



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

June 4, 2015

MEMORANDUM

To: Tracy Davis, PE, Director
Division of Energy, Mineral, and Land Resources

From: Jason M. Watkins, Field Operations Branch Head
Division of Waste Management
Solid Waste Section

Subject: Hearing Officer's Report and Recommendations
Green Meadow, LLC and Charah, Inc. Proposed Coal Ash Reuse Projects
Draft DEMLR Modified Mining Permits
Chatham and Lee Counties

I served as the Hearing Officer for the Subject Public Hearings held at the Dennis A. Wicker Civic Center in Sanford, NC on April 13, 2015 and at the Chatham County Courthouse in Pittsboro, NC on April 16, 2015. The public hearing was held under the authority of the Coal Ash Management Act of 2014, the Mining Act of 1971 and Title 15A of the North Carolina Administrative Code Chapter 02H.0504. This was a combined public hearing to receive comment for the Division of Water Resources' 401 water quality certification, the Division of Energy, Mineral and Land Resources' draft modified mining permits and the Division of Waste Management's draft structural fill permits needed by Green Meadow, LLC and Charah, Inc. in order to reuse coal ash at the Colon Mine Site in Lee County and the Brickhaven No. 2 Mine Tract "A" in Chatham County.

In addition to listening to oral comments at the public hearing, I have reviewed all written comments received during and after the public comment period. In preparation of this report, I have considered all of the public comments, the public record, and the site visit for the project.

The report has been prepared using the following outline:

- I. Site History / Background
- II. April 13, 2015 Public Hearing Summary
- III. April 16, 2015 Public Hearing Summary
- IV. Comments and Response
- V. Recommendations
- VI. Summary
- VII. Attachments

I. History / Background

In February 2014, a failure in a portion of the Stormwater conduit under the primary ash basin at the Dan River Steam Station resulted in the release of a large volume of coal ash residuals into the Dan River. The spill brought in local, state and national attention to the management of coal ash.

Shortly after the spill, Governor Pat McCrory proposed a comprehensive coal ash action plan in April 2014. The North Carolina General Assembly passed legislation based on the [Governor's Coal Ash Action Plan](#), known as the [Coal Ash Management Act \(CAMA, S729\)](#), which became effective on September 20, 2014. This legislation requires the cleanup of coal ash and closure of coal ash ponds at all 14 coal ash sites and gives oversight to the Department of Environment and Natural Resources (DENR). The law also set hard deadlines to end wet coal ash production in North Carolina and imposes new, protective requirements on large projects using coal ash as fill material. The law includes new requirements regarding public notification of spills, providing drinking water to affected families, and monitoring of groundwater around the ash ponds.

As part of CAMA, NCGS 130A-309 provides the provisions for comprehensive management of coal combustion residuals and provides for the permitting, construction, operation and closure of structural fills in open pit mines.

In November 2014, Green Meadow, LLC and Charah, Inc. submitted applications for mining permit modifications and structural fill reuse permits to the Division of Energy, Mineral and Land Resources and the Division of Waste Management as allowed under CAMA. On Jan. 23, 2015, the state approved a request to transfer mining permit #53-05 for the Colon Mine in Lee County, and permit #19-25 for the Brickhaven #2 Tract A in Chatham County to Green Meadow, LLC. This was a needed first step in moving the permitting process for these two sites forward.

These two projects must also obtain 401 Water Quality Certifications from the Division of Water Resources.

The following is a brief history of the proposed project locations and permits under review:

Colon Mine - Mining Permit #53-05

On Oct. 3, 1972, the state granted mining permit #53-05 to Sanford Brick and Tile Co. to conduct mining activities at the Colon mine site located in Lee County, five miles southeast of the City of Sanford off Brickyard Rd. Between October 1972 and April 2005, mining permit #53-05 was renewed three times, in adherence to the standard 10-year mining permit renewal cycle. During this same time period, mining permit #53-05 was modified nine times. Three of the modifications were changes to the corporate name. On Jan. 23, 2015, mining permit #19-25 was transferred from General Shale Brick, Inc. to Green Meadow, LLC.

The state mining program is currently reviewing a request from Green Meadow to modify mining permit #53-05. The proposed modifications would include redesigning the erosion and sedimentation control measures throughout the site and reducing the affected acreage to 314 acres. The modification also includes changing the method for reclaiming the mine by constructing structural fill using coal combustion byproducts in accordance with the provisions of the Coal Ash Management Act of 2014.

Reclamation of the mine site using a structural fill also requires a separate permit from the Division of Waste Management, draft permit #5306-STRUCT-2015.

Brickhaven No. 2 Mine Tract "A" Permit #19-25

On Aug. 30, 1985, the state granted mining permit #19-25 to Cherokee Brick Co. to conduct mining activities at the Brickhaven No. 2 Mine Tract "A" site located in Chatham County, six miles south of Moncure. Between August 1985 and October 2014, mining permit #19-25 was renewed two times, in adherence to the standard 10-year mining permit renewal cycle. During this same time period, mining permit #19-25 was modified eight times. Three of the modifications were changes to the corporate name. On Jan. 23, 2015, mining permit #19-25 was transferred from General Shale Brick, Inc. to Green Meadow, LLC.

The state mining program is currently reviewing a request from Green Meadow, LLC to modify mining permit #19-25. The proposed modification would include redesigning the erosion and sedimentation control measures throughout the site and reducing the affected acreage to 267 acres. The modification also includes changing the method for reclaiming the mine by constructing structural fill using coal combustion byproducts in accordance with the provisions of the Coal Ash Management Act of 2014. Reclamation of the mine site using a structural fill also requires a separate permit from the Division of Waste Management, draft permit #1910-STRUCT-2015.

As part of the review of the permit modification requests and applications for structural fill permits, staff from the Division of Energy, Mineral and Land Resources (DEMLR) and the Division of Waste Management (DWM) visited the Colon Mine site on Dec. 5, 2014. DEMLR staff also conducted an inspection of the Brickhaven site on Nov. 9, 2014.

Under the authority of CAMA, the Mining Act of 1971 and Title 15A of the North Carolina Administrative Code Chapter 02H .0504, the Department of Environment and Natural Resources held a public comment period from March 23, 2015 until May 16, 2015 to accept public input on the draft permits. The public comment period included two public hearings held in the counties where the proposed projects are located.

Notice of the draft permits (Attachment II) was posted to the DENR website on March 23, 2015, the first day of the public comment period. Additionally, notice was published in The Chatham News and The Sanford Herald on March 26, 2015. The public comment period ended on May 16, 2015.

II. April 13, 2015 Public Hearing

A public hearing was held April 13, 2015, at 6 p.m. at the Dennis A. Wicker Civic Center in Sanford, NC. The public hearing was held under the authority of the Coal Ash Management Act of 2014, the Mining Act of 1971 and Title 15A of the North Carolina Administrative Code Chapter 02H .0504. This was a combined public hearing to receive comment for the Division of Water Resources' 401 water quality certification, the Division of Energy, Mineral and Land Resources' draft modified mining permits and the Division of Waste Management's draft structural fill permits (Attachment I) needed by Green Meadow, LLC and Charah, Inc. in order to reuse coal ash at the Colon Mine Site in Lee County and the Brickhaven No. 2 Mine Tract "A" in Chatham County.

One hundred thirty-four people attended the April 13 public hearing, including 24 staff members from DENR. A total of 110 individuals signed the attendance sign-in sheets at the registration table (Attachment IV). The hearing officer provided opening remarks before opening the hearing for public comment. Thirty-two individuals registered in advance of the hearing to provide comments, and eight additional individuals made comments for a total of 40 speakers. Speakers were given three minutes for initial presentations. Additional time was allowed for speakers after everyone that registered to speak was finished. The list of speakers is included as Attachment VI. Of the 40 individuals that spoke at the public hearing, none were in favor of the draft permits being approved.

The public hearing transcript, including oral comments, is attached to this report as Attachment VIII. DEMLR also received approximately 20 written comments during the public comment period from local and state government agencies, citizens and citizen groups (Attachment X). Several of the comments were written transcripts of the comments providing during the public hearings. A summary of the comments for both hearings and the comment period, along with detailed responses that have a direct impact on the draft mining permit decision making process are included in Part V below.

III. April 16, 2015 Public Hearing

A second public hearing was held April 16, 2015, at 6 p.m. at the Chatham County Courthouse in Pittsboro, NC. The public hearing was held under the authority of the Coal Ash Management Act of 2014, the Mining Act of 1971 and Title 15A of the North Carolina Administrative Code Chapter 02H .0504. This was a combined public hearing to receive comment for the Division of Water Resources' 401 water quality certification, the Division of Energy, Mineral and Land Resources' draft modified mining permits and the Division of Waste Management's draft structural fill permits (Attachment I) needed by Green Meadow, LLC and Charah, Inc. in order to reuse coal ash at the Colon Mine Site in Lee County and the Brickhaven No. 2 Mine Tract "A" in Chatham County.

One hundred thirty-seven people attended the April 16 public hearing, including 17 staff members from DENR. A total of 120 individuals signed the attendance sign in sheets at the registration table (Attachment V). The Hearing Officer provided opening comments before opening the hearing for public comment. Thirty-seven individuals registered in advance of the hearing to make comments and four additional individuals made comments for a total of 41 speakers. Speakers were given three minutes for initial presentations and an additional time of two minutes was provided after everyone that registered to speak was finished. One speaker left the hearing prior to being recognized and five speakers took the opportunity to comment a second time. The list of speakers is included as Attachment VII. Of the 40 individuals that spoke at the public hearing, none were in favor of the draft permits being approved.

The public hearing transcript including oral comments is included as Attachment IX. In addition to the public hearings, DEMLR received 20 written comments during the public comment period from local and state government agencies, citizens and citizen groups (Attachment X). Several of the comments were written transcripts of the comments providing during the public hearings. A summary of the comments for both hearings and the comment period, along with detailed responses that have a direct impact on the draft mining permit decision making process, are included in Part V below.

IV. Comments and Response

The following is a review of the comments received during the April 13 and 16 public hearings, emails and other written comments received by the Division of Energy, Mineral and Land Resources. Consistently within the comments was opposition to the approval on these permits based on a varying set of criteria. Under North Carolina law, only certain criteria are considered as part of the permit review process, therefore the following will provide only a brief summation of the comments that fall outside those criteria. Through my review of the application documents, the submitted comments and discussion with division staff, responses are provided to those items directly relevant to both permits (#53-05 and #19-25) and/or review process.

Public comments received focused on the seven denial criteria, definition of reclamation and reclamation plan approval, and adequate bonding.

Findings: All of the information obtained to date was reviewed with respect to G.S. 74-51 (1-7):

(1) "That any requirement of this Article or any rule promulgated hereunder will be violated by the proposed operation;"

There is no evidence to suggest that the proposed operation will violate the Act.

(2) "That the operation will have unduly adverse effects on potable groundwater supplies, wildlife or fresh water, estuarine, or marine fisheries;"

A detailed erosion and sediment control plan adequately addresses sedimentation runoff issues from disturbed areas. The site currently has a Mining General Stormwater Permit NCG020000 in place. During the coal ash placement and subsequent reclamation, the work will be following the requirements set out in the DWM Structural Fill Permit and associated statutes and regulations to meet any other groundwater or water quality issues – see Operating Condition No.12 and Reclamation Condition Nos. 1 - 4. In addition, other conditions have been placed in the mining permit to protect surface and ground water. See Operating Condition Nos. 1, 3, 4 and 5.

(3) "That the operation will violate standards of air quality, surface water quality, or groundwater quality that have been promulgated by the Department;"

Operating Conditions Nos. 1, 2, 3, 4, 5 and 12 of the modified permit require that the operation comply with state water, groundwater, and air quality regulations.

(4) "That the operation will constitute a direct and substantial physical hazard to public health and safety or to a neighboring dwelling house, school, church, hospital, commercial or industrial building, public road or other public property, excluding matters relating to use of a public road;"

Conditions have been written into the modified permit to protect adjoining properties. See Operating Condition Nos. 6, 7, 8, 9, 10 and 11.

(5) "That the operation will have a significantly adverse effect on the purposes of a publicly owned park, forest or recreation area;"

This is not applicable as there are no such areas in close proximity to the proposed operation.

(6) "That previous experience with similar operations indicates a substantial possibility that the operation will result in substantial deposits of sediment in stream beds or lakes, landslides, or acid water pollution;"

A detailed erosion and sedimentation control plan has been developed for this site and should provide adequate protection to the surrounding environment. See Operating Condition No. 4.

Specific buffer zones, safety measures, and cut/fill slopes have been incorporated into the modified permit to provide adequate protection against slope failures at this site - see Operating Condition Nos. 3, 7, 10 and 11.

(7) That the applicant or any parent, subsidiary, or other affiliate of the applicant or parent has not been in substantial compliance with this Article, rules adopted under this Article, or other laws or rules of this State for the protection of the environment or has not corrected all violations that the applicant or any parent, subsidiary, or other affiliate of the applicant or parent may have committed under this Article or rules adopted under this Article and that resulted in:

- a. Revocation of a permit,
- b. Forfeiture of part or all of a bond or other security,
- c. Conviction of a misdemeanor under G.S. 74-64,
- d. Any other court order issued under G.S. 74-64, or
- e. Final assessment of a civil penalty under G.S. 74-64.

This is not applicable as the operator, Green Meadow LLC, has no prior mining violations in the state.

With regard to the concerns raised about the proposed reclamation plan, the reclamation plan submitted by Green Meadow LLC will include the establishment of vegetative cover, soil stability, and appropriate water and safety protections for the area as required by GS 74-49 (12). The plan includes the required protection of adjacent surface resources, surface gradient restoration, revegetation details, elimination of conditions hazardous to animal or fish, compliance with state water and air quality pollution laws, rehabilitation of settling ponds, control of contaminants and mining refuse, minimization of erosion, siltation and other pollution, and a schedule for completion of reclamation as required in GS 49(13) and GS 74-53. Final slopes, safety of adjoining properties, overburden placement suitable for subsequent use, elimination of noxious and foul water accumulation, and vegetative cover establishment have been provided. See Reclamation Plan Conditions Nos. 1 through 4.

With regard to concerns that additional land will be mined, active mining permit #53-05 was transferred to Green Meadow, LLC with the intent that mining would continue as permitted. No additional land was added to the mining permit to be mined.

The Division of Energy, Mineral and Land Resources has approved unconventional reclamation plans for permitted mines in the past, such as reclamation of the mined area that resulted in commercial building sites, parking areas, auto salvage sites, and land clearing and inert debris landfills.

With regard to bonding requirements, a \$500,000.00 blanket bond has been submitted for both the Brickhaven Mine No. 2 Tract A and the Colon Mine as outlined in Bonding Requirements, NCAC Title 15A, Chapter 5.003 (e).

V. Recommendations

After thorough review of all public comments received and the project record, as well as information gained from site visits and discussions with DEMLR staff, I have concluded that there is no evidence that the proposed mining permit modification will violate any part of G.S. 74-49 through 68 and the NCAC Title 15A, Chapter 5 as outlined and reviewed above. Therefore, there are no further recommendations being made as part of this report.

VI. Summary

Public comments concerning the two public hearings focused on several major issue areas, including quality of life, transportation, construction standards for liners, ground and surface water contamination, Duke Energy's environmental history, property rights, environmental justice, the permitting process and water supply protection in the Cape Fear River Basin. Due to the number of public comments, many of which expressed concerns on the same issues, each comment is not addressed individually. Only comments that have direct relevance to the draft mining permit decision have been addressed in the responses (Section IV).

As stated above, a thorough review of all public comments received and the project record has been conducted, and additional insight has been obtained through discussions with DEMLR staff and site visits. Based on all of this information, it is my recommendation that the mining permit modifications be approved. It is further recommended that the division include in the permit any additional conditions necessary to insure that the projects will protect public health and the environment as required under state law.

VII. Attachments

- I. Draft Mining Permits – Available at Public Hearing
- II. Notice of Public Comment period on March 23, 2015
- III. Notice of Public Hearings – Chatham News & Sanford Herald, March 26, 2015
- IV. April 13, 2015 Non-speaker sign-in sheets (on CD)
- V. April 16, 2015 Non-speaker sign-in sheets (on CD)
- VI. April 13, 2015 Speaker list (on CD)
- VII. April 16, 2015 Speaker list (on CD)
- VIII. April 13, 2015 Public Hearing transcript, including oral comments (on CD)
- IX. April 16, 2015 Public Hearing transcript, including oral comments (on CD)
- X. Written comments received during the comment period, including at the public hearings (on CD)