Environmental Management Commission December 10, 2014

COAL ASH MANAGEMENT ACT OF 2014 AND MANAGEMENT OF COAL ASH IN NC

Division of Waste Management

Implementation of Coal Ash Management Act of 2014

- Coal combustion product and residual generation rates
- Beneficial use according to 15A NCAC 13B .1700 and 15A NCAC 2T .1200
- Status of the two structural fill permit reviews §130A-309.214-.219

Ash Tons Produced



3

15A NCAC 13B .1708 OTHER USES FOR COAL COMBUSTION BY-PRODUCTS

Coal combustion by-products may be beneficially used on one or more of the following applications or when handled, processed, transported or stockpiled for such beneficial use applications and **do not require a solid waste permit** provided the uses are consistent with the requirements identified below:

soil nutrient additives or other agricultural purposes under the authority of the North Carolina Department of Agriculture;

traction control material or road surface material if the use is approved by the North Carolina Department of Transportation;

material in the **manufacturing of another product**, including, but not limited to concrete products, lightweight aggregate, roofing materials, plastics, paint, flowable fill and roller compacted concrete or as a substitute for a product or material resource, including but not limited to, blasting grit, roofing granules, filter cloth precoat for sludge dewatering and pipe bedding;

fill for the base, sub-base, under a structure or the footprint of a paved road, a parking lot, sidewalk, walkway or similar structure;

extraction or recovery of materials and compounds contained within the coal combustion by-products

CCB processed with a cementitious binder to produce a **stabilized structural fill product** which is spread and compacted for the construction of a project with a planned end use

15A NCAC 02T .1200 COAL COMBUSTION PRODUCTS MANAGEMENT

applies to the treatment, storage, transportation, use, and disposal of coal combustion products (CCPs) that are defined as wastewater treatment residuals. Approved uses include:

Substitute for blasting grit, roofing

granules, and filter cloth precoat

Flowable fill for backfill of trenches

- Combustion fuel
- Material for manufacturing (Concrete, asphalt, bricks, etc.)
- Material for traction control during snow
 Stabilization of residuals and ice events
- Combustion fuel

• Soil additive/amendment,

- Overlay for roads, residential driveways, farm roads, and high-traffic farm areas
- Bedding for pipes, railroad beds, and underground storage tanks
- Structural fill

- Individual permit required for use as structural fill, bedding, or road overlay.
- 2 active permits covering ash generated by 14 utility facilities.

Structural Fill Review - Types of Structural Fills

Regulated Structural Fills 15A NCAC 13B .1700

61 currently in inventory 40 over 10,000 cubic yards 21 under 10,000 cubic yards

Pre-Regulatory Structural Fills (pre January 4, 1994)
 18 currently in inventory
 6 over 10,000 cubic yards
 12 under 10,000 cubic yards

Structural Fills Regulated by 15A NCAC 2T .1200
 2 existing permits allowing structural fills > 1' in depth
 Current active project - Asheville Regional Airport over 10,000 cubic yards

Structural Fills by County

- Brunswick 7
- Buncombe 1
- Cabarrus 1
- Catawba 4
- Columbus 1
- Craven 1
- Cumberland 6
- Duplin 3
- Durham 1
- Edgecombe 1
- Forsyth 2
- Gaston 2

- Halifax 9
- Henderson 1
- Iredell 17
- Mecklenburg 2
- Nash 10
- Northampton 1
- Person 3
- Robeson 2
- Rowan 2
- Stokes 2
- Washington 1

The Coastal Plains – 42 The Piedmont – 36 The Mountains – 2





Structural Fill Review - Halifax Co



11.52 acres 127,776 cubic yards

Structural Fill Review - Northampton Co



Asheville Regional Airport Structural Fill



NCDENR DWR Permit Buncombe County

Status of new coal ash structural fill permits



Permit Applie Color Struc Charah, Inc. November 2014

Colon Mine Site Structural Fill



Permit Application Brickhaven No.2 Mine Tract "A" Structural Fill

Charah, Inc. Moncare, Nasth Carolina November 2014



RECEIVED November 21, 2014 Solid Waste Section

- Nov 21, 2014
- Dec 5, 2014
- Dec 21, 2014
- TBD
- TBD
- TBD

Applications received

Site visit

Completeness review §130A-309.203 Draft permit issued (90 days after completeness) Public Comment Period and Public Hearing (30 to 60 days comment period)

Final permit decision (within 60 days after comment period closes.

Brickhaven Mine Tract "A" Structural Fill Permit Submittal

Details

- Moncure, NC (Chatham County)
- Mine Permit No. 19-25
 - 301 acres
- Proposing to place 12.5 million tons (10 million yd³) as structural fill (1.7 million yd^{3/}yr)
- 145 acres for the lined fill area
 - Phase 1 60.6 acres in 2 cells
 - Phase 2 55.2 acres in 2 cells
 - Phase 3 29 acres in 1 cell

• 7.5-8 yrs to complete



Location



View of Phase 1 looking North



View of Phase 2 looking South

Colon Mine Structural Fill Permit Submittal

Details

- Sanford, NC (Lee County)
- Mine Permit No. 53-05
 - 411 acres
- Proposing to place 8.87 tons (7.1 million yd³) as structural fill (1.6 million yd³/yr) •
- 118 acres for the lined fill area
 - Phase 1 36.9 acres in 2 cells
 - Phase 2 81.8 in 3 cells
- 5-5.5 yrs to complete

View of Phase 1 looking North





Location

View of Phase 1 looking South

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