

## Cliffside Steam Station/Rogers Energy Complex Coal Ash Impoundment Closure Plan

Public Hearing February 25, 2020







Current View of Active Ash Basin

Current View of Unit 5 Ash Basin



#### Cliffside/Rogers Steam Station

- Located astride the Cleveland/Rutherford County line
- Owned by Duke Energy Carolinas
- Two-unit, 1,387-megawatt coal and natural gas fired plant
- Began operation in 1940
- Currently in active operation
- Unit 5 ash basin construction completed in 1970
  - 46 acres
  - Currently contains 2.36 million tons of ash
- Active ash basin construction completed in 1980
  - 86 acres
  - Currently contains 5.04 million 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
- More than 80 million tons of impoundment ash will be excavated and stored in newly constructed, onsite lined landfills
- 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 plans
- Within 60 days of approval, Duke Energy must begin implementation of the closure plan



#### Closure by Excavation

- Two impoundments will be excavated
  - 7,390,000 tons of ash
  - 8 years to complete excavation
- Excavated ash will be placed in a lateral expansion of the existing onsite permitted lined landfill (8106-INDUS-2009)
- Proposed New Landfill Details
  - Approximately 47.5 acres
  - Final elevation of 1000 feet (170 feet above McCraw Road)



#### Estimated Project Schedule

- Begin landfill construction 4<sup>th</sup> Quarter of 2021
- Begin coal ash excavation 4<sup>th</sup> Quarter of 2021
- Complete coal ash excavation 4<sup>th</sup> Quarter of 2028
- Complete final closure of landfill 4<sup>th</sup> Quarter of 2029
- Complete final site vegetative cover 4<sup>th</sup> Quarter 2030





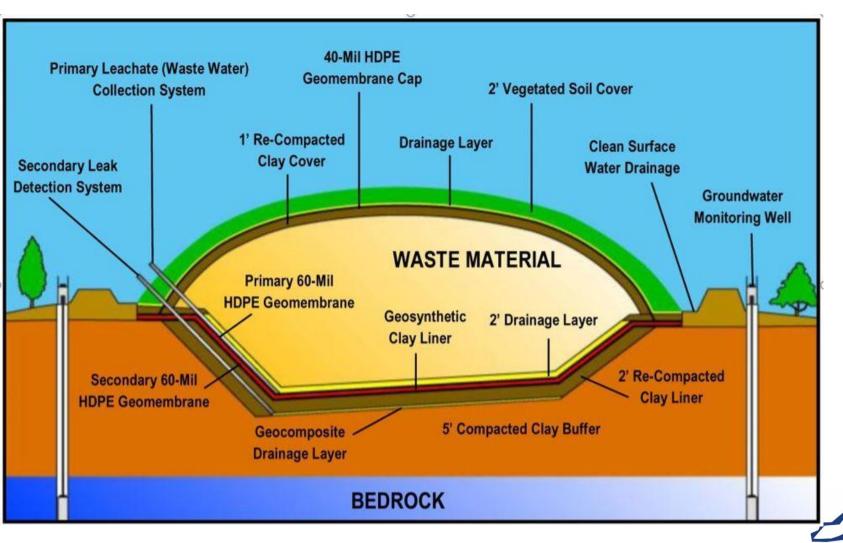
# Proposed Landfill Location

Yellow line – existing operating landfill boundary

Red line – new landfill boundary

Black dashed line – former ash impoundments boundary





Landfill Cross Section





Current View of Active Ash Basin

Current View of Unit 5 Ash Basin







Active Ash Basin Post Closure View

Unit 5 Ash Basin 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:

cliffsidecomments@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/cliffside-steam-station-coal-ash-closure-plan

