



*Mayo Steam Station
Coal Ash Impoundment Closure Plan*

Public Hearing
February 10, 2020



Current View



Mayo Steam Station

- Located in Person County
- Owned by Duke Energy Progress
- Single unit, 727-megawatt coal fired plant
- Began operation in 1983
- Currently in active operation
- Coal ash basin construction completed in 1982
 - 153 acres
 - Currently contains 6.6 million tons of ash
- Flue Gas Desulfurization (FGD) basin construction completed in 2009
 - Two basins totaling 5 acres
 - Currently contains 31,869 tons of ash



Coal Ash Management Act – House Bill 630 – July 2016

- January 2019 – DEQ held public information sessions regarding closure options for the ash basins at Allen, Belews Creek, Cliffside, Marshall, Mayo and Roxboro (excavate, hybrid or cap in place)
- April 1, 2019 – DEQ directed Duke to fully excavate all the ash basins
- April 26, 2019 – Duke filed Petitions for Contested Case Hearing in the Office of Administrative Hearings challenging DEQ's decision for closure method
- December 31, 2019 – Duke submitted Closure Plans for closure by excavation
- December 31, 2019 – Duke, DEQ and several community environmental groups entered into a Settlement Agreement ending the appeal litigation
- January 31, 2020 – Consent Order incorporating the terms of the Settlement Agreement filed with Wake County Superior Court
- February 5, 2020 – Consent Order entered by Judge Paul Ridgeway



Final Consent Order

- Covers coal ash impoundments at Allen, Belews Creek, Cliffside, Marshall, Mayo and Roxboro
- Identifies nine ash impoundments to be excavated
- Approximately 80 million tons of impoundment ash will be excavated and stored in newly constructed, onsite lined landfills
- 4 million tons of impoundment ash will be left in place at 3 facilities
 - Located beneath pre-existing permitted landfills and structural fills
 - Covered with a synthetic closure cap system to prevent water infiltration
 - Stability features installed to prevent ash movement
 - Additional groundwater monitoring may be required
 - Duke must demonstrate corrective action measures will clean up groundwater by December 31, 2029
- **At Mayo, all impoundment ash will be excavated**



DEQ Closure Plan Action Timeline

- December 31, 2019 – DEQ received proposed Closure Plans for Allen, Belews Creek, Cliffside, Marshall, Mayo and Roxboro
- CAMA requires DEQ to conduct public hearings within 60 days of receipt of proposed closure plan
- Public allowed at least 20 days after public hearings to submit written comments
- Final decision (approval or disapproval) by DEQ due 120 days of receipt of complete closure plan
- Within 60 days of approval, Duke Energy must begin implementation of the closure plan



Closure by Excavation

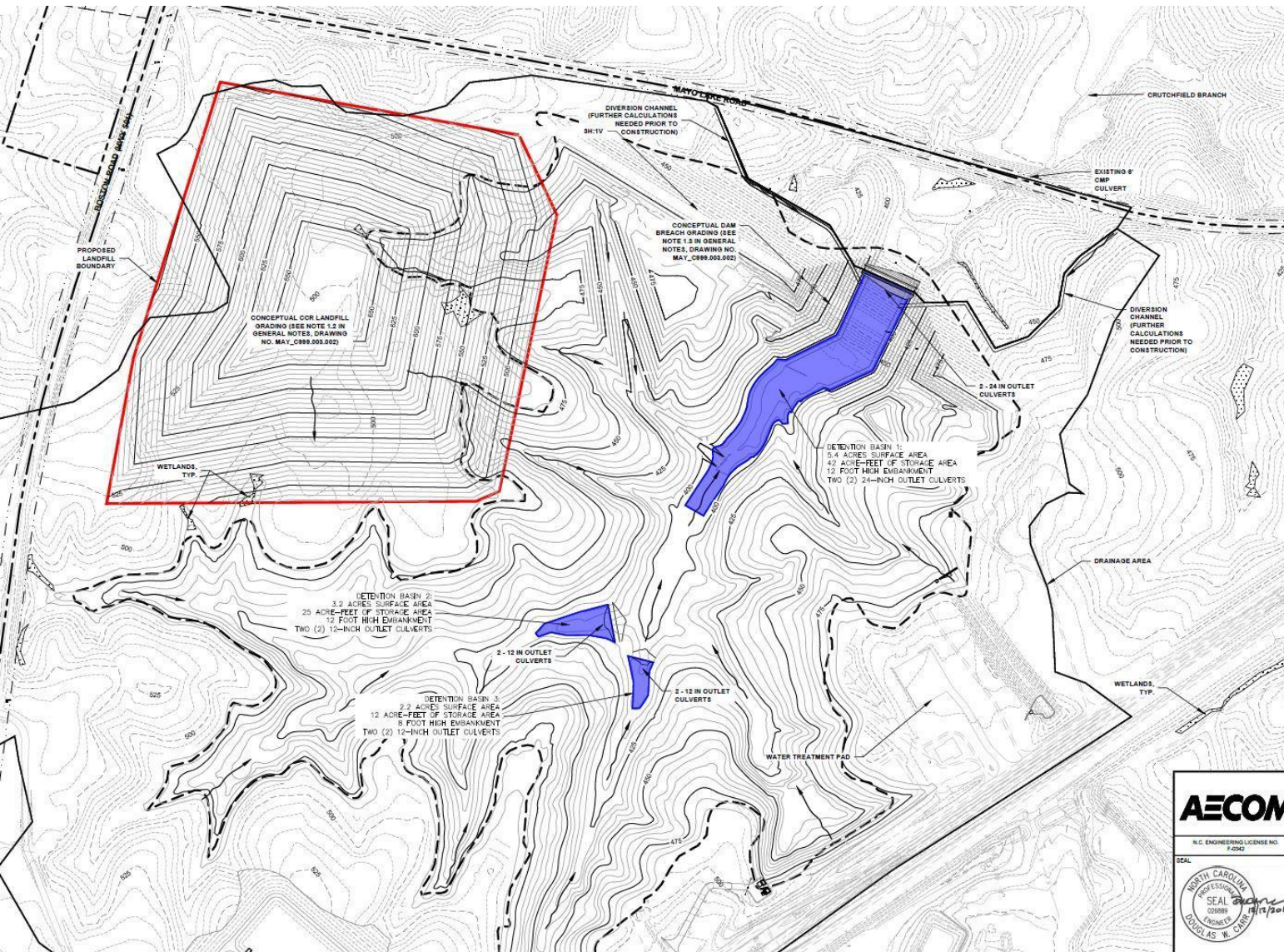
- Three impoundments will be excavated
 - 6,631,896 tons of ash
 - 8 years to complete excavation
- Excavated ash will be placed in a double-lined landfill partially within the footprint of the coal ash impoundment
- Proposed New Landfill Details
 - Approximately 58 acres
 - Final elevation of 665 feet (170 feet above Boston Road)



Estimated Project Schedule

- Begin landfill construction – 4th Quarter of 2021
- Begin coal ash excavation – 1st Quarter of 2023
- Complete coal ash excavation – 4th Quarter of 2028
- Complete final closure of landfill – 4th Quarter of 2029
- Complete final site vegetative cover – 4th Quarter 2030





Proposed Landfill Location

AECOM

N.C. ENGINEERING LICENSE NO. F4242

SEAL

NORTH CAROLINA
 PROFESSIONAL ENGINEER
 SEAL
 DOUGLAS W. CURR
 11/15/2019



Landfill Cross Section



Current View





Post Closure View



Submit comments by mail to:

Louise Hughes

N.C. Department of Environmental Quality

1601 Mail Service Center

Raleigh, North Carolina 27699-1601

Submit comments by email to:

mayocomments@ncdenr.gov - Include Closure Plan in the subject

The Closure Plan may be found at:

<https://deq.nc.gov/news/key-issues/coal-ash-excavation/mayo-power-station-coal-ash-closure-plan>

