

Quarterly Report to the N.C. Environmental Review Commission on Operations, Activities, Programs and Progress Relating to Coal Combustion Residuals Surface Impoundments

2nd Quarter 2018



This report is submitted to meet the requirements of General Statute 130A-309.204, which requires the Department of Environmental Quality to submit quarterly reporting on operations, activities, programs and progress relating to coal combustion residuals surface impoundment

Division of Water Resources

§ 130A-309.204. Reports.

(a) The Department shall submit quarterly written reports to the Environmental Review Commission and the Coal Ash Management 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...

Assessment and Corrective Action Status

- Individual site-specific status notes included below.

Prioritization Status (reference G.S. 130A-309.213)

- Facilities classified as high-risk are Asheville Steam Station, Dan River Combined Cycle Station, Riverbend Steam Station, and L. V. Sutton Energy Complex.
- Facilities classified as intermediate-risk are H. F. Lee Energy Complex, Cape Fear Steam Electric Plant, and W. H. Weatherspoon Power Plant. These facilities have also been selected by Duke Energy for Beneficiation under 130A-309.216.
- Facilities classified as intermediate-low risk (Allen Steam Station, Belews Creek Steam Station, Buck Combined Cycle Station, James E. Rogers Energy Complex, Marshall Steam Station, Mayo Steam Electric Plant, and Roxboro Steam Electric Plant) are still being considered for low risk. A final decision will be made based on criteria under 130A-309.213(d), which requires a final decision be made no later than 11/30/2018. However, the owner of the coal combustion residuals can apply for a one year extension. be made no later than 11/30/2018. However, the owner of the coal combustion residuals can apply for a one year extension.

Closure Status (reference G.S. 130-309.214)

- Low-risk impoundments are required to be closed no later than 12/31/2029. A proposed closure plan for low-risk impoundments must be submitted no later than 12/31/2019.

- Intermediate-risk impoundments are required to be closed no later than 12/31/2024. A proposed closure plan for intermediate-risk impoundments must be submitted no later than 12/31/2019.
- High-risk impoundments are required to be closed no later than 12/31/2019. Proposed plans were submitted by 12/31/2016.
- Individual site-specific status notes are included below.

Costs (reference G.S. 130-309.214(m))

- Costs are required to be included with the site closure plans. Closure plans for the high-risk impoundments were submitted in January 2017, but were deemed incomplete by DEQ.

Allen Steam Station

- Assessment and Corrective Action Status
 - On 1/31/2018, Duke Energy submitted an updated Comprehensive Site Assessment (CSA) Report for the facility. This report is currently being reviewed by the DWR Mooresville Regional Office.
 - On 1/16/2018, DWR received a work plan to address potential soil and groundwater contamination resulting from the raw coal pile. On May 2, 2018, DWR sent Duke Energy a letter conditionally approving their plan.
 - On 3/26/2018, DWR received a work plan to evaluate surface water. On 4/20/2018, DWR sent Duke Energy a letter conditionally approving their plan.
 - On 5/11/2018, Duke Energy submitted a request to perform an aquifer test on the site. DWR Mooresville Regional Office is currently reviewing the request.
 - On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
- Closure Status
 - Per 130A-309.213(d), DEQ is required to issue a final classification by 11/30/2018. This final classification will determine the closure methods available for the impoundments.
- NPDES permit NC0004979
 - Draft permit was sent to public notice and the comment period ended 5/18/2018.
- SOC S17-009
 - SOC was approved by the EMC on 4/12/2018.

Asheville Steam Electric Plant

- Assessment and Corrective Action Status
 - DEQ and Duke Energy are in the process of developing submittal dates.
 - On 4/25/2018, DWR received a revised work plan to conduct an aquifer test at the site.

- On 4/26/2018, DWR received a report on an Isotope Study performed at the site.
- Closure Status
 - 1964 Basin
 - Excavation of the impoundment in progress.
 - 1982 Basin
 - Impoundment completely excavated.
- NPDES permit NC0000396
 - Draft permit is under peer review prior to submission for public notice.
- SOC S17-010
 - SOC is in development. There is a potential the SOC may be reviewed by the EMC in September.

Belews Creek Steam Station

- Assessment and Corrective Action Status
 - On 10/31/2017, Duke submitted the updated CSA Report for the facility. On 4/26/2018, DWR sent comments to Duke Energy on their updated Comprehensive Site Assessment.
 - On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
- Closure Status
 - Per 130A-309.213(d), DEQ is required to issue a final classification by 11/30/2018. This final classification will determine the closure methods available for the impoundments.
- NPDES permit NC0024406
 - Draft permit is currently on hold.
- SOC S18-004
 - SOC was public noticed on 4/21/2018 and/or 4/22/2018. A public hearing was held on 5/23/2018. The SOC is scheduled for EMC consideration on 7/12/2018.

Buck Combined Cycle Station

- Assessment and Corrective Action Status
 - Duke has proposed to submit the updated CSA Report on 9/30/2018.
- Closure Status
 - Per G.S. 130A-309.216, Duke was required to identify, at a minimum, three sites for beneficial reuse. Duke selected this facility for beneficial reuse. G.S. 130A-309.216(c) states that sites selected for beneficiation projects must close by 12/31/2029.
- NPDES Permit NC0004774

- Draft permit was sent to public notice. The public hearing will be held on 6/13/2018, and the comment period ends 6/20/2018.
- SOC S18-004
 - SOC was public noticed on 4/21/2018 and/or 4/22/2018. A public hearing was held on 5/23/2018. The SOC is scheduled for EMC consideration on 7/12/2018.

Cape Fear Steam Electric Plant

- Assessment and Corrective Action Status
 - Duke has proposed to submit the updated CSA Report on 9/30/2018.
- Closure Status
 - Per G.S. 130A-309.216, Duke was required to identify, at a minimum, three sites for beneficial reuse. Duke selected this facility for beneficial reuse. G.S. 130A-309.216(c) states that sites selected for beneficiation projects must close by 12/31/2029.
- NPDES permit NC0003433
 - Currently in draft and waiting for submission to be re-public noticed.
- SOC S18-006
 - SOC is in development. There is a potential the SOC may be reviewed by the EMC in September.

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

- Assessment and Corrective Action Status
 - On 1/31/2018, Duke Energy submitted an updated CSA Report for the facility. This report is currently being reviewed by the DWR Asheville Regional Office.
 - On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
 - On 5/11/2018, Duke Energy submitted a request to perform an aquifer test on the site. DWR Asheville Regional Office is currently reviewing the request.
 - Duke continues to assess a former coal ash storage area north of Broad River.
- Closure Status
 - Inactive Units 1-4 are completely excavated
 - Per 130A-309.213(d), DEQ is required to issue a final classification by 11/30/2018. This final classification will determine the closure methods available for the impoundments.
- NPDES permit NC0005088
 - Draft permit was sent to public notice and the comment period ends 6/13/2018.
- SOC S17-009
 - SOC was approved by the EMC on 4/12/2018.

Dan River Combined Cycle Station

- Assessment and Corrective Action Status
 - On 12/12/2017, DEQ receive a revised excavation plan for the facility. DWR is reviewing the soil sampling portion of the plan and will be providing comments to Duke soon.
 - On 1/31/2018, Duke Energy submitted an updated CSA Report for the facility. This report is currently being reviewed by the DWR Winston-Salem Regional Office.
 - On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
- Closure Status
 - Excavation at the site is currently underway.
- NPDES permit NC0003468
 - Permit was issued 8/27/2016 and became effective 12/1/2016.

H. F. Lee Energy Complex

- Assessment and Corrective Action Status
 - On 1/18/2018, DWR received a work plan to address potential soil and groundwater contamination resulting from the triangle pond. DWR is currently preparing a response to Duke.
 - On 4/26/2018, DWR received a surface water evaluation plan from Duke Energy. On 5/8/2018, DWR sent Duke Energy a letter conditionally approving the plan.
 - Duke has proposed to submit the updated CSA Report on 9/30/2018.
- Closure Status
 - Per G.S. 130A-309.216, Duke was required to identify, at a minimum, three sites for beneficial reuse. Duke selected this facility for beneficial reuse. G.S. 130A-309.216(c) states that sites selected for beneficiation projects must close by 12/31/2029.
- NPDES permit NC0003417
 - Currently in draft and waiting for submission to be re-public noticed.
- SOC S18-006
 - SOC is in development. There is a potential the SOC may be reviewed by the EMC in September.

Marshall Steam Station

- Assessment and Corrective Action Status
 - On 1/31/2018, Duke Energy submitted an updated CSA Report for the facility. This report is currently being reviewed by the DWR Mooresville Regional Office.
 - On 5/11/2018, Duke Energy submitted a request to perform an aquifer test on the site. DWR Mooresville Regional Office is currently reviewing the request.

- On 5/26/2018, Duke Energy submitted a surface water evaluation plan. On 4/20/2018, DWR sent Duke Energy a letter conditionally approving the plan.
- On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
- Closure Status
 - Per 130A-309.213(d), DEQ is required to issue a final classification by 11/30/2018. This final classification will determine the closure methods available for the impoundments.
- NPDES permit NC0004987
 - Major permit modification completed. Modified permit was issued 4/2/2018 and became effective 5/1/2018.
- SOC S17-009
 - SOC was approved by the EMC on 4/12/2018.

Mayo Steam Electric Plant

- Assessment and Corrective Action Status
 - On 2/12/2018, Duke submitted a plan to sample surface water at the facility. On 4/3/2018, DWR sent a letter to Duke Energy conditionally approving the surface water evaluation.
 - On 8/31/2017, Duke submitted the updated CSA Report for the facility. On 5/7/2018, DWR sent comments to Duke Energy on their updated Comprehensive Site Assessment.
 - On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
- Closure Status
 - Per 130A-309.213(d), DEQ is required to issue a final classification by 11/30/2018. This final classification will determine the closure methods available for the impoundments.
- NPDES permit NC0038377
 - Draft permit was sent to public notice and the comment period ends 6/1/2018.
- SOC S18-005
 - SOC was public noticed on 4/21/2018. A public hearing will be held on 5/24/2018. The SOC is scheduled for EMC consideration on 7/12/2018.

Riverbend Steam Station

- Assessment and Corrective Action Status
 - On 12/12/2017, DWR received an updated excavation plan from Duke. DWR is reviewing the soil sampling portion of the plan and will be providing comments to Duke soon.
 - On 1/15/2018, DWR received a work plan to address potential soil and groundwater contamination resulting from the former raw coal pile area. On 5/4/2018, DWR sent Duke Energy a letter conditionally approving their plan.
 - On 10/31/2017, Duke submitted the updated CSA Report for the facility. On 5/4/2018, DWR sent comments to Duke Energy on their updated Comprehensive Site Assessment.
 - On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
- Closure Status
 - Excavation at the site is currently underway.
- NPDES permit NC0004961
 - Permit was issued 11/18/2016 and became effective 12/1/2016.
- SOC S16-005
 - Signed by the Director 11/10/2016.

Roxboro Steam Electric Plant

- Assessment and Corrective Action Status
 - On 1/30/2018, Duke submitted a plan to sample surface water at the facility. On 4/3/2018, DWR sent a letter to Duke Energy conditionally approving their plan.
 - On 10/31/2017, Duke submitted the updated CSA Report for the facility. On 5/7/2018, DWR sent comments to Duke Energy on their updated Comprehensive Site Assessment.
 - On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
- Closure Status
 - Per 130A-309.213(d), DEQ is required to issue a final classification by 11/30/2018. This final classification will determine the closure methods available for the impoundments.
- NPDES permit NC0003425
 - Currently in draft and waiting for submission to be re-public noticed.
- SOC S18-005

- SOC was public noticed on 4/21/2018. A public hearing will be held on 5/24/2018. The SOC is scheduled for EMC consideration on 7/12/2018.

L. V. Sutton Energy Complex

- Assessment and Corrective Action Status
 - On 12/12/2017, DWR received an updated excavation plan from Duke. On 3/9/2018, DWR approved the soil sampling portion of the plan.
 - On 1/31/2018, Duke Energy submitted an updated CSA Report for the facility. This report is currently being reviewed by the DWR Wilmington Regional Office.
 - On 4/26/2018, DWR received a surface water evaluation plan from Duke Energy. On 5/10/2018, DWR sent Duke Energy a letter conditionally approving the plan.
 - On 5/14/2018, DWR sent Duke Energy a letter approving a majority of the background concentrations calculated by Duke Energy. Duke Energy will be responsible for providing updated calculations for any background concentration that the DWR found unacceptable. The approved background concentrations will be used for a basis for groundwater remediation in their upcoming Corrective Action Plan.
- Closure Status
 - Excavation at the site is currently underway.
- NPDES permit NC0001422
 - Permit was issued 9/30/2017 and became effective 10/1/2017.

W. H. Weatherspoon Power Plant

- Assessment and Corrective Action Status
 - On 12/19/2017, DWR received an updated excavation plan from Duke. DWR is reviewing the soil sampling portion of the plan and will be providing comments to Duke soon.
 - On 1/15/2018, DWR received a work plan to address potential soil and groundwater contamination resulting from the former raw coal pile area. On 5/4/2018, DWR sent Duke Energy a letter conditionally approving their plan.
 - Duke has proposed to submit the updated CSA Report on 9/30/2018.
- Closure Status
 - Per G.S. 130A-309.216, Duke was required to identify, at a minimum, three sites for beneficial reuse. Duke selected this facility for beneficial reuse. G.S. 130A-309.216(c) states that sites selected for beneficiation projects must close by 12/31/2029.
- NPDES permit NC0005363
 - Currently in draft and waiting for submission to be re-public noticed.
- SOC S18-006
 - SOC is in development. There is a potential the SOC may be reviewed by the EMC in September.

Annual Groundwater Protection and Restoration Reports

- The Annual Groundwater Protection and Restoration Reports have been uploaded to the DEQ website.
- <https://edocs.deq.nc.gov/WaterResources/Browse.aspx?startid=221202&dbid=0&cr=1>
- Since the reports are very concise, they do not lend themselves to being summarized. The report does, however, summarize all groundwater sampling, protection, and restoration activities related to the impoundment for the preceding year.

Annual Surface Water Protection and Restoration Reports

- The Annual Surface Water Protection and Restoration Reports have been uploaded to the DEQ website.
- <https://edocs.deq.nc.gov/WaterResources/Browse.aspx?startid=221202&dbid=0&cr=1>
- Since the reports are very concise, they do not lend themselves to being summarized. The report does, however, summarize all groundwater sampling, protection, and restoration activities related to the impoundment for the preceding year.

Division of Waste Management

This report is submitted to meet the requirements of General Statute 130A-309.204, which requires the Department of Environmental Quality to submit quarterly reporting on operations, activities, programs and progress relating to coal combustion residuals surface impoundments. This report is intended to provide an update on activities that have occurred since April 1, 2018.

The June 2018 Division of Waste Management's portion of the Quarterly Report to the N.C. Environmental Review Commission is as follows:

5. N.C. Division of Waste Management

Duke facilities with industrial landfills - The North Carolina Division of Waste Management's Solid Waste Section (Section) regulates industrial coal combustion residual landfills in accordance with 15A NCAC 13B .0500.

Allen Steam Station – Gaston County

- 3612-INDUS-2008: Retired Ash Basin Landfill (open, double-lined, landfill constructed on top of retired ash basin)
 - Cell 2B currently receiving coal ash
- Inspected 4/23/2018 – No violations noted.

Belews Creek Steam Station – Stokes County

- 8503-INDUS-1984: Pine Hall Road Landfill (closed, unlined)
 - Inspected 2/23/2018 – No violations noted.
 - Groundwater Assessment: request letter 11/9/2011, workplan submitted 2/9/2012, workplan approved 3/23/2012, assessment report submitted 10/1/2012, final assessment approval 5/2/2016

8504-INDUS: Craig Road Landfill (open, lined)

- Permit to Operate (PTO), renewal issued 11/28/2017
- Paste Demonstration Project for bromide sequestration authorized 8/18/2017, has been placed on hold pending additional information from the Division of Water Resources.
- Inspected 2/23/2018– No violations noted.
Groundwater Assessment: request letter 11/9/2011, workplan submitted 2/9/2012, workplan approved 3/23/2012, assessment report submitted 12/21/2012, final assessment approval 5/2/2016

8505-INDUS: Flue Gas Desulfurization (FGD) Landfill (open, lined)

- The facility has been mining gypsum from landfill to meet wallboard production needs, thus increasing landfill capacity, since June 2015
- PTO issued 11/28/2017
- Groundwater Assessment: request letter 11/9/2011, workplan submitted 2/9/2012, workplan approved 3/23/2012, assessment report submitted 10/5/2012, assessment response 11/28/2012, approved additional assessment workplan 11/7/2016; approved amendment to workplan on 2/24/2017; received assessment report 5/31/2017; DWM Solid Waste Section concurrence 8/21/2017. Currently still undergoing assessment.
- Inspected 11/9/2011 for 8503 and 8504, approved 5/2/2016. The 8505-INDUS landfill continues under groundwater assessment – approved additional assessment workplan 11/7/2016; approved amendment to workplan on 2/24/2017; received assessment report 5/31/2017; and DWM Solid Waste Section concurrence 8/21/2017.
- Inspected 2/23/2018

Dan River Steam Station – Rockingham County (retired coal-fired plant, converted to combined cycle turbine)

- 7906-INDUS-2016
- PTO, Permit to Construct (PTC) issued 10/26/2016
- Coal Ash Management Act requires basin ash removal by 2019.
- Basin ash to Waste Management Landfill, Jetersville, VA and to Roanoke Cement, Troutville, VA for concrete production, contract completed June 2017.
- Cell 1 Operation authorized on 5/30/2017
- First load of ash disposed in Cell 1 on 5/31/2017
- Cell 2 Operation authorized on 10/2/2017
- Pre-Operations Meeting for Cell 3 was held on 5/8/2018
- To be inspected 6/13/2018

Mayo Steam Electric Plant – Person County

7305-INDUS-2012 (open, double lined)

- Groundwater Assessment: workplan submitted on 1/31/2017 and revised on 2/23/2017; approval issued 3/22/2017; groundwater assessment status letter sent on 1/17/2018; and Solid Waste Section response to status letter sent 1/26/2018.
- Leachate Environmental Event Report 8/16/2017 (force main piping at blind flange)
- Inspected 9/7/2017
- Leachate Line leak investigation

- Potential leak in leachate transfer vault area
- Site visit 4/12/2018– No violations noted.
- Incident report submitted 4/20/2018 – Investigation not yet complete

Marshall Steam Station – Catawba County

1804-INDUS-1983: Dry Ash Landfill (closed, unlined)

- Inspected 4/24/2018
- 1809-INDUS: FGD Landfill (open but active, lined)
 - Last received waste on 10/16/2015, 12-inch interim cover and established vegetation
 - PTO renewal issued 12/20/2016
 - Revised Closure and Post-Closure Plan approved on 3/5/2018
 - Inspected 4/24/2018– No violations noted.
 - Preconstruction meeting for PTC Cells 3 and 4 – 2/9/2017
 - Groundwater Assessment for 1804 and 1809 requested on 11/9/2011; 1804 response 12/12/2012, and 1809 response 7/12/2012. The final approval for 1804 and 1809 was issued on 5/2/2016.
 - Inspected 4/24/2018
 - 5/30/2018 – No violations noted.
 - Pre-operations Meeting for Cells 3 and 4 was held on 5/30/2018.

Rodgers Energy Complex – Rutherford County

8106-INDUS-2009: Landfill (open, lined)

- PTO Phase I and II issued June 2016
- Plant and basin ash to landfill (excavation basin units 1 through 4 completed in June 2017),
- Inspected 4/23/2018 – No violations noted.

Roxboro Steam Electric Plant – Person County

7302-INDUS-1988: Landfill (open, lined, constructed partially on top of retired ash basin)

- PTO Vertical Expansion Phase 6 completed 12/20/2016
- Groundwater Assessment: requested 6/29/2016, response 9/28/2016 and final approval issued 6/23/2017
- Inspected 10/2/2017 – No violations noted.

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

- 6512-INDUS-2016
- PTC September 2016
- CAMA requires basin ash removal by 2019
- Basin ash via rail to the Brickhaven Structural Fill stopped when landfill operations began
- First load of ash disposed in Cell 3 on 7/7/2017
- First load of ash disposed in Cell 4 on 9/11/2017
- Inspected 11/15/2017 – No violations noted.
- Cell 6 Operation approved 2/7/2018

- Cells 7 and 8 Pre-Operation meeting 5/16/2018
- Cells 7 and 8 Operations approved 5/16/2018

Landfill off-site of power industry

Halifax County Industrial Landfill – Halifax County Westmoreland Partners, Roanoke Valley Energy Plant (intermittently active coal-fired plant)

- 4204-INDUS-1994: Halifax County Coal Ash Landfill (open/inactive, lined)
- To be inspected 6/20/2018
- Halifax County is coordinating with Westmoreland on closure of the landfill.

Duke facilities without landfills

Asheville Steam Electric Plant - Buncombe County (Duke Energy submitted plans to convert to combined cycle turbine to the N.C. Utilities Commission for approval in 2015.)

- The Asheville Airport Structural Fill DWR Distribution of Residual Solids (DORS) Permit #WQ0000452 has been used to construct three structural fills at the Asheville Airport.
- CAMA requires basin ash removal by 2022
- Ash excavation from 1982 basin completed in September 2016. Basin ash was sent by truck to the Rodgers Steam Plant and ended September 2016.
- Plant and basin (1964 Basin) ash sent by truck to Waste Management's Homer, GA landfill

Buck Steam Station – Rowan County (retired coal-fired plant, converted to combined cycle turbine)

- Site of Beneficiation Plant announcement December 2016
- Permitting process to begin Spring 2018
- Operations anticipated to begin Fall 2019

Cape Fear Steam Electric Plant – Chatham County (retired coal-fired plant, no electricity production)

- Site of Beneficiation Plant announced per CAMA June 2017
- Permitting process to begin Summer 2018
- Operations anticipated to begin Spring 2020

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

- Site of Beneficiation Plant announced per CAMA December 2016
- Permitting process to begin Summer 2018
- Operations anticipated to begin Summer 2020

Riverbend Steam Station – Gaston County (retired coal-fired facility, no electricity)

- CAMA requires basin ash removal by 2019
- Dry stack and basin ash via rail to Brickhaven Structural Fill.
- Approximately 4.3 million tons of ash excavated as of April 2018

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

- Basin ash trucked to beneficial reuse facility in South Carolina began 9/13/2017. More than 140,000 tons excavated for reuse as of May 2018.

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

- Beneficial reuse: mine reclamation (ash from any Duke plant)
- Owned/operated by Charah, Inc.
- The structural fill will have an approximate footprint of 145 acres in size when completed and have a capacity of 12.5 million tons of ash airspace; the expected life of facility to completion of the fill is approximately eight years.
- Ash from Sutton and Riverbend
- PTC/PTO issued 6/5/2015; ash sent by truck (October 2015) and by rail (March 2016).
- Last train load from Sutton on 6/27/2017
- Partial closure of Cell 1 – 18 acres closed
 - Inspection 3/5/2018 – No violations noted.
- More than 6 million tons of ash placed in the structural fill as of March 2018

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

- Beneficial reuse mine reclamation (ash from any Duke plant)
- Owned/operated by Charah, Inc.
- Spans 118 acres, holds 8.87 million tons of ash and took approximately five years to complete.
- PTC issued on 6/5/2015. Construction has not started.

1117-STRUC-, Asheville Airport Area 2 – Buncombe County

- Area 2 PTO application withdrawn.
- Areas 1, 3 and 4 constructed (DWR DORS Permit #WQ0000452)
- Field Assessment of structural fill cap for Area 2 was conducted on 5/2/2018

Inventory of structural fills per Session Law 2014-122:

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

Groundwater assessment and corrective action at structural fills

Roxboro Steam Station Gypsum Storage Pad (CCB0003)

- Groundwater Assessment Work Plan – Duke submitted this plan on 11/20/2016. The DWM Solid Waste Section staff approved it on 12/6/2016. The Groundwater Assessment Report was submitted 6/28/2017.

Belews Creek Steam Station Structural Fill (CCB0070)

- Groundwater Assessment Work Plan – Duke submitted this on 11/7/2016; and the Solid Waste Section approved it on 12/7/2016. The approval to install well clusters was issued on 5/26/2017, followed by an approval of time extension on 12/15/2017. The Groundwater Assessment Report was submitted 12/5/2018; and the Solid Waste Section response to assessment report was sent 1/23/2018.

Swift Creek in Nash County (CCB0057)

- Groundwater assessment complete
- Corrective Action initiated Spring 2017
- XRF (in situ metals) and dust sampling conducted 9/6/2017
- Corrective action project complete December 2017
- Final Cover and seeding completed January 2018.

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

- Groundwater Assessment ongoing in conjunction with Division of Water Resources. Notice of Violation issued on 10/21/2016 for impacts to wetlands and surface water.

Historic Ash Management Area

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

- Inspection/Site Visit was performed on 4/16/2018
- Added to inventory on 4/30/2018

Division of Energy, Mineral, and Land Resources

This report is submitted to meet the requirements of General Statute 130A-309.204, which requires the Department of Environmental Quality to submit quarterly reporting on operations, activities, programs and progress relating to coal combustion residuals surface impoundments. This report is intended to provide an update on activities that have occurred or have been reported for the second quarter (April, May, and June) of 2018.

The June 2018 Division of Energy, Mineral, and Land Resources’ portion of the Quarterly Report to the N.C. Environmental Review Commission is as follows:

N.C. 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 Storm Water Program under the authority of multiple Session Laws along with their associated Administrative Code.

Allen Steam Station

Dam Safety –

- 2/22/2018-GASTO-016 As-built outfall pipe point repair (Scope 7 Addendum 1)
- GASTO-061 Well installation as-built.

Erosion and Sediment Control and Construction Storm Water –

- GASTO-2009-001 Revised issued Approval with Modifications 1/9/2018.
- GASTO-2018-015 Allen Steam Station - Additional Area Water Redirect issued Approval 1/23/2018.
- GASTO-2017-015, Additional Area Water Redirect issued Approval 1/23/2018.
- GASTO-2009-001 Revised issued Approval 2/14/2018.
- GASTO-2017-015, GASTO-2018-004, GASTO-2018-013 inspected and compliant 2/22/2018.
- GASTO-2018-015 Revised issued Approval 3/29/2018.

Buck Steam Station

Dam Safety – Nothing to report at this time

Erosion and Sediment Control and Construction Storm Water –

- ROWAN-2018-006 Buck Station, Beneficial Ash Facility withdrawn 1/25/2018.
- ROWAN-2018-008 Buck Station, Beneficial Ash Facility (Phase 1) issued Approval 2/28/2018.
- ROWAN-2018-012 Buck Beneficial Ash Access Road issued Approval 3/27/2018.

NPDES Storm Water

- 1/10/2018 - Letter with additional detail for storm water outfalls and updated site info.
- 2/20/2018 - Letter with update stating that Duke plans on plugging SW outfall 003 and redirect to station sump due to demo.

Cliffside Steam Station

Dam Safety

- 2/28/2018 CLEVE-050 Well installation as- built inspection.

Erosion and Sediment Control and Construction Storm Water – No activity at this time.

Marshall Steam Station

Dam Safety

- Comments sent to Raleigh on 1/18/2018 for installing instrumentation on CATAW-054.
- Erosion and Sediment Control and Construction Storm Water – No activity to report at this time.

NPDES Storm Water

- 3/21/2018 - Discussion with Duke about the creation of a new storm water pond to collect offsite storm water and possible outfall location, decided minor mod to permit.

Riverbend Steam Station

Dam Safety – Nothing to report at this time.

Erosion and Sediment Control and Construction Storm Water –

- GASTO-2016-020 & GASTO-2016-021 inspected 2/22/2018-closed.
- GASTO-2014-012 inspected 2/22/2018, compliant.

Belews Creek Steam Station

Dam Safety

- Annual Inspection for Dan River Service Water Pond (ROCKI-241) 3/22/2018.
- Annual Inspection for Dan River Primary Ash Basin (ROCKI-237) 3/22/2018.
- Annual Inspection for Dan River Secondary Ash Basin (ROCKI-218) 3/22/2018.

Erosion and Sediment Control and Construction Storm Water – Nothing to report at this time.

NPDES Storm Water

- 2/8/2018 - Letter requesting the addition of two recently discovered sediment basins to the permit
- 2/6/2018 - Minor modification request to add two old sediment basins as new outfalls

Dan River Steam Station

Dam Safety

- As-built inspection for Belew's Creek Ash Basin (STOKE-116) Scope 2, 3/30/2017, compliant.
- As-built inspection for Belew's Lake Ash Basin (STOKE-116) Scope 3, 3/30/2017, compliant.
- Annual Inspection for Belew's Lake Ash Basin (STOKE-116) 3/27/2018, compliant.
- Annual Inspection for Belew's Lake Saddle Dike #1 (STOKE-117) 3/27/2018, compliant.
- Annual Inspection for Belew's lake Saddle Dike #2 (STOKE-118) 3/27/2018, compliant.
- Annual Inspection for Belews Lake Saddle Dike #3 (STOKE-119) 3/27/2018, compliant.
- Annual Inspection for Belew's Lake Saddle Dike #4 (ROCKI-235) 3/27/2018, compliant.
- Annual Inspection for Belew's Lake Dam (ROCKI-236) 3/27/2018, compliant.

Erosion and Sediment Control and Construction Stormwater – Nothing to report at this time.

Sutton Power Station

Dam Safety – No activity to report at this time.

Erosion and Sediment Control and Construction Storm Water – No activity to report at this time.

Cape Fear Power Station

Dam Safety – No activity to report at this time.

Erosion and Sediment Control – No activity to report at this time.

Mayo Power Station

Dam Safety

- 1/18/2018 Proposed Duke Mayo Coal Pile Runoff Holding Basin Dam - Jurisdictional Determination – Based on the field inspection and the information

provided, the RRO concurs with the applicant's assessment that this is a low-hazard exempt structure.

- 2/12/2018 As-built for Mayo Ash Pond Weighted Overlay Filter – Overall, the dam appears to be in generally good operating condition. The repairs that were made appear to be in substantial conformance with the approved plans and as detailed on the record drawings prepared by AMEC Foster Wheeler and provided by Duke Energy.

Erosion and Sediment Control – No activity to report at this time.

Roxboro Power Station

Dam Safety

- 1/24/2018 Request to Construct Retention Basin Dam Roxboro Steam Station. No additional comment to this revision.

Erosion and Sediment Control- Not activity 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.

Colon Mine Permit 53-05

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.

Weatherspoon Power Station

Dam Safety

- ROBES-004 Cooling Lake Dam Request For Certificate Of Approval To Repair-Dam Modification-Scope-1 Dated 1/30/2018; Received NCDEQ FRO 1/31/2018

Erosion and Sediment Control & Storm Water Combined - Nothing to report at this time.

H.F. Lee Power Station

Dam Safety- Nothing to report at this time.

Erosion and Sediment Control & Storm Water Combined

- 1/10/2018 - Closure inspections of Wayne-2017-021, Wayne -2017-034 and Wayne-207-036. For reference, “Closure Inspection” in the Erosion & Sediment Control Program is defined as the project is complete, stable and has been closed-out.

Asheville Power Station

Dam Safety

- 2/6/2018 received Certificate of Approval to Repair (COAR) for BUNCO-097 1964 Ash Pond Scope 6, Addendum 1.
- 2/8/2018 received email requesting Certificate of Final Approval (COFA) for the decommissioning and slope improvement of Separator Dike 1982 Ash Basin BUNCO-089.
- 2/13/2018 Received 10 day notification for work on BUNCO-097, 1964 Ash Pond Scope 6, Addendum 1.
- 3/16/2018 received COFA of breach of BUNCO-089 1982 Ash Basin.
- 3/16/2018 received COFA of repair of Separator Dike (part of BUNCO-097, 1964 Ash Pond).
- 3/26/2018 received 10 day notification for BUNCO-088 Lake Julian Dam Scope 3, Addendum 1 (Phase 2).
- 3/28/2018 received proposed modification request for COAR for BUNCO-088 Scope 3 Addendum 1 (Phase 1).

Erosion and Sediment Control & Storm Water Combined –

- 1/4/2018, Approved BUNCO-2018-007 Duke Asheville Plant Screening Berm.
- 1/4/2018, Approved BUNCO-2018-007 Duke Asheville Plant Screening Berm.