**Quarterly Report to the** 

North Carolina General Assembly

# Coal Combustion Residuals Surface Impoundments

4<sup>th</sup> Quarter 2018



NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY



ROY COOPER Governor MICHAEL S. REGAN Secretary

## **Department of Environmental Quality**

#### **Regulatory Background**

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. 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 North Carolina 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.



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## **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.

<u>Prioritization and Closure Status [G.S. 130A-309.213]</u> Currently, all facilities are ranked either as high or intermediate 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
  - Riverbend Steam Station
  - 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:
  - H. F. Lee Energy Complex
  - Cape Fear Steam Electric Plant
  - W. H. Weatherspoon Power Plant

These facilities have also been selected by Duke Energy for beneficiation under G.S. 130A-309.216. The Buck Combined Cycle Station has also been selected by Duke Energy for beneficiation, but is currently classified as intermediate risk. 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:
  - Allen Steam Station
  - 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
- 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.

## 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 North Carolina Department of Environmental Quality (DEQ). These plans included general cost estimates and were labeled confidential.
- Updated corrective action plans have yet to be submitted for all facilities.

## Site Specific Actions of Surface Impoundments

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

#### Acronyms

The following acronyms may be used in the remaining sections.

- CAP Corrective Action Plan
- CSA Comprehensive Site Assessment
- DEQ North Carolina Department of Environmental Quality
- DWR Division of Water Resources
- EMC Environmental Management Commission
- NPDES National Pollution Discharge Elimination System
- SOC Special Order by Consent

#### Allen Steam Station

- Assessment and Corrective Action Status
  - October 8, 2018 DEQ established dates for Duke Energy to submit the following:
    - Closure plans August 1, 2019
    - Updated CAP for the impoundments and all sources hydrogeologically connected to the impoundments – December 1, 2019

- CSA for all sources not hydrogeologically connected to the impoundments – March 31, 2020.
- October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
- Closure Status
  - On 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
  - Permit was issued July 13, 2018 and became effective August 1, 2018.
- SOC S17-009
  - SOC was approved by the EMC on April 12, 2018.

## Asheville Steam Electric Plant

- Assessment and Corrective Action Status
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
  - Duke Energy has yet to submit the updated CSA Report. DEQ and Duke Energy are in the process of developing submittal dates.
- Closure Status
  - o 1964 Basin
    - Excavation of the impoundment in progress.
  - o 1982 Basin
    - Impoundment completely excavated.
- NPDES permit NC0000396
  - Permit was issued November 8, 2018 and becomes effective December 1, 2018.
- SOC S17-010
  - SOC was signed by the EMC on October 10, 2018.

#### Belews Creek Steam Station

- Assessment and Corrective Action Status
  - October 8, 2018 DEQ established dates for Duke Energy to submit the following:
    - Closure plans August 1, 2019
    - Updated CAP for the impoundments and all sources hydrogeologically connected to the impoundments December 1, 2019
    - CSA for all sources not hydrogeologically connected to the impoundments – March 31, 2020.

- October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
- Closure Status
  - On 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
  - Draft permit was sent to public notice and the comment period ended July 30, 2018.
- SOC S18-004
  - SOC was approved by the EMC on July 12, 2018.

## Buck Combined Cycle Station

- Assessment and Corrective Action Status
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
  - October 17, 2018 DWR's Mooresville Regional Office approves the surface water evaluation plan.
  - Duke Energy has yet to submit the updated CSA Report. DEQ and Duke Energy are in the process of developing submittal dates.
- Closure Status
  - 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.
  - On November 13, 2018, DEQ deemed that this facility is low risk based on criteria under G.S. 130A-309.213(d)(1).
- NPDES Permit NC0004774
  - Permit was issued September 17, 2018 and became effective November 1, 2018.
- SOC S18-004
  - SOC was approved by the EMC on July 12, 2018.

#### Cape Fear Steam Electric Plant

- Assessment and Corrective Action Status
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate

drinking water to households within one-half mile of the established facility compliance boundary.

- Duke Energy has yet to submit the updated CSA Report. DEQ and Duke Energy are in the process of developing submittal dates.
- 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.
- NPDES permit NC0003433
  - Draft permit was sent to public notice. The public comment period ended July 27, 2018. The draft permit was re-public noticed on October 17, 2018, and the public comment period ends November 25, 2018.
- 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
  - October 8, 2018 DEQ established dates for Duke Energy to submit the following:
    - Closure plans August 1, 2019
    - Updated CAP for the impoundments and all sources hydrogeologically connected to the impoundments – December 1, 2019
    - CSA for all sources not hydrogeologically connected to the impoundments – March 31, 2020.
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
  - Duke continues to assess a former coal ash storage area north of Broad River.
- Closure Status
  - Inactive Units 1-4 are completely excavated. On August 10, 2018, DEQ approved the visual verification of CCR removal.
  - On 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 NC0005088
  - Permit was issued July 13, 2018 and becomes effective September 1, 2018.
- SOC S17-009
  - SOC was approved by the EMC on April 12, 2018.

## Dan River Combined Cycle Station

- Assessment and Corrective Action Status
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
  - Duke Energy has yet to submit the updated CAP Report. DEQ and Duke Energy are in the process of developing submittal dates.
- Closure Status
  - Excavation at the site is currently underway.
- NPDES permit NC0003468
  - Permit was issued October 27, 2016 and became effective December 1, 2016.

## H. F. Lee Energy Complex

- Assessment and Corrective Action Status
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
  - Duke Energy has yet to submit the updated CSA Report. DEQ and Duke Energy are in the process of developing submittal dates.
- Closure Status
  - 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.
- NPDES permit NC0003417
  - Draft permit was public noticed on November 2, 2018, and the public comment period ends November 31, 2018.
- SOC S18-006
  - SOC has been public noticed. A public hearing is scheduled for December 6, 2018, and review by the EMC is scheduled for January 10, 2019.

#### Marshall Steam Station

- Assessment and Corrective Action Status
  - On January 31, 2018, Duke Energy submitted an updated CSA Report for the facility. On August 7, 2018, DWR submitted comments to Duke Energy.
  - October 8, 2018 DEQ established dates for Duke Energy to submit the following:
    - Closure plans August 1, 2019
    - Updated CAP for the impoundments and all sources hydrogeologically connected to the impoundments December 1, 2019
    - CSA for all sources not hydrogeologically connected to the impoundments – March 31, 2020.

- October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
- Closure Status
  - On 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
  - Major permit modification completed. Modified permit was issued April 2, 2018 and became effective May 1, 2018.
- SOC S17-009
  - SOC was approved by the EMC on April 12, 2018.

## Mayo Steam Electric Plant

- Assessment and Corrective Action Status
  - October 8, 2018 DEQ established dates for Duke Energy to submit the following:
    - Closure plans August 1, 2019
    - Updated CAP for the impoundments and all sources hydrogeologically connected to the impoundments December 1, 2019
    - CSA for all sources not hydrogeologically connected to the impoundments – March 31, 2020.
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
- Closure Status
  - On 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
  - Permit was issued July 13, 2018 and became effective August 1, 2018.
- SOC S18-005
  - SOC was approved by the EMC on August 15, 2018.

#### **Riverbend Steam Station**

- Assessment and Corrective Action Status
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.

- Duke Energy has yet to submit the updated CAP Report. DEQ and Duke Energy are in the process of developing submittal dates.
- Closure Status
  - Excavation at the site is currently underway.
- NPDES permit NC0004961
  - Permit was issued November 18, 2016 and became effective December 1, 2016.
- SOC \$16-005
  - Signed by the Director November 10, 2016.

Roxboro Steam Electric Plant

- Assessment and Corrective Action Status
  - October 8, 2018 DEQ established dates for Duke Energy to submit the following:
    - Closure plans August 1, 2019
    - Updated CAP for the impoundments and all sources hydrogeologically connected to the impoundments – December 1, 2019
    - CSA for all sources not hydrogeologically connected to the impoundments – March 31, 2020.
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
- Closure Status
  - On 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
  - Currently in draft and waiting for submission to be re-public noticed.
- SOC S18-005
  - SOC was approved by the EMC on August 15, 2018.
- L. V. Sutton Energy Complex
  - Assessment and Corrective Action Status
    - October 8, 2018 DWR approves the Coal Pile Assessment Plan.
    - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
    - Duke Energy has yet to submit the updated CAP Report. DEQ and Duke Energy are in the process of developing submittal dates.
  - Closure Status
    - Excavation at the site is currently underway.
  - NPDES permit NC0001422

• Permit was issued September 30, 2017 and became effective October 1, 2017.

W. H. Weatherspoon Power Plant

- Assessment and Corrective Action Status
  - October 12, 2018 DEQ approved Duke Energy's compliance with General Statute 130A-309.211(c1) which required Duke Energy to provide permanent alternate drinking water to households within one-half mile of the established facility compliance boundary.
  - October 29, 2018 Duke Energy submits a surface water characterization plan. On November 16, 2018, DWR approved the plan.
  - Duke Energy has yet to submit the updated CSA Report. DEQ and Duke Energy are in the process of developing submittal dates.
- Closure Status
  - 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.
- NPDES permit NC0005363
  - Permit was issued August 3, 2018 and becomes effective November 1, 2018.
- 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 DEQ website <u>https://edocs.deq.nc.gov/WaterResources/Browse.aspx?startid=221202&dbid=0&cr=1</u>. 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 Report Summary

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## **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.

<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)
  - Cell 2B currently receiving coal ash
  - Inspected April 23, 2018

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

- **8503-INDUS-1984**: Pine Hall Road Landfill (closed, unlined)
  - Inspected February 23, 2018
  - Groundwater Assessment: assessment request letter issued 11/9/11, assessment work plan submitted 2/9/12, work plan approval issued 3/23/12, assessment report submitted 10/1/12, final approval of assessment report 5/2/16
- **8504-INDUS**: Craig Road Landfill (open, lined)
  - Permit to Operate (PTO), renewal issued Nov. 28, 2017
  - Paste Demonstration Project for bromide sequestration authorized Aug. 18, 2017, has been placed on hold pending additional information from the Division of Water Resources.
  - Groundwater Assessment: assessment request letter issued 11/9/2011, work plan submitted 2/9/2012, work plan approved 3/23/2012, assessment report submitted 12/21/2012, final assessment approval 5/2/2016
  - Small slope failure, incident report submitted 10/15/18, repairs completed
  - Inspected October 16, 2018
- **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 Nov. 28, 2017
  - Groundwater Assessment: assessment request letter issued 11/9/2011, work plan submitted 2/9/2012, work plan approved 3/23/2012, assessment report submitted 10/5/2012, assessment response issued 11/28/2012, approved additional assessment work plan 11/7/2016; approved amendment to work plan on 2/24/2017; assessment report submitted 5/31/2017; DWM Solid Waste Section concurrence 8/21/2017. Revised report to assessment report issued 4/25/18. Currently still undergoing assessment.
  - Inspected February 23, 2018

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

- **7906-INDUS-2016**: CCR Landfill (open, lined)
  - PTO, Permit to Construct (PTC) issued October 26, 2016
  - Coal Ash Management Act requires basin ash removal by December 31, 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 May 30, 2017
  - First load of ash disposed in Cell 1 on May 31, 2017
  - Cell 2 Operation authorized on Oct. 2, 2017
  - Pre-Operations Meeting for Cell 3 was held on May 8, 2018
  - Small slope failure, incident report submitted 5/17/18, repairs completed
  - Inspected September 28, 2018

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

- 7305-INDUS-2012: CCR Landfill (open, double lined)
  - Groundwater Assessment: workplan submitted on 12/31/17 and revised on 2/23/17; workplan approval issued 3/22/17; groundwater assessment status letter submitted 1/17/18; response to status letter issued 1/26/18; additional assessment workplan submitted 7/20/18
  - Inspected September 7, 2018 and September 27, 2018
  - Leachate storage issue being investigated.

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

- 1804-INDUS-1983: Dry Ash Landfill (closed, unlined)
  - Inspected April 24, 2018
    - Groundwater Assessment: assessment request letter issued 11/9/11, assessment workplan submitted 2/9/12, workplan approval issued 3/23/12, assessment report issued 7/12/12, final assessment approval issued 5/2/16
- **1809-INDUS**: FGD Landfill (closed, lined)
  - Last received waste on October 16, 2015, 12-inch interim cover and established vegetation
  - PTO renewal issued December 20, 2016
  - Revised Closure and Post-Closure Plan approved on March 5, 2018
  - Inspected April 24, 2018
  - Closure Cap construction nearing completion.
  - Groundwater Assessment: assessment request letter issued 11/9/11, assessment workplan submitted 2/9/12, workplan approval issued 2/20/12, assessment report issued 12/21/12, final assessment approval issued 5/2/16
  - 1812-INDUS-2008: Industrial Landfill #1 (open, double-lined)
    - Inspected April 24, 2018
- Structural Fill CCB0031
  - Stormwater rerouting project is underway, completion scheduled for 2<sup>nd</sup> quarter 2018.

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

- **8106-INDUS-2009**: CCR Landfill (open, lined)
  - PTO Phase I and II issued June 2016
  - Facility announced the use of natural gas as
  - Inspected October 1, 2018
  - Approval of Phase 3 & 4 piezometer installation plan issued 7/13/18

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

- **7302-INDUS-1988**: CCR Landfill (open, lined, constructed partially on top of retired ash basin)
  - PTO Vertical Expansion Phase 6 completed 12/20/16
  - Groundwater Assessment: assessment request letter issued 6/29/16; assessment response/report submitted 9/28/16; final assessment approval issued 6/23/17
  - Inspected October 1, 2018

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

- 6512-INDUS-2016: CCR Landfill (open, lined0
  - PTC issued September 2016
  - CAMA requires basin ash removal by December 31, 2019
  - Basin ash via rail to the Brickhaven Structural Fill (1910-STRUC-2015) stopped when landfill operations began
  - First load of ash disposed in Cell 3 July 7, 2017
  - First load of ash disposed in Cell 4 September 11, 2017
  - Cell 5 Operation approved December 4, 2017
  - Cell 6 Operation approved February 7, 2018
  - Cells 7 and 8 Pre-Operation meeting May 16, 2018
  - Cells 7 and 8 Operations approved May 16, 2018
  - Significant slope failures from Hurricane Florence reported September 15, 2018
  - o Inspected September 20, 2018 and November 1, 2018

## Landfill off-site of power industry

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

- 4204-INDUS-1994: Halifax County Coal Ash Landfill (open/inactive, lined)
  - Inspected June 20, 2018
  - Halifax County is coordinating with Westmoreland on closure of the landfill.
  - Closure activities began October 31, 2018

## Duke 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.)

- 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 December 31, 2019

- 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

<u>Buck Steam Station – Rowan County</u> (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

<u>Cape Fear Steam Electric Plant – Chatham County</u> (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

<u>H.F. Lee Steam Electric Plant – Wayne County</u> (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

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

- CAMA requires basin ash removal by December 31, 2019
- Dry stack and basin ash via rail to Brickhaven Structural Fill (1910-STRUC-2015)
- Approximately 4.3 million tons of ash excavated as of April 2018
- Approximated completion of excavation November 2018

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

• Basin ash trucked to beneficial reuse facilities in South Carolina began in Sept. 13, 2017. More than 272,000 tons excavated for reuse as of October 2018. Excavation basin ash is being sent to the Holcim facility in Holly Hill, SC and the Argos USA facility in Harleyville, SC.

**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 allowed from any Duke plant)
- Owned/operated by Charah, Inc.
- The structural fill is permitted for an approximate footprint of 145 acres in size when completed and capacity of 12.5 million tons of ash airspace; the expected life of facility if all airspace is used is approximately eight years.

- Ash received from Sutton and Riverbend
- PTC/PTO issued June 5, 2015: ash sent by truck (October 2015) and by rail (March 2016).
- Last train load from Sutton on June 27, 2017
- Partial closure of Cell 1 18 acres closed
- Inspection March 5, 2018
- More than 6 million tons of ash has been placed in the structural fill in Cells 1, 2, and 6 as of March 2018
- When excavation activities conclude from Riverbend in late 2018, partial closure will begin.

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

- Beneficial reuse mine reclamation (ash allowed from any Duke plant)
- Owned/operated by Charah, Inc.
- Spans 118 acres, holds 8.87 million tons of ash.
- PTC issued on June 5, 2015. Construction has not started.

#### <u>1117-STRUC-</u>, 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 conducted May 2, 2018
- DWR will continue to be lead for the site; DWM will assist as needed

Inventory of structural fills per Session Law 2014 122: <u>http://deq.nc.gov/about/divisions/waste-management/solid-waste-section/coal-combustion-byproducts</u>.

#### Groundwater assessment and corrective action at structural fills

Roxboro Steam Station Gypsum Storage Pad (CCB0003)

- Groundwater Assessment: assessment work plan submitted 11/20/16; work plan approval issued 12/6/16; assessment report submitted 6/28/17
- Assessment ongoing

#### Belews Creek Steam Station Structural Fill (CCB0070)

- Groundwater Assessment: assessment work plan submitted 11/7/16; work plan approval issued 12/7/16; additional assessment approval (installation of well clusters)issued 5/26/17; time extension of assessment approval issued 12/15/17; Groundwater Assessment Report submitted 1/5/18; response to assessment report issued 1/23/18
- Assessment ongoing

#### Swift Creek in Nash County (CCB0057)

- Corrective Action initiated Spring 2017
- In situ metals and dust sampling conducted Sept. 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)

- Surface water Assessment ongoing by Division of Water Resources. Notice of Violation issued on October 21, 2016 for impacts to wetlands and surface water
- Surface water sampling was conducted in Spring 2017 and 2018.

## Historic Ash Management Area

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

- Inspection/Site Visit was performed on April 16, 2018
- Added to inventory database on April 30, 2018
- Sampling and Analysis Plan approved August 20, 2018
- Site Assessment Action Plan submitted September 11, 2018

## **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
  - Issued Approval to impound on interim basis for testing on June 20, 2018.
- Erosion and Sediment Control and Construction Storm Water
  - Issued approval of Lined Retention Bain Emergency Spillway with modifications on July 5, 2018.
- NPDES Storm Water
  - 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
  - Issued Approval with modifications on ROWAN-2018-008 on 7/20/2018.
  - Issued Approval with modifications on ROWAN-2019-004 Buck Beneficial Ash Access Rd-Ph 2 & Additional Area on 7/28/2018.
  - Issued Approval with modification on ROWAN-2019-005 Buck Basement Water Collection Pond A/M on 9/6/2018.
  - Issued Approval with modifications on ROWAN-2017-001 on 9/26/2018.
  - Issued Approval with modifications on ROWAN-2017-011 Revised on 9/24/2018.
  - Issued Approval with modifications on ROWAN-2018-008 revised on 9/27/2018.
- NPDES Storm Water
  - NPDES permit issued on August 1, 2018.

## 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

- Issued Approval with modifications on CLEVE-2018-043 Cliffside Steam Station Groundwater Monitoring Well and Soil Boring Installations on 6/13/2018.
- NPDES Storm Water
  - Nothing to report at this time.

## **Marshall Steam Station**

- Dam Safety
  - Issued approval for installation of instrumentation for the Active Ash Basin (Cataw-054) on June 20, 2018.
- Erosion and Sediment Control and Construction Storm Water
  - Issued Approval with modifications on CATAW-2018-019 Revised on 7/5/2018.
  - Issued Approval with modification on CATAW-2019-001 Duke Energy Marshall Steam Substation Fence Upgrade Project (Laydown Yard) on 7/30/2018.
- NPDES Storm Water
  - September 21, 2018 Permit Mod Issued to Add Two Outfalls for ash pond bypass.

## **Riverbend Steam Station**

- Dam Safety
  - Inspected Gasto-097 and 098 on 8/21/18.
- Erosion and Sediment Control and Construction Storm Water
  - Issued Approval with modifications on GASTO-2019-001 Grading and ESC Plan for Final Closure of Former Ash Storage Areas on 8/6/2018.
  - o Issued Approval with modifications on GASTO-2018-008 Revised on 8/23/2018.
  - Issued Approval with modifications on GASTO-2015-018 Revised on 9/18/2018.
  - Issued Approval with modifications on GASTO-2019-009 Riverbend Demolition Final Grading Plan on 9/26/2018.
- NPDES Storm Water
  - Nothing to report at this time.

## **Belews Creek Steam Station**

- Dam Safety
  - Received submittal on Stoke-116 project 7 on July 18, 2018. Additional information requested on July 31, 2018 and Duke submitted that infomation on August 31, 2018. Approval to repair was issued on August 31, 2018.
  - Received submittal for monitoring wells on August 27, 2018 and issued approval on September 4, 2018.

- Erosion and Sediment Control and Construction Storm Water
  - Belews creek steam station proposed groundwater extraction s (STOKE-2017-018)
     Inspected 7/24/18 Compliant, Closed
  - Belews creek stream station proposed well replacement (STOKE-2017-019) Inspected 7/24/18 Compliant, Closed
  - Belews creek steam station coal pile esc plan (STOKE-2017-009) Inspected 7/24/18 Compliant, Closed;
  - Belews creek steam station process & storm water re-direction (STOKE-2017-008)
    Inspected 7/24/18 Compliant, Still Open;
  - BC-419 VEGETATION REMOVAL SADDLE DIKE #1 (STOKE-2016-007) Inspected 7/24/18 Compliant, Still Open;
- NPDES Storm Water
  - Nothing to report at this time.

## **Dan River Combined Cycle Station**

- Dam Safety
  - Received revised submittal for the Secondary Ash Basin (Rocki-238) on July 16, 2018. Issue approval to modify on July 16, 2018.
- Erosion and Sediment Control and Construction Storm Water
  - Inspected Duke Energy Dan River Phase 2 (ROCKI-2014-008) 3/22/18,
  - Inspected Dan River Landfill Construction (ROCKI-2016-003) 3/22/18,
  - Inspected Duke Energy Dan River Landfill Cut 2/3/4 Borrow Area (ROCKI-2018-002) 3/22/18.
- NPDES Storm Water
  - Nothing to report at this time.

## L. V. Sutton Energy Complex

- Dam Safety
  - Sutton Plant Emergency Action Plan meeting and dam tour 6/14/2018
  - Inspected all dams multiple times following Hurricane Florence during September and October of 2018. Sutton Lake dam had multiple breaches that have been temporarily repaired and Duke is planning the final repairs 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.

## Cape Fear Steam Electric Plant

- Dam Safety
  - Issued second extension of approval to modify the 1956 Ash Basin (Chath-075) on August 16, 2018.
- Erosion and Sediment Control and Construction Storm Water
  - Approved PERSO-2019-001, Roxboro West Gate Relocation on 7/20/18.
- NPDES Storm Water
  - Nothing to report at this time.

## Mayo Steam Electric Plant

- Dam Safety
  - Issued interim approval to impound for FGD Settling Pond on July 6, 2018.
  - Issued interim approval to impound for proposed Retention Basin on July 6, 2018.
  - 09/06/18 annual dam inspection for dams (PERSO-034, PERSO-035, PERSO-002). PERSO-034, recommend continue monitoring and maintenance. PERSO-035, recommend continued maintenance no change from previous inspection. PERSO-002 Hyco Lake dam noted edge of apron on concrete spillway has horizontal and vertical cracks. Cracks are not significant. Propose maintenance repair. Previous void in edge of down stream chute side wall has been repaired.
- Erosion and Sediment Control and Construction Storm Water
  - Mayo 504 as built inspection/Vegetation Removal Project PERSO-2017-014 inspected on 05/31/2018 and recommended continuing vegetation efforts.
  - PERSO-2017-014 inspected on 09/06/2018 and project was completed. Recommended close out with no further action.
  - PERSO-2019-002, Mayo Emergency Spillway Access Rd Improvements approved 8/30/18.
- NPDES Storm Water
  - Nothing to report at this time.

## **Roxboro Steam Electric Plant**

- Dam Safety
  - Annual inspection of dams. PERSO-038 observed riprap repair along toe of dam. No change in wetness from previous inspection. abutment dense vegetation removed. NOI sent October 2, 2018, PERSO-039 No change from previous inspection. NOI sent 10/2/2018. PERSO-033, Seed and straw in place where pipe repair has been completed. Regrading of ditch on side of road over dam is proposed to provide a positive flow of drainage. Dam remains in good condition. NOI sent 10/2/2018. PERSO-013 consistent with previous inspection. Recommended continued maintenance and monitoring. PERSO-040, PERSO-041, and PERS)-

042 were all inspected and found no problems. Continued monitoring and maintenance recommended.

- 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
  - 06/14/18 site inspection-site was in compliance. mixed stabilization on cells receiving ash. Several basins were approaching the time for maintenance to be provided, but functioning well. Inspection report sent July 12, 2018. 08/20/2018-site inspection due to a complaint of disturbed soil causing off site impacts. No finding of a violation was made due to activities at this site. 09/28/18- site inspection post hurrican due to a citizen reporting flooding at the mine site. Adjacent mine released flood waters to ditch running through Brickhaven. Waters topped the ditch and flooded the parking area and entered creek adjacent to mine. No coal ash was found to be disturbed or flooded.
- NPDES Storm Water
  - 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
- NPDES Storm Water
  - $\circ$  Nothing to report at this time.

## W. H. Weatherspoon Power Plant

- Dam Safety
  - Received a revised submittal to construct a new emergency spillway on the Cooling Pond Dam (Robes-004) on July 24, 2018. Sent a revision request on August 14, 2018 and received that additional information on September 13, 2018. Issued approval to modify on October 2, 2018.

- Erosion and Sediment Control and Construction Storm Water
  - ROBES-2019-003 E&SC plan received 8-6-2018 for Weatherspoon 230kv structure. Approved on 9-5-2018
- NPDES Storm Water
  - Nothing to report at this time.

## H.F. Lee Energy Complex

- Dam Safety
  - WAYNE-022 Active basin, Inactive basins WAYNE-031,032,033 and WAYNE-009 Cooling Pond Pre Florence Operations visit on September 12, 2018. September 20, 2018 after Florence Inspected Cooling Pond, Active basin and 3 inactive basins. September 26, 2018 Cooling Pond, Active basin and 3 inactive basins inspected again. Annual Inspection scheduled for September 26, 2018 - Cancelled due to Florence.
- Erosion and Sediment Control and Construction Storm Water
  - June 14, 2018 HF Lee Benefication project pre-submittal meeting. E&S issued June 18, 2018.
- NPDES Storm Water
  - $\circ$  Nothing to report at this time.

## Asheville Steam Electric Plant

- Dam Safety
  - Received "As-Built" drawings on Lake Julian Dam (Bunco-088) Addendum 2 on August 13, 2018. Completed "As-Built" inspection on August 23, 2018 for (Bunco-088). Issued Final Approval for Phase 1 and Phase 2 on August 30, 2018 for (Bunco-088).
  - Received Project 4 Addendum 1 for Bunco-088 on June 21, 2018. Sent a revision request letter to Duke on June 27, 2018. Duke provided additional information on August 27, 2018. Approval to repair was issued on August 30, 2018.
  - Received submittal for Project 5 for Bunco-088 on July 3, 2018. Sent revision request letter to Duke on July 23, 2018 and received additional information form Duke on August 29, 2018. Approval to repair was issue on August 30, 2018.
  - Received submittal for Project 7 Principal Spillway abandonment on 1964 Ash Basin (Bunco-097) on September 5, 2018.
  - Received submittal on Proposed construction of temporary lined retention basin on July 2, 2018. Requested additional information from Duke on July 31, 2018 and that information was provided on August 27, 2018. Dam was exempted on September 6, 2018.
- Erosion and Sediment Control and Construction Storm Water

- May 14, 2018 Approved BUNCO-2018-005 Duke Groundwater Assessment Plan.
- 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-TBD	ON-GOING CONSTRUCTION
Asheville Steam Electric Plant	Asheville 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	ACTIVE
Asheville Steam Electric Plant	Asheville Retention Basin Dam	BUNCO-TBD	PROPOSED CONSTRUCTION
Belews Creek Steam Station	Belews Creek Active Ash Basin Dam	STOKE-116	ACTIVE
Belews Creek Steam Station	Belews Lake Main Dam	ROCKI-236	ACTIVE
Belews Creek Steam Station	Belews Lake Saddle Dam #1	STOKE-117	ACTIVE
Belews Creek Steam Station	Belews Lake Saddle Dam #2	STOKE-118	ACTIVE
Belews Creek Steam Station	Belews Lake Saddle Dam #3	STOKE-119	ACTIVE
Belews Creek Steam Station	Belews Lake Saddle Dam #4	ROCKI-235	ACTIVE
Belews Creek Steam Station	Belews Creek Chemical Pond Dam	STOKE-115	ACTIVE
Belews Creek Steam Station	Belews Creek Retention Basin Dam	STOKE-TBD	ON-GOING CONSTRUCTION
Belews Creek Steam Station	Belews Creek Holding Basin Dam	STOKE-TBD	ON-GOING CONSTRUCTION
Buck Combined Cycle Station	Buck Steam Station Main Ash Basin Dam (#3)	ROWAN-047	ACTIVE
Buck Combined Cycle Station	Buck Steam Station New (Additional Primary) Dam	ROWAN-068	ACTIVE
Buck Combined Cycle Station	Buck Steam Station Basin 1 to Basin 2 Dam	ROWAN-069	ACTIVE
Buck Combined Cycle Station	Buck Steam Station Basin 2 to Basin 3 Dam	ROWAN-070	ACTIVE

Buck Combined Cycle	Buck Steam Station Divider	ROWAN-071	ACTIVE
Station	Dam	KOWAN-071	ACTIVE
Buck Combined Cycle	Buck Steam Station Fuel	ROWAN-072	ACTIVE
Station	Containment Dam		
Buck Combined Cycle	Buck SW Wet Pond (Proposed)	ROWAN-TBD	ON-GOING
Station			CONSTRUCTION
Buck Combined Cycle	Buck SW Dry Pond (Proposed)	ROWAN-TBD	ON-GOING
Station			CONSTRUCTION
Cape Fear Steam	Buckhorn Lake Dam	CHATH-022	ACTIVE
Electric Plant			
Cape Fear Steam	Cape Fear 1956 Ash Pond Dam	CHATH-075	INACTIVE
Electric Plant	(Inactive)		
Cape Fear Steam	Cape Fear 1963 Ash Pond Dam	CHATH-076	INACTIVE
Electric Plant	(Inactive)		
Cape Fear Steam	Cape Fear 1970 Ash Pond Dam	CHATH-077	INACTIVE
Electric Plant	(Inactive)		
Cape Fear Steam	Cape Fear 1978 Ash Pond Dam	CHATH-078	ACTIVE
Electric Plant	Cupe I cui 1976 Asir I olici Dulli	CIMIN 070	Mentel
Cape Fear Steam	Cape Fear 1985 Ash Pond Dam	CHATH-079	ACTIVE
Electric Plant	Cape I cai 1965 Asii I olid Dalli	CHAIN-077	ACTIVE
Cape Fear Steam	Cape Fear Flood Control Dam	CHATH-080	ACTIVE
Electric Plant	(Exempted by HB 119 (L))	CHAIII-000	ACTIVE
James E. Rogers	Cliffside River Dam (Exempted	CLEVE-053	ACTIVE
÷		CLEVE-035	ACTIVE
Energy Complex	by HB 119 (L))		
(Cliffside Steam			
Station)			
James E. Rogers	Cliffside Inactive Ash Basin #5	RUTHE-070	INACTIVE
Energy Complex	Main Dam		
(Cliffside Steam			
Station)			
James E. Rogers	Cliffside Inactive Ash Basin #5	RUTHE-072	INACTIVE
Energy Complex	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 Pond	CLEVE-049	ACTIVE
Energy Complex	Downstream Dam		
(Cliffside Steam			
Station)			
James E. Rogers	Cliffside Inactive Ash Basin 1-4	CLEVE-047	ON-GOING
Energy Complex	Main Dam		CONSTRUCTION
(Cliffside Steam			
Station)			
James E. Rogers	Cliffside Active Ash Basin	CLEVE-054	ACTIVE
Energy Complex	Internal Dam		
(Cliffside Steam			
Station)			
	L	1	1

Dan River Combined	Dan River Active Primary Ash	ROCKI-237	ON-GOING
Cycle Station	Basin Dam	ROCKI 257	DECOMISSION
Dan River Combined	Dan River Active Secondary Ash	ROCKI-238	ON-GOING
Cycle Station	Basin Dam	ROCKI 250	DECOMISSION
-			
Dan River Combined	Dan River Plant Service Water	ROCKI-241	ACTIVE
Cycle Station	Pond Dam		
Dan River Combined	Dan River Plant River Dam	ROCKI-239	ACTIVE
Cycle Station			
H.F. Lee Energy	H.F. Lee Power Station Cooling	WAYNE-009	ACTIVE
Complex	Lake Dam H.F. Lee Active Ash Pond Dam	WANNE 022	
H.F. Lee Energy	H.F. Lee Active Ash Pond Dam	WAYNE-022	ACTIVE
Complex H.F. Lee Energy	H.F. Lee Ash Pond 1 Dam	WAYNE-031	INACTIVE
Complex	(Inactive)	WAINE-051	INACTIVE
H.F. Lee Energy	H.F. Lee Ash Pond 2 Dam	WAYNE-032	INACTIVE
Complex	(Inactive)	WAINE-032	INACTIVE
H.F. Lee Energy	H.F. Lee Ash Pond 3 Dam	WAYNE-033	INACTIVE
Complex	(Inactive)	WAINE-033	INACTIVE
H.F. Lee Energy	H.F. Lee Permanent SW Pond	WAYNE-TBD	ON-GOING
Complex			CONSTRUCTION
H.F. Lee Energy	H.F. Lee Triangular Pond Dam	WAYNE-034	ACTIVE
Complex			
Marshall Steam Station	Marshall Active Ash Basin Dam	CATAW-054	ACTIVE
Marshall Steam Station	Marshall Retention Basin Dam	CATAW-TBD	ON-GOING
			CONSTRUCTION
Marshall Steam Station	Marshall Holding Basin Dam	CATAW-TBD	ON-GOING
			CONSTRUCTION
Marshall Steam Station	Marshall SW West Pond	CATAW-TBD	ON-GOING
			CONSTRUCTION
Marshall Steam Station	Marshall SW East Pond	CATAW-TBD	ON-GOING
			CONSTRUCTION
Mayo Steam Electric	Mayo Lake Dam	PERSO-034	ACTIVE
Plant			
-	Mayo Ash Pond Dam	PERSO-035	ACTIVE
Plant			
Mayo Steam Electric	Mayo FGD Settling Pond	PERSO-036	ACTIVE
Plant	(Exempted by HB 119)		
Mayo Steam Electric	Mayo FGD Flush Pond	PERSO-037	ACTIVE
Plant El vi	(Exempted by HB 119)		
Mayo Steam Electric	Mayo Coal Pile Dam	PERSO-046	ACTIVE
Plant			
Mayo Steam Electric	Mayo FGD Settling Pond	PERSO-TBD	ON-GOING
Plant Mana Steam Electric	Mana Datantian Dasin Dam	DEDGO TDD	CONSTRUCTION
Mayo Steam Electric Plant	Mayo Retention Basin Dam	PERSO-TBD	ON-GOING CONSTRUCTION
Riverbend Steam	Riverbend Active Ash Basin	GASTO-097	ON-GOING
Station	Dam 1 (Primary)	UASIU-097	DECOMISSION
Riverbend Steam	Riverbend Active Ash Basin	GASTO-098	ON-GOING
Station	Dam 2 (Secondary)	0/01/0-070	DECOMISSION
Station	Duni 2 (Decondary)		DECOMINDION

Riverbend Steam	Riverbend Ash Basin	GASTO-099	REMOVED
Station	Intermediate Dam		
Riverbend Steam	Riverbend Fuel Containment	GASTO-099	REMOVED
Station	Dam		
Roxboro Steam	Lake Hyco Dam	PERSO-002	ACTIVE
Electric Plant			
Roxboro Steam	Roxboro Afterbay Dam	PERSO-013	ACTIVE
Electric Plant			
Roxboro Steam	Roxboro West Ash Pond Dam	PERSO-038	ACTIVE
Electric Plant			
Roxboro Steam	Roxboro West Ash Pond South	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 Pond	PERSO-041	ACTIVE
Electric Plant	Dam		
Roxboro Steam	Roxboro FGD Forward Flush	PERSO-042	ACTIVE
Electric Plant	Pond Dam		
Roxboro Steam	Roxboro East Ash Pond Dam	PERSO-033	ACTIVE
Electric Plant			
Roxboro Steam	Roxboro Intake Pond Dam	PERSO-043	ACTIVE
Electric Plant			
Roxboro Steam	Roxboro Retention Basin Dam	PERSO-TBD	ON-GOING
Electric Plant			CONSTRUCTION
Roxboro Steam	Roxboro Holding Basin Dam	PERSO-TBD	ON-GOING
Electric Plant	_		CONSTRUCTION
L. V. Sutton Energy	Sutton 1984 Ash Pond Dam	NEWHA-005	ON-GOING
Complex			DECOMISSION
L. V. Sutton Energy	Sutton 1971 Ash Pond Dam	NEWHA-004	ON-GOING
Complex			DECOMISSION
L. V. Sutton Energy	Sutton 1972 Cooling Pond	NEWHA-003	ACTIVE
Complex	(Exempted by HB 119)		
W. H. Weatherspoon	Weatherspoon Plant Cooling	ROBES-004	ACTIVE
Power Plant	Lake Dam		
W. H. Weatherspoon	Weatherspoon 1979 Ash Pond	ROBES-009	ACTIVE
Power Plant	Dam		