Department of Environmental Quality Quarterly Report October 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
- CCP Coal Combustion Products
- 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
- EOR Engineer of Record
- ESC Erosion and Sediment Control Plan
- 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
- UIC Underground Injection Control

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:
 - o 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

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

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
 - June 26, 2020 DEQ provides Duke Energy with guidance on streamlining CSAs and CAPs for future submittals.

Allen Steam Station

- Assessment and Corrective Action Status
 - June 19, 2020 Duke Energy submits UIC permit application for pilot test of proposed remediation system.
 - DEQ is continuing to review the Updated CAP Report for the impoundments and associated other primary and secondary sources.
 - o February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following is the new approved report deadline:

- September 1, 2020 Updated CSA for primary and secondary sources not associated with the impoundments.
- Closure Status
 - July 31, 2020 Duke Energy submits amended Closure Plan. DEQ currently reviewing.
- NPDES permit NC0004979
 - No updates this quarter.
- SOC S17–009
 - No updates this quarter.

Asheville Steam Electric Plant

- Assessment and Corrective Action Status
 - o July 31, 2020 Duke Energy submits annual Effectiveness Monitoring Report for the Interim Actions at the facility.
 - o February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following are the new approved report deadlines:
 - December 1, 2020 Updated CSA for primary and secondary sources associated with the impoundments.
 - The CAP for the primary and secondary sources associated with the impoundments will be due six months after DEQ "approves" the CSA.
- Closure Status
 - July 14, 2020 DEQ submits request to Duke Energy to provide a "Closure Report" for the facility six months after the final excavation activity takes place.
 - o Excavation of the 1964 Basin is in progress.
 - o Excavation of the 1982 Basin is complete.
- NPDES permit NC0000396
 - o No updates this quarter.
- SOC S17–010
 - No updates this quarter.

Belews Creek Steam Station

- Assessment and Corrective Action Status
 - July 31, 2020 Duke Energy submits annual Effectiveness Monitoring Report for the Interim Actions at the facility.
 - o June 19, 2020 Duke Energy submits UIC permit application for pilot test of proposed remediation system.
 - DEQ is continuing to review the Updated CAP Report for the impoundments and associated other primary and secondary sources.
 - o February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following is the new approved report deadline:
 - September 1, 2020 Updated CSA for primary and secondary sources not associated with the impoundments.
- Closure Status

- August 17, 2020 DEQ approves the Closure Plan.
- NPDES permit NC0024406
 - No update this quarter.
- SOC S18–004
 - No update this quarter.
- SOC S18–009
 - No updated this quarter.

Buck Combined Cycle Station

- Assessment and Corrective Action Status
 - July 12, 2020 Duke Energy submits a Surface Water Evaluation Report for the facility. On June 23, 2020, DEQ provides comments to Duke Energy on the Surface Water Evaluation Report.
 - May 27, 2020 DEQ approves the Additional Area Assessment Plan for the Coal Pile
 - February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following are the new approved report deadlines:
 - February 1, 2021 Updated CSA for primary and secondary sources associated with the impoundments.
 - The CAP for the primary and secondary sources associated with the impoundments will be due six months after DEQ "approves" the CSA.
- Closure Status
 - August 17, 2020 DEQ approves the Closure Plan.
- NPDES Permit NC0004774
 - o August 1, 2020 Major modification became effective.
- SOC S18–004
 - No updates this quarter.

Cape Fear Steam Electric Plant

- Assessment and Corrective Action Status
 - June 2, 2020 DEQ approves Duke Energy's request for abandonment of several monitoring wells.
 - May 29, 2020 Duke Energy submits request for abandonment of several monitoring wells.
 - February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following are the new approved report deadlines:
 - December 1, 2020 Updated CSA for primary and secondary sources associated with the impoundments.
 - The CAP for the primary and secondary sources associated with the impoundments will be due six months after DEQ "approves" the CSA.
- Closure Status
 - August 17, 2020 DEQ approves the Closure Plan.
- NPDES permit NC0003433

- o July 17, 2020 Major modification submitted to Section Chief for signature.
- SOC S19-001
 - No updates this quarter.

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

- Assessment and Corrective Action Status
 - o DEQ is continuing to review the Updated CAP Report for the impoundments and associated other primary and secondary sources.
 - February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following is the new approved report deadline:
 - December 18, 2020 Updated CSA for primary and secondary sources not associated with the impoundments.
- Closure Status
 - o Excavation of the Inactive Units 1–4 is complete.
- NPDES permit NC0005088
 - o Permit currently on hold pending changes to 40 CFR 423 being finalized.
- SOC S17-009
 - No updates this quarter.

Dan River Combined Cycle Station

- Assessment and Corrective Action Status
 - February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following is the new approved report deadlines:
 - November 2, 2020 Updated CAP for primary and secondary sources associated with the impoundments.
- Closure Status
 - July 14, 2020 DEQ submits request to Duke Energy to provide a "Closure Report" for the facility six months after the final excavation activity takes place.
 - o Excavation is complete.
- NPDES permit NC0003468
 - No updates this quarter.

H. F. Lee Energy Complex

- Assessment and Corrective Action Status
 - June 2, 2020 DEQ approves Duke Energy's request for abandonment of several monitoring wells.
 - May 29, 2020 Duke Energy submits request for abandonment of several monitoring wells.
 - February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following are the new approved report deadlines:
 - December 1, 2020 Updated CSA for primary and secondary sources associated with the impoundments.

- The CAP for the primary and secondary sources associated with the impoundments will be due six months after DEQ "approves" the CSA.
- Closure Status
 - o August 17, 2020 DEQ approves the Closure Plan.
- NPDES permit NC0003417
 - No updates this quarter.
- SOC S18–006
 - No update this quarter.

Marshall Steam Station

- Assessment and Corrective Action Status
 - June 19, 2020 Duke Energy submits UIC permit application for pilot test of proposed remediation system.
 - DEQ is continuing to review the Updated CAP Report for the impoundments and associated other primary and secondary sources.
- Closure Status
 - No updates this quarter.
- NPDES permit NC0004987
 - o April 29, 2020 Major permit modification application received. Draft permit public noticed on July 6, 2020.
- SOC S17-009
 - No updates this quarter.

Mayo Steam Electric Plant

- Assessment and Corrective Action Status
 - July 16, 2020 DEQ approves the additional area assessment plan for the gypsum pad.
 - o July 16, 2020 Duke Energy submits proposal for optimizing the monitoring program at the facility. DEQ is currently reviewing.
 - o DEQ is continuing to review the Updated CAP Report for the impoundments and associated other primary and secondary sources.
 - February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following is the new approved report deadline:
 - December 31, 2020 Updated CSA for primary and secondary sources not associated with the impoundments.
- Closure Status
 - No updates this quarter.
- NPDES permit NC0038377
 - No updates this quarter.
- SOC S18–005
 - No updates this quarter.

Riverbend Steam Station

- Assessment and Corrective Action Status
 - o July 16, 2020 Duke Energy submits proposal for optimizing the monitoring program at the facility. DEQ is currently reviewing.
 - February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following is the new approved report deadline:
 - November 2, 2020 Updated CAP for primary and secondary sources associated with the impoundments.

• Closure Status

- o March 11, 2020 Duke Energy submits a "Closure Report" for the facility
 - July 22, 2020 Duke Energy responds to comments with requested information.
 - July 6, 2020 DEQ provides comments to Duke Energy on the "Closure Report" for the facility which included a request for additional documentation.
- o Excavation is complete.
- NPDES permit NC0004961
 - August 27, 2019 Renewal application received. Permit review in progress.
- SOC S16-005
 - No updates this quarter.

Roxboro Steam Electric Plant

- Assessment and Corrective Action Status
 - June 8, 2020 DEQ approves Duke Energy's request for abandonment of several monitoring wells.
 - o June 1, 2020 Duke Energy submits request for abandonment of several monitoring wells.
 - DEQ is continuing to review the Updated CAP Report for the impoundments and associated other primary and secondary sources.
 - February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following is the new approved report deadline:
 - March 31, 2021 CSA for primary and secondary sources not associated with the impoundments.
- Closure Status
 - o August 17, 2020 DEQ approves the Closure Plan.
- NPDES permit NC0003425
 - o July 1, 2020 Permit became effective.
- SOC S18–005
 - No updates this quarter.

L. V. Sutton Energy Complex

- Assessment and Corrective Action Status
 - o August 3, 2020 Duke Energy submits the Updated CAP for primary and secondary sources associated with the impoundments.
 - o June 21, 2020 Duke submits additional information on the dike at the Lay of Land Area (LOLA).
 - May 15, 2020 Duke Energy submits annual Effectiveness Monitoring Report for the Interim Actions at the facility.
 - o May 10, 2020 Duke Energy submits a Surface Water Evaluation for the facility.
 - July 19, 2020, DEQ provides comments to Duke Energy.

Closure Status

- July 14, 2020 DEQ submits request to Duke Energy to provide a "Closure Report" for the facility six months after the final excavation activity takes place.
- May 7, 2020 Duke Energy submits visual verification letter report for the former process area. DEQ to respond.
- o December 13, 2019 DEQ sends Closure Certification letter for the 1984 basin.
 - July 14, 2020 DEQ approves the closure certification.
- August 28, 2019 Duke Energy submits request for closure certification for the 1971 Basin. DEQ to respond.
 - July 14, 2020 DEQ approves the closure certification
- o Excavation of the 1971 Basin is complete.
- o Excavation of the 1984 Basin is complete.
- NPDES permit NC0001422
 - o July 1, 2020 Permit became effective.

W. H. Weatherspoon Power Plant

- Assessment and Corrective Action Status
 - o August 3, 2020 Duke Energy submits the Updated CSA for primary and secondary sources associated with the impoundments. DEQ to review.
 - July 17, 2020 Duke Energy submits a Surface Water Evaluation Report for the facility. DEQ to review.
 - o February 26, 2020 DEQ approves the request to extend deadlines for upcoming CSAs and CAPs. The following is the new approved report deadline:
 - The CAP for the primary and secondary sources associated with the impoundments will be due six months after DEQ "approves" the CSA.
- Closure Status
 - o August 17, 2020 DEQ approves the Closure Plan.
- NPDES permit NC0005363
 - No updates this quarter.
- SOC S19-006
 - No updates this quarter.

Annual Groundwater Protection and Restoration Report Summary

The Annual Groundwater Protection and Restoration Reports are available upon request from the Division of Water Resources. 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 are available upon request from the Division of Water Resources. 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 August 6, 2020 Annual site inspection.
 - o August 5, 2020 Virtual records review via Microsoft Teams.
 - o July 1, 2020 DWM issued Life of Site Permit to Operate.
- Proposed Final Closure Plan
 - o July 31, 2020 Duke submitted amended Closure Plan to reflect the three proposed onsite landfills:
 - New landfill permit numbers: North Starter LF 3619-INDUS, South Starter LF 3620-INDUS, Basin LF 3621-INDUS.
 - o All impoundment ash to be excavated and placed in onsite lined landfill.

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

- 1119–INUDS–2020
 - o Currently under construction.

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 July 23, 2020 Annual site inspection.
 - o July 22, 2020 Virtual records review via Microsoft Teams.
 - o Groundwater Assessment
 - No updates at this time.
- 8504–INDUS–2007: Craig Road Landfill (open, lined)
 - o July 23, 2020 Annual site inspection.
 - o July 22, 2020 Virtual records review via Microsoft Teams.
 - o Groundwater Assessment
 - No updates at this time.
- 8505–INDUS–2008: Flue Gas Desulfurization (FGD) Landfill (open, lined)
 - o July 23, 2020 Annual site inspection.
 - o July 22, 2020 Virtual records review via Microsoft Teams.
 - Groundwater Assessment
 - No updates at this time.
- Proposed Final Closure Plan
 - o New landfill permit number: Basin LF 8506-INDUS
 - 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 Closure cap system construction ongoing.

<u>Mayo Steam Electric Plant – Person County (current coal fired)</u>

- 7305–INDUS–2012: CCR Landfill (open, double lined)
 - Groundwater Assessment
 - August 10, 2020 Duke submitted Groundwater Final Assessment Report.
- Approved Final Closure Plan.
 - o May 29, 2020 Draft Excavation Plan submitted.
 - o New landfill permit number: Basin LF 7307-INDUS
 - o All impoundment ash to be excavated and placed in onsite lined landfill.

<u>Marshall Steam Station – Catawba County (current coal fired)</u>

- 1804–INDUS–1983: Dry Ash Landfill (closed, unlined Phase 2 composite cap system)
 - o July 9, 2020 Annual site inspection.
 - o July 8, 2020 virtual records review via Microsoft Teams.
 - o Groundwater Assessment
 - No updates at this time.
- 1809–INDUS: FGD Landfill (closed, lined)
 - o July 9, 2020 Annual site inspection.
 - o July 8, 2020 virtual records review via Microsoft Teams.
 - o June 30, 2020 Permit for Closure issued.
 - o Groundwater Assessment
 - No updates at this time.
- 1812–INDUS–2008: Industrial Landfill #1 (open, double–lined)
 - o July 9, 2020 Annual site inspection.
 - o July 8, 2020 virtual records review via Microsoft Teams.
- MAR-145 Stormwater Reroute Project
 - o May 21, 2020 CQA submitted, project complete.
- Approved Final Closure Plan.
 - o May 29, 2020 Draft Excavation Plan submitted.
 - o New landfill will be an expansion of the existing landfill 1812-INDUS-2008
 - 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 Construction of Phase 3 ongoing.
 - o September 17, 2020 Annual site inspection.
 - o September 16, 2020 Virtual records review via Microsoft Teams.
 - o June 30, 2020 Duke submitted revised Phase 3 Post Blasting Report.
 - o June 9, 2020 DWM issued comments on Post Blasting Report.
 - o June 5, 2020 Duke submitted Phase 3 Post Blasting Report.
- Approved Final Closure Plan.

- o May 29, 2020 Draft Excavation Plan submitted.
- 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 September 25, 2019 Inspected.
- Proposed Closure Plan.
 - o New landfill will be an expansion of the existing landfill 7302-INDUS-1998
 - 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 Closure turf cap system construction is ongoing.
 - o June 10, 2020 All non-CAMA coal ash (Lay of the Land Area) has been excavated and placed in onsite landfill.

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 February 24, 2020 Permit for Closure issued.

DUKE ENERGY FACILITIES WITHOUT LANDFILLS

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

- Proposed Final Closure Plan
 - All impoundment ash to be excavated and beneficiated through the onsite STAR plant process

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

- Proposed Final Closure Plan
 - 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)

- Proposed Final Closure Plan
 - o 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)

• No updates this quarter.

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

- Proposed Final Closure Plan
 - 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

• July 24, 2020 – Final Assessment Report submitted.

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

• No updates at this time.

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

 $\underline{http://deq.nc.gov/about/divisions/waste-management/solid-waste-section/coal-combustion-byproducts}.$

Groundwater Assessment and Corrective Action

Roxboro Steam Station Gypsum Storage Pad (CCB0003)

• No updates this quarter.

Belews Creek Steam Station Structural Fill (CCB0070)

• No updates this quarter.

Swift Creek in Nash County (CCB0057)

• No updates at this time.

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

• No updates this quarter.

HISTORIC ASH MANAGEMENT AREA

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

• No updates 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
 - o GASTO-061
 - 6/10/20 Received submittal for the removal of four 18-inch sluice lines buried near the crest of north dike for GASTO-061 (Allen Active Ash Basin Dam) Scope 6.
- 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.

Asheville Steam Electric Plant

- Dam Safety
 - o Nothing to report at this time.
- 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.

Belews Creek Steam Station

- Dam Safety
 - Nothing to report at this time.
- 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.

Buck Combined Cycle Station

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

Nothing to report at this time.

Cape Fear Steam Electric Plant

- Dam Safety
 - o CHATH-022
 - 7/22/20 Received submittal for the lowering of the crest by three feet between the east abutment wall and the toe access roadway in order to improve safety factors on the downstream slope of embankment for CHATH-022 (Buckhorn Lake Dam) Scope 3.
 - o CHATH-079
 - 7/21/20 Received submittal for the widening of the existing north access ramp for CHATH-079 (Cape Fear 1985 Ash Basin Dam) Scope 9.
- Erosion and Sediment Control and Construction Storm Water
 - o Nothing to report at this time.
- NPDES Storm Water
 - Nothing to report at this time.

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

- Dam Safety
 - Nothing to report at this time.
- 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.

Dan River Combined Cycle Station

- Dam Safety
 - Nothing to report at this time.
- Erosion and Sediment Control and Construction Storm Water
 - o 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
 - 6/17/20 NOI letter.
 - 6/5/20 Annual Inspection.
 - o WAYNE-022
 - 10/3/19 Received revised submittal for the removal of two pipes and improvement of the haul road in preparation for beneficial reuse activities for WAYNE-022 (HF Lee Active Ash Basin Dam) Scope 5.

- 6/16/20 NOI letter
- 6/5/20 As-Built inspection performed.
- 6/5/20 Annual Inspection.
- 6/5/20 Certificate of Final Approval to Repair issued.
- o WAYNE-032
 - 6/16/20 NOD issued for trees on crest of dam.
 - 6/5/20 Annual Dam inspection.
 - 6/4/20 Received submittal to relocate a 200-foot section of dam near the Half-Mile Branch Stream for WAYNE-032 (HF Lee Inactive Ash Basin #2 Dam) Scope 6.
- o WAYNE-033
 - 6/16/20 NOD issued for trees on crest of dam.
 - 6/5/20 Annual dam inspection.
- o WAYNE-009
 - 6/16/20 NOI issued.
 - 6/5/20 Annual dam inspection.
- Erosion and Sediment Control and Construction Storm Water
 - \circ 6/15/20 WAYNE-2018-035 revision approved.
 - o 6/12/20 WAYNE-2018-035 HF Lee Ash Beneficiation Facility revision received.
- NPDES Storm Water
 - o Nothing to report at this time.

Marshall Steam Station

- Dam Safety
 - o CATAW-054
 - 2/4/20 Received revised submittal for the abandonment of a coal silo discharge pipe for CATAW-054 (Marshall Active Ash Basin Dam) Scope 9.
 - 6/24/20 As-Built inspection performed.
 - 6/24/20 Certificate of Final 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.

Mayo Steam Electric Plant

- Dam Safety
 - o PERSO-036.037
 - 6/8/20 Received submittal for the request of re-classifying the two subject dams due to the removal of all FGD solids, liquids, and liner for PERSO-036 (Mayo FGD Settling Pond Dam) and PERSO-037 (Mayo FGD Flush Pond Dam).

- o PERSO-049
 - 5/28/19 Received submittal for the installation of a fence grounding system running parallel to the top of dam within a trench for PERSO-049 (Mayo FGD Settling Basin Dam) Scope 2.
 - 7/15/20 As-Built inspection performed.
 - 7/17/20 Certificate of Final Approval to Repair issued.
- o PERSO-050
 - 5/28/19 Received submittal for the installation of a fence grounding system running parallel to the top of dam within a trench for PERSO-050 (Mayo Retention Basin Dam) Scope 2.
 - 7/24/19 Certificate of Approval to Repair issued.
 - 7/24/20 As-Built submittal received.
 - 7/15/20 As-Built inspection performed.
 - 8/3/20 Certificate of Final Approval to Repair issued.
- Erosion and Sediment Control and Construction Storm Water
 - o PERSO-2020-006
 - 7/15/20 Inspection, minor disturbance outside approved limits.
- NPDES Storm Water
 - Nothing to report at this time.

Riverbend 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.

Roxboro Steam Electric Plant

- Dam Safety
 - o PERSO-002
 - 7/29/19 Received revised submittal for the joint filling and void grouting of the primary spillway for PERSO-002 (Lake Hyco Dam) Scope 3.
 - 7/15/20 As-Built inspection performed.
 - 7/24/20 Certificate of Final Approval to Repair issued.
 - o PERSO-033
 - 2/17/20 Received revised submittal for the investigation of a subsurface pipe near the toe of dam for PERSO-033 (Roxboro East Ash Basin Dam) Scope 4.
 - 6/4/20 As-Built submittal received.
 - 7/15/20 As-Built inspection performed.
 - 7/17/20 Certificate of Final Approval to Repair issued.

- o PERSO-040,041,042
 - 7/22/19 Received submittal for the decommissioning of the subject dams for PERSO-040 (Roxboro West FGD Settling Pond Dam) Scope 1, PERSO-041 (Roxboro East FGD Settling Pond Dam) Scope 1, PERSO-042 (Roxboro FGD Forward Flush Pond Dam) Scope 1.
 - 6/17/20 Certificate of Approval to Breach issued.
- PERSO-047
 - 6/25/19 Received submittal for the installation of a fence grounding system running parallel to the top of dam within a trench for PERSO-047 (Roxboro Holding Basin Dam) Scope 2.
 - 7/15/20 As-Built inspection performed.
 - 7/17/20 Certificate of Final Approval to Repair issued.
- o PERSO-048
 - 6/25/19 Received submittal for the installation of a fence grounding system running parallel to the top of dam within a trench for PERSO-048 (Roxboro Retention Basin Dam) Scope 2.
 - 7/15/20 As-Built inspection performed.
 - 7/17/20 Certificate of Final Approval to Repair issued.
- Erosion and Sediment Control and Construction Storm Water
 - o Perso-2017-011 Inspection- project complete and closed (c/o).
 - o Perso-2018-010 Inspection- project complete and closed (c/o).
 - o Perso-2018-009 Inspection- project complete and closed (c/o).
- NPDES Storm Water
 - o Nothing to report at this time.

L. V. Sutton Energy Complex

- Dam Safety
 - o NEWHA-005
 - 12/13/17 Received revised submittal for the decommissioning of NEWHA-005 (Sutton 1984 Ash Basin Dam) Scope 4.
 - 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.

Brickhaven No 2. Tract "A"

- Dam Safety
 - Nothing to report at this time.
- Erosion and Sediment Control
 - Nothing to report at this time.
- Mining
 - Nothing to report at this time.

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

Colon Mine Permit 53-05

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

W. H. Weatherspoon Power Plant

- Dam Safety
 - o ROBES-004
 - 2/25/20 Received submittal for the refurbishment of a sheet pile intake structure wall for ROBES-004 (Weatherspoon Cooling Lake Dam) Scope 2.
 - 7/24/20 Certificate of Approval to Repair issued.
 - o ROBES-009
 - 2/27/20 Received submittal for the removal of an 8-inch sluice line located near crest of dam for ROBES-009 (Weatherspoon 1979 Ash Basin Dam) Scope 9.
 - 6/29/20 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.

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	Lake Julian Dam	BUNCO-088	ACTIVE
Electric Plant			
Asheville Steam	Asheville 1982 Ash Pond	BUNCO-089	DECOMISSIONED
Electric Plant	Dam		
Asheville Steam	Asheville 1964 Ash Pond	BUNCO-097	ON-GOING
Electric Plant	Dam		DECOMISSION
Asheville Steam	Asheville Lined Retention	BUNCO-101	ON-GOING
Electric Plant	Basin Dam		DECOMISSION
Asheville Steam	North Stormwater Pond Dam	BUNCO-504	ON-GOING
Electric Plant			CONSTRUCTION
Asheville Steam	South Stormwater Pond Dam	BUNCO-505	ON-GOING
Electric Plant		CECALE 116	CONSTRUCTION
Belews Creek Steam	Belews Creek Active Ash	STOKE-116	ACTIVE
Station	Basin Dam	DOCKL 226	ACTIVE
Belews Creek Steam	Belews Lake Dam	ROCKI-236	ACTIVE
Station Create Steam	Belews Lake Saddle Dike #1	STOKE-117	ACTIVE
Belews Creek Steam Station	Dam	STOKE-11/	ACTIVE
Belews Creek Steam	Belews Lake Saddle Dike #2	STOKE-118	ACTIVE
Station	Dam	310KL-116	ACTIVE
Belews Creek Steam	Belews Lake Saddle Dike #3	STOKE-119	ACTIVE
Station Station	Dam	STORE II)	TICTIVE
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 Basin	STOKE-121	ACTIVE
Station	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 Cycle Station	Buck Ash Basin #1 Dam	ROWAN-068	ACTIVE

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 Dam	CHATH-080	DECOMISSIONED
Electric Plant			
James E. Rogers	Cliffside River Dam	CLEVE-053	ACTIVE
Energy Complex			
(Cliffside Steam			
Station)			
James E. Rogers	Cliffside Inactive Ash Basin	RUTHE-070	INACTIVE
Energy Complex	#5 Main Dam		
(Cliffside Steam			
Station)			
James E. Rogers	Cliffside Inactive Ash Basin	RUTHE-072	INACTIVE
Energy Complex	#5 Saddle Dam		
(Cliffside Steam			
Station)			
James E. Rogers	Cliffside Active Ash Basin	CLEVE-050	ACTIVE
Energy Complex	Upstream Dam		
(Cliffside Steam			
Station)			
James E. Rogers	Cliffside Active Ash Basin	CLEVE-049	ACTIVE
Energy Complex	Downstream Dam		
(Cliffside Steam			
Station)			

James E. Rogers	Cliffside Retention Basin	CLEVE-047	ACTIVE
Energy Complex	Dam (Formerly Inactive Ash	CLLVL 047	Henve
(Cliffside Steam	Basin #1-4 Main Dam)		
Station)			
James E. Rogers	Cliffside Active Ash Basin	CLEVE-054	ACTIVE
Energy Complex	Internal Dam	CLEVE-054	ACTIVE
(Cliffside Steam			
Station)			
Dan River Combined	Dan River Active Primary	ROCKI-237	ON-GOING
Cycle Station	Ash Basin Dam	KOCKI-23/	DECOMISSION
Dan River Combined	Dan River Active Secondary	ROCKI-238	ON-GOING
	Ash Basin Dam	KUCKI-236	DECOMISSION
Cycle Station Dan River Combined	Dan River Service Water	ROCKI-241	
		KUCKI-241	ACTIVE
Cycle Station Dan River Combined	Settling Pond Dam Dan River Low Head	DOCKI 220	ACTIVE
		ROCKI-239	ACTIVE
Cycle Station	Diversion Dam	WANNE 000	ACTIVE
H.F. Lee Energy	H.F. Lee Cooling Lake Dam	WAYNE-009	ACTIVE
Complex	HE LANGE ALD C	WAYDIE 022	A CELLIE
H.F. Lee Energy	H.F. Lee Active Ash Basin	WAYNE-022	ACTIVE
Complex	Dam	****	TO A L COMPANIE
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		
H.F. Lee Energy	H.F. Lee Permanent	WAYNE-036	ACTIVE
Complex	Stormwater Pond Dam		
H.F. Lee Energy	H.F. Lee Triangular Pond	WAYNE-034	DECOMISSIONED
Complex	Dam		
Marshall Steam	Marshall Active Ash Basin	CATAW-054	ACTIVE
Station	Dam		
Marshall Steam	Marshall Retention Basin	CATAW-076	ACTIVE
Station	Dam		
Marshall Steam	Marshall Holding Basin Dam	CATAW-075	ACTIVE
Station			
Marshall Steam	Marshall West Temporary	CATAW-077	ACTIVE
Station	SWP		
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	ON-GOING
Plant	Dam		DECOMISSION
	<u> </u>	1	1

Mayo Steam Electric	Mayo FGD Flush Pond Dam	PERSO-037	ON-GOING
Plant			DECOMISSION
Mayo Steam Electric	Mayo Coal Pile Dam	PERSO-046	ACTIVE
Plant			
Mayo Steam Electric	Mayo FGD Settling Basin	PERSO-049	ACTIVE
Plant	Dam		
Mayo Steam Electric	Mayo Retention Basin Dam	PERSO-050	ACTIVE
Plant			
Riverbend Steam	Riverbend Active Primary	GASTO-097	ON-GOING
Station	Ash Basin Dam	011010 077	DECOMISSION
Riverbend Steam	Riverbend Active Secondary	GASTO-098	ON-GOING
Station	Ash Basin Dam		DECOMISSION
Riverbend Steam	Riverbend Intermediate Dam	GASTO-099	DECOMISSIONED
Station	Terversena intermediate Bain	Gristo o	BECOMISSIONED
Riverbend Steam	Riverbend Fuel Containment	GASTO-105	DECOMISSIONED
Station	Dam	0/10/10/10/	BECOMISSIONED
Roxboro Steam	Lake Hyco Dam	PERSO-002	ACTIVE
Electric Plant	East Try to Built	LINGO 002	TICTIVE
Roxboro Steam	Roxboro Afterbay Dam	PERSO-013	ACTIVE
Electric Plant	Reservoir	LINGO 015	TICTIVE
Roxboro Steam	Roxboro West Ash Basin	PERSO-038	ACTIVE
Electric Plant	Dam	LICE USO	ACTIVE
Roxboro Steam	Roxboro West Ash Basin	PERSO-039	ACTIVE
Electric Plant	Rock Filter Dam	LIGO 057	HOTTVE
Roxboro Steam	Roxboro West FGD Settling	PERSO-040	ON-GOING
Electric Plant	Pond Dam	I LIGO 010	DECOMISSION
Roxboro Steam	Roxboro East FGD Settling	PERSO-041	ON-GOING
Electric Plant	Pond Dam	LIGO VII	DECOMISSION
Roxboro Steam	Roxboro FGD Forward Flush	PERSO-042	ON-GOING
Electric Plant	Pond Dam	I Litto 0 12	DECOMISSION
Roxboro Steam	Roxboro East Ash Basin Dam	PERSO-033	ACTIVE
Electric Plant	Roxooto Eust Asii Busii Buii	LICE USS	ACTIVE
Roxboro Steam	Roxboro Intake Pond Dam	PERSO-043	ACTIVE
Electric Plant	Rozooto intake i ona Bani	LIGO 015	HOTTVE
Roxboro Steam	Roxboro Retention Basin	PERSO-048	ACTIVE
Electric Plant	Dam	LICO 010	HOTTVE
Roxboro Steam	Roxboro Holding Basin Dam	PERSO-047	ACTIVE
Electric Plant	Rozeoto Holang Basin Bain	LIGO 017	TICTIVE
L. V. Sutton Energy	Sutton 1984 Ash Basin Dam	NEWHA-005	DECOMISSIONED
Complex		112 11111 000	BECOMMONICA
L. V. Sutton Energy	Sutton 1971 (1983) Ash Basin	NEWHA-004	DECOMISSIONED
Complex	Dam	1.12	
L. V. Sutton Energy	Sutton 1972 Cooling Lake	NEWHA-003	ACTIVE
Complex	Dam	1112 11111 003	
W. H. Weatherspoon	Weatherspoon Cooling Lake	ROBES-004	ACTIVE
Power Plant	Dam	RODES OUT	
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W. H. Weatherspoon	Weatherspoon 1979 Ash	ROBES-009	ACTIVE
Power Plant	Basin Dam		