

STATE OF NORTH CAROLINA  
COUNTIES OF CHATHAM & LEE

IN THE OFFICE OF  
ADMINISTRATIVE HEARINGS  
15 EHR 04772

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ENVIRONMENTALEE, CHATHAM )  
CITIZENS AGAINST COAL ASH DUMP, )  
& BLUE RIDGE ENVIRONMENTAL )  
DEFENSE LEAGUE INC. )  
Petitioners )  
v. )  
NC DEPARTMENT OF ENVIRONMENT )  
AND NATURAL RESOURCES, DIVISION )  
OF WASTE MANAGEMENT, AND )  
DIVISION OF ENERGY, MINERAL, AND )  
LAND RESOURCES, )  
Respondents, )  
and )  
GREEN MEADOW, LLC, )  
AND CHARAH, INC., )  
Respondent-Intervenors. )

**FINAL DECISION**

On December 7, and 8, 2015, Administrative Law Judge Melissa Owens Lassiter conducted a contested case hearing in this case in Raleigh, North Carolina pursuant to Petitioners’ appeal of Respondent Divisions’ issuance of the following permits to Respondent-Intervenors on June 4, 2015:

- (1) Division of Waste Management issued Solid Waste Management Facility Structural Fill, Mine Reclamation Permit No. 5306 to Construct and Operate a Structural Fill at the Colon Road mine site in Lee County, North Carolina to Green Meadow, LLC and Charah, Inc.
- (2) Division of Waste Management issued Solid Waste Management Facility Structural Fill, Mine Reclamation Permit No. 1910 for the same purpose at the Brickhaven mine site in Chatham County, North Carolina to Green Meadow, LLC, and Charah, Inc.
- (3) Division of Energy, Mineral, and Land Resources issued Modified Mining Permit for Permit No. 53-05 for the operation of a Clay Mine at the Colon Mine in Lee County, North Carolina to Green Meadow, LLC and

(4) Division of Energy, Mineral, and Land Resources issued Modified Mining Permit No. 19-25 for the same type of operation at the Brickhaven No. 2 Mine Tract “A” in Chatham County, North Carolina to Green Meadow, LLC.

### **APPEARANCES**

For Petitioners: John D. Runkle, Attorney at Law, 2121 Damascus Church Road, Chapel Hill, North Carolina 27516

For Respondents: Teresa L. Townsend, Assistant Attorney General, NC Department of Justice, 9001 Mail Service Center, Raleigh, NC 27699-9001

For Respondent-Intervenors: Peter J. McGrath, Jr., Attorney at Law, 100 North Tryon Street, Floor 47, Charlotte, NC 28202-4003

### **ISSUES**

1. Whether Respondents met the requirements of the Mining Act of 1971 and the Coal Ash Management Act of 2014 by permitting the Brickhaven and Colon Road mine sites as structural fills to be used for mine reclamation rather than as solid waste landfills (Claim A)?

2. Whether Respondents’ requirement for the amount of financial assurance from the permittees met the requirements under the Mining Act of 1971 and the Coal Ash Management Act of 2014 (Claim B)?

3. Whether Respondents appropriately applied the requirements of the Coal Ash Management Act of 2014 by approving the use of an encapsulation liner system, which employed a composite liner utilizing a geosynthetic clay liner, for the containment of coal combustion products as part of the permits pursuant to N.C. Gen. Stat. § 130A-309.220(b)(1) (Claim C)?

4. Whether Petitioners have met their burden of proving that the cumulative impact of the proposed facilities would have a disproportionate adverse impact on the Chatham or Lee County communities under the Solid Waste Management Act, N.C. Gen. Stat. § 130A-294(a)(4)c.9. (Claim F)?

5. Whether Respondents appropriately applied the requirements of the Coal Ash Management Act of 2014 by approving the Toxicity Characteristic Leaching Procedure, pursuant to N.C. Gen. Stat. § 130A-309.219(b)(1)(d), to characterize the toxic constituents of the coal combustion products (Claim G)?

6. Whether Petitioners met their burden of proof to show that Respondents substantially prejudiced Petitioners’ rights and either exceeded their authority or jurisdiction, acted erroneously, failed to use proper procedure, acted arbitrarily or capriciously, or failed to act as required by law or rule by issuing the structural fill and modified mining permits for the Brickhaven and Colon Road mines?

**STATUTES AND REGULATIONS AT ISSUE**

N.C. Gen. Stat. § 130A, Article 9, Solid Waste Management Act, including Coal Ash  
Management Act of 2014,  
N.C. Gen. Stat. § 74, Article 7, Mining Act of 1971  
N.C. Gen. Stat. §§ 150B-22 through 150B-37  
15A NCAC 13B .1700  
15A NCAC 05B .0103

**EXHIBITS RECEIVED INTO EVIDENCE**

**FOR PETITIONERS:**

- |               |  |
|---------------|--|
| Petitioners 1 | Photographs submitted by Terica Luxton   |
| Petitioners 2 | Email from Thad Valentine to Judy Wehner, Colon Mine Partial release inspection, April 16, 2014 (for illustrative purposes only)   |
| Petitioners 3 | Blue Ridge Environmental Defense League, EnvironmentalLEE, Chatham Citizens Against Coal Ash Dump, and NC WARN: “Joint Comments on Proposed Coal Ash Landfills in Lee and Chatham Counties,” May 15, 2015 (for illustrative purposes only – to reflect that comments were submitted only)  |
| Petitioners 4 | “Comments on Proposed Disposal of Coal Combustion Ash in Subtitle D Landfill in Clay Mines,” G. Fred Lee, PhD, PE, BCEES, F.ASCE and Anne Jones-Lee, PhD, May 6, 2015 (for illustrative purposes only – to reflect that comments were submitted only)  |
| Petitioners 5 | “Technical and Scientific Issues with Coal Ash Structural Fills in North Carolina,” A. Dennis Lemly, Ph.D., Research Associate Profession of Biology Wake Forest University, April 22, 2015. (for illustrative purposes only – to reflect that comments were submitted only)   |
| Petitioners 6 | Power point presentation by Don Kovasckitz, Director, GIS Strategic Services, Lee County, given to the Lee County Board of Commissioners on December 15, 2014  |
| Petitioners 7 | Power point presentation by Don Kovasckitz, Director, GIS Strategic Services, Lee County, given to the Lee-Sanford Environmental Affairs Board in May 2015. (Except for Slide 3, which was excluded upon the sustaining of an objection based on relevancy and Slide 4, which was excluded upon the sustaining of an objection based on hearsay) |

**FOR RESPONDENTS:**

- Respondents 1            Coal Ash Management Act of 2014
- Respondents A            Permit Documents for Lee County Site (Colon Mine)
- A-1                    Solid Waste Management Facility Structural Fill, Mine Reclamation Permit No. 5306 to Green Meadow, LLC and Charah, Inc. to Construct and Operate the Colon Mine Site Structural Fill in conjunction with NCDENR DEMLR Mine Permit 53-05 issued on June 5, 2015
- A-2                    Colon Mine Site Structural Fill Permit Application and Addenda
- A-3                    Colon Mine Permit No. 53-05 Modification to Green Meadow, LLC to change 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 and the terms and conditions of the Permit to Construct and Operate Colon Mine Site Structural Fill Permit No. 5306 issued by the Division of Waste Management, said permit No. 53-05 being issued by the Division of Energy, Mineral, and Land Resources on June 5, 2015.
- Respondents B            Permit Documents for Chatham County Site (Brickhaven Mine)
- B-1                    Solid Waste Management Facility Structural Fill, Mine Reclamation Permit No. 1910 to Green Meadow, LLC and Charah, Inc. to Construct and Operate the Brickhaven Mine Site Structural Fill in conjunction with NCDENR DEMLR Mine Permit 19-25 issued on June 5, 2015
- B-2                    Brickhaven Mine Site Structural Fill Permit Application and Addenda
- B-3                    Brickhaven Mine Permit No. 19-25 Modification to Green Meadow, LLC to change 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 and the terms and conditions of the Permit to Construct and Operate Brickhaven Mine Site Structural Fill Permit No. 1910 issued by the Division of Waste Management, said permit No. 19-25 being issued by the Division of Energy, Mineral, and Land Resources on June 5, 2015.
- Respondents C            Financial Assurance Mechanisms for Brickhaven Mine Site
- C-1                    Performance Bond for Closure, Post-closure, and Potential Assessment and Corrective Action costs in the total amount of \$10,200,560.00
- C-2                    Certificate of Liability Insurance for Sudden and Non-Sudden events in the amount of \$4 million per occurrence and \$8 million annual aggregate

C-3	Surety Bond Guaranteeing Payment for disaster response costs in the amount of \$65,000.00
C-4	\$500,000.00 Blanket bond guaranteeing compliance with the Mining Act of 1971
Respondents D	Financial Assurance Mechanisms for Colon Mine Site
D-1	Performance Bond for Closure, Post-closure, and Potential Assessment and Corrective Action costs in the total amount of \$10,380,470.00
D-2	Certificate of Liability Insurance for Sudden and Non-Sudden events in the amount of \$4 million per occurrence and \$8 million annual aggregate
D-3	Surety Bond Guaranteeing Payment for disaster response costs in the amount of \$65,000.00
D-4	\$500,000.00 Blanket bond guaranteeing compliance with the Mining Act of 1971
Respondents E	Hearing Officer's Reports and Recommendations
Respondents F	Public Comments
F-1	May 16, 2015 Blue Ridge Environmental Defense League public comments
F-2	May 16, 2015 John Wagner's public comments
F-3	April 13, 2015 Public Hearing transcript
F-4	April 16, 2015 Public Hearing transcript
Respondents G	October 19, 2000 Environmental Equity Initiative Policy
Respondents H	Petitioners' Discovery Responses
H-1	Petitioners' Response to First Set of Interrogatories
H-2	Petitioners' Response to First Request for Admission

**PRELIMINARY MATTERS**

On December 7, 2015, the Undersigned conducted a pre-trial conference with the parties' attorneys. During this conference, Petitioners' counsel, Mr. Runkle, advised the Undersigned that Petitioners anticipated calling two expert witnesses on Claims C and G. Mr. Runkle explained

that Petitioners were not prepared to go forward on Claims/Issues C or G, as their expert witnesses were unavailable. One expert witness was from California, while the other expert witness was from Winston-Salem. Mr. Runkle further advised the Undersigned and opposing counsel that he would need to subpoena those witnesses to testify in January of 2016, but not to testify the week of December 7, 2015. The Undersigned advised Mr. Runkle that the witnesses could testify via video conferencing, and asked Mr. Runkle to advise his experts they could testify via video conferencing, and determine if that would assist the testimonial process.

Before the contested case hearing on the merits began, the Undersigned informed all parties that it had reviewed Respondents' Motion for Summary Judgment, Respondent-Intervenors' Joinder in said Motion, and Petitioners' Response to the Motion, and was Denying Summary Judgment as to Petitioners' Claims C (liner issue), F (environmental justice issue) and G (Toxicity Characteristic Leaching Procedure issue), but would hear arguments for Summary Judgment on Petitioners' Claims A (structural fill permit v. solid waste landfill permit issue), B (financial assurance issue), D (compliance history review of the permittees and Duke Energy issue) and E (dust control measures issue). These claims are referenced by Claim A, B, C, etc. in the decision below.

Following all parties' arguments on the Summary Judgment Motion, the Undersigned Granted Summary Judgment for Petitioners as to Petitioners' Claim D, Denied Summary Judgment on all other claims. Petitioners opted to Voluntarily Dismiss with prejudice Petitioner's Claim D in lieu of an Order for Partial Summary Judgment. After the Undersigned's ruling, Petitioners and Respondent-Intervenors advised the Undersigned that they had reached a settlement as to Claim E regarding the issue of coal dust.

On the record, Respondents moved to dismiss Claims C and G, because the parties had two months' notice of the date for the hearing on the merits, and Petitioners now claimed it was not ready to proceed. Mr. Runkle responded that it did not subpoena its California expert, because it was not financially prudent to pay an expert to "sit here and maybe or maybe not be able to testify today," not knowing the ruling on the pending Motion for Summary Judgment. The Undersigned Denied Respondents' Motion to Dismiss, and called the case for a hearing on the merits on all remaining claims. (T. pp. 48-50)

The Undersigned requested the parties to address particularly, during the hearing on the merits, how the mine reclamation/structural fill could be beneficially used (Claim A), and how the amount of financial assurance/bond required was determined (Claim B).

### **FINDINGS OF FACT**

Based upon careful consideration of the pleadings, testimony, evidence, arguments, and legal briefs received during the contested case hearing, as well as the entire record of this proceeding, including Petitioners' case-in-chief, Respondents' renewal of their Motion for Summary Judgment, and Respondents' request that Petitioners' case be dismissed at the end of Petitioners' case-in-chief, the undersigned finds as follows:

#### **Parties**

1. Petitioners EnvironmentalLee and Chatham Citizens Against Coal Ash Dump are chapters of the Petitioner Blue Ridge Environmental Defense League Inc. The Blue Ridge Environmental Defense League Inc. (BREDL) is a non-profit organization focusing on environmental issues.

2. Respondent Division of Waste Management (“DWM”) is a State agency established pursuant to N.C. Gen. Stat. §§ 143B-279.1 through 143B-344.23, who is vested with the statutory authority to enforce the State’s environmental pollution laws, including laws enacted to regulate solid waste. The North Carolina General Assembly mandates that Respondent DWM promote and preserve an environment that is conducive to public health and welfare by establishing a statewide solid waste management program, and mandates that such action be deemed acts of the sovereign power of the State.

3. Respondent-Intervenors Green Meadow, LLC and Charah, Inc. hold the solid waste management facility structural fill/mine reclamation permits at the Colon Road and Brickhaven sites, as noted above. Respondent-Intervenor Green Meadow, LLC holds the modified mining permits, as noted above.

#### Statutes at Issue

4. On September 20, 2014, the North Carolina General Assembly passed the Coal Ash Management Act ("CAMA") to provide a comprehensive management plan for the cleanup of coal ash, and the closure of coal ash ponds, and to provide permitting, construction, operation and closure of large projects using coal ash as fill material, i.e. structural fills, in open pit mines in North Carolina.

5. N.C. Gen. Stat. § 130A, Article 9 regulates the management of solid waste, which includes North Carolina’s solid waste permit system and the management of coal ash.

a. N.C. Gen. Stat. § 130A-290(35) defines “solid waste.” Excluded from that definition are coal combustion products that are beneficially used, including use for structural fill. *See also*, N.C. Gen. Stat. §§ 130A-290 (2b) and 130A-309.201(4).

b. N.C. Gen. Stat. §§ 130A-309.201(14) defines “structural fill” as:

[A]n engineered fill with a projected beneficial end use constructed using coal combustion products that are properly placed and compacted. For purposes of this Part, the term includes fill used to reclaim open pit mines...

c. N. C. Gen. Stat. § 130A-309.201 (11) defines an “open pit mine” as:

[A]n excavation made at the surface of the ground for the purpose of extracting minerals, inorganic and organic, from their natural deposits, which excavation is open to the surface.

d. N.C. Gen. Stat. § 130A-309.201 (10) defines “minerals” as “soil, clay, coal, phosphate, metallic ore, and any other solid material or substance of commercial value found in natural deposits on or in the earth.”

6. N.C. Gen. Stat § 130A-309.219(a)(2) requires that projects using coal combustion products as structural fill involving the placement of 8,000 or more tons of coal combustion products per acre or 80,000 or more tons of coal combustion products in total per project receive an individual permit from DWM.

7. N.C. Gen. Stat §§ 130A-309.219(b)(1)(d) and (b)(2) require that projects using coal combustion products as structural fill involving the placement of 8,000 or more tons of coal combustion products per acre or 80,000 or more tons of coal combustion products in total per project provide:

[A] Toxicity Characteristic Leaching Procedure analysis from a representative sample of each different coal combustion product’s source to be used in the project for, at a minimum, all of the following constituents: arsenic, barium, cadmium, lead, chromium, mercury, selenium, and silver.

8. N.C. Gen. Stat § 130A-309.220 describes the design, construction, and siting requirements for projects using coal combustion products for structural fill. N.C. Gen. Stat § 130A-309.220(b) explains the specific requirements for the liners, leachate collection system, cap, and groundwater monitoring system required for large structural fills, with (b)(1) specifically requiring a base liner consist of one of two optional designs: (a) a composite liner utilizing a compacted clay liner or (b) a composite liner utilizing a geosynthetic clay liner.

9. N.C. Gen. Stat § 130A-309.221 explains the financial assurance requirements for large projects using coal combustion products for structural fill. The applicant for a permit to construct or operate a structural fill must establish:

[F]inancial assurance that will ensure that sufficient funds are available for facility closure, post-closure maintenance and monitoring, any corrective action that the Department may require, and to satisfy any potential liability for sudden and nonsudden accidental occurrences, and subsequent costs incurred by the Department in response to an incident at a structural fill project, even if the applicant or permit holder becomes insolvent or ceases to reside, be incorporated, do business, or maintain assets in the State.

N.C. Gen. Stat § 130A-309.221(a).

10. N.C. Gen. Stat § 130A-294(a)(4)c.9. requires DWM to “deny an application for a permit for a solid waste management facility” if:

The cumulative impact of the proposed facility, when considered in relation to other similar impacts of facilities located or proposed in the community, would have a



disproportionate adverse impact on a minority or low-income community protected by Title VI of the federal Civil Rights Act of 1964.

11. Respondent Division of Energy, Mineral, and Land Resources (“DEMLR”) is a State agency established pursuant to N.C. Gen. Stat. §§ 143B-279.1 through 143B-344.23, who is vested with the statutory authority to enforce the State’s environmental pollution laws, including laws enacted to regulate mining operations. The North Carolina General Assembly mandates that Respondent DEMLR promote and preserve an environment that is conducive to public health and welfare by establishing a statewide mining program, and mandates that such action be deemed acts of the sovereign power of the State.

12. N.C. Gen. Stat. § 74, Article 7 constitutes the Mining Act of 1971 and regulates mining and reclamation of mined lands. In N.C. Gen. Stat. § 74-47, the General Assembly stated:

It is not practical to extract minerals required by our society without disturbing the surface of the earth and producing waste materials, and the very character of certain surface mining operations precludes complete restoration of the land to its original condition. ... (and) finds that the conduct of mining and reclamation of mined lands as provided by this Article will allow the mining of valuable minerals and will provide for the protection of the State’s environment and for the subsequent beneficial use of the mined and reclaimed land.

13. N.C. Gen. Stat. § 74-49(12) defines “reclamation” as “the reasonable rehabilitation of the affected land for useful purposes, and the protection of the natural resources of the surrounding area.” “[B]oth the need for and the practicability of reclamation will control the type and degree of reclamation in any specific instance. ...”

14. N.C. Gen. Stat. § 74-49(6) defines “minerals” as:

[S]oil, clay, coal, stone, gravel, sand, phosphate, rock, metallic ore, and any other solid material or substance of commercial value found in natural deposits on or in the earth.

15. N.C. Gen. Stat. § 74-49(13) explains that the requirements of a “reclamation plan” must be submitted by the operator and approved by DEMLR before reclamation of the affected land commences. Such plan shall include, but not be limited to:

- a. Proposed practices to protect adjacent surface resources;
- b. Specifications for surface gradient restoration to a surface suitable for the proposed subsequent use of the land after reclamation is completed, and proposed method of accomplishment;
- c. Manner and type of revegetation or other surface treatment of the affected areas;
- d. Method of prevention or elimination of conditions that will be hazardous to animal or fish life in or adjacent to the area;
- e. Method of compliance with State air and water pollution laws;

- f. Method of rehabilitation of settling ponds;
- g. Method of control of contaminants and disposal of mining refuse;
- h. Method of restoration or establishment of stream channels and stream banks to a condition minimizing erosion, siltation, and other pollution;
- i. Maps and other supporting documents as may be reasonably required by the Department; and
- j. A time schedule that meets the requirements of G.S. 74-53.

*See also* N.C. Gen. Stat. § 74-53.

16. N.C. Gen. Stat. § 74-52 lists the basis upon which a mining permit may be modified. N.C. Gen. Stat. § 74-54 and 15A NCAC 05B .0103 explain the requirements for a bond, and the necessary calculations to determine the amount of the bond. Specifically, 15A NCAC 05B .0103(e) requires that once a determination is made that the total amount of a blanket bond has reached the \$500,000 amount, and the applicant has a good operating record, then the amount of a \$500,000 blanket bond is considered sufficient to reclaim all sites, and “no additional reclamation bond money is needed.”

#### Petitioner’s Evidence

17. At hearing, Petitioners presented testimony of Debbie Hall, Terica Luxton, Judy Hogan, and Sheila Crump. Debbie Hall and Terica Luxton are from Lee County and members of EnvironmentalLEE, while Ms. Hogan and Ms. Luxton are from Chatham County and members of Chatham Citizens Against Coal Ash Dump. All four witnesses live near the respective mine sites, and are concerned there may be environmental impacts from the disposal of coal ash at the mine sites, and that the mine sites may negatively affect their communities.

18. There are about 50 active members of EnvironmentalLee who meet once a month in the Colon community in Lee County. The Colon community is located right across the road from the Colon Road mine site. Debbie Hall estimated that approximately 30 to 35 EnvironmentalLee members live:

[On] the roads that go right around that site – the Osgood community, Colon community—those people that are most closely joined to the site. . . I would say within three and a half to five miles from the site ---the majority of the people.

(T pp. 54-55) Ms. Hall is concerned about the environmental impact [of the proposed coal ash facility at Colon Road] to the surrounding community. Many residents in Colon community use wells to irrigate their gardens they eat from, and water the animals. They eat those animals, and eat eggs. Hall is also concerned about the dust that will be in the air. She explained that the Colon community has already been affected by the brick industry that’s been in that community for decades. (T. pp. 57-58)

19. Ms. Hall further explained that at the end of last summer [2015], she saw a pond had been drained on the proposed coal ash site in Lee County, and “they were digging. I saw displacement of the animals there, beavers.” (T. pp. 61-62) She has seen truck traffic, ditches dug,

land moved, and grading. (T. pp. 63-64) However, Hall acknowledged that “there has been no coal ash spots at the site at this point.” (T. p. 62)

20. Ms. Hall admitted she has no training in environmental science, and no personal knowledge of any effects of coal ash that extend three to five miles from where coal ash has been placed. (T. p. 62) She also admitted that the brick factory is no longer in operation, and she cannot say how far the closed brick factory is located from the Colon proposed coal ash site. (T. p. 63)

21. Terica Luxton has been involved with EnvironmentalLee for four years fighting for the environment. She is concerned about the proposed coal ash facility at Colon Road for several reasons. First, Lee County does not have any coal ash. Second, the proposed Colon Road facility is located right on top of the Colon community’s largest water shed. Ms. Luxton opined:

The water shed is our life. I mean the bottom line is water – without water you don’t have life. . . . The people in Colon depend upon those wells.

(T. p. 66) Ms. Luxton has researched the history of some people who live and are buried in the Colon community. She believes in fighting to protect the environment for those people. (T. pp. 73-74)

22. Judy Hogan is a resident of Moncure, North Carolina, and Chairperson for Chatham Citizens Against the Coal Ash Dump (“Chatham Citizens”). Chatham Citizens Against the Coal Ash Dump consists of 84 members. Fifty-three of such members live in Moncure, NC, fourteen of such members live in Lee County, and ten members live in other parts of Chatham County or other counties. EnvironmentalLee and Chatham Citizens groups support one another. Ms. Hogan lives approximately five miles, by air, from the Brickhaven proposed coal ash facility in Moncure, NC. She lives on Moncure-Pittsboro Road, a major travel route in the county. (T. p. 77)

23. Beginning around October 23, 2015, Ms. Hogan began seeing trucks hauling coal ash on Moncure-Pittsboro Road toward the Brickhaven coal ash site. Residents in the area have notified the Sheriff’s Department and the North Carolina Highway Patrol about trucks speeding through Moncure, and near the site. (T. p. 79) Ms. Hogan has educated herself about what coal ash looks like. About three weeks ago, she observed coal ash coming off the top and behind an older truck. (T. pp. 80-81) Back in April [of 2015], “people in Brickhaven took photos of coal ash blowing off the old Cape Fear coal ash mines. It looks grey to black. . . the truck was going fast.” (T. p. 81) Ms. Hogan, who lives near Jordan [Lake] dam, saw coal ash when she returned from a walk along Jordan Dam Road. (T. p. 81)

24. Sheila Crump is a Moncure, NC resident who lives six or seven miles from the Brickhaven coal ash site in Chatham County. Ms. Crump is concerned about additional traffic that would be created by trucks driving to and from the coal ash facility, along Moncure-Pittsboro Road and Highway 1. There is existing heavy traffic, especially from log trucks, along Old Highway 1, and other main roads in the area. (T. pp. 84-85) Ms. Crump lives next to the railroad tracks, and has to drive across the train track to reach Old Highway 1. (T. p. 85) Ms. Crump joined the Chatham Citizens Against the Coal Ash Dump group in June of 2015.

25. Petitioners' fifth witness was Ed Mussler. Mr. Mussler is a licensed Professional Engineer who has worked as the DWM Permitting Supervisor of the Solid Waste Section ("SWS") for the past ten years. Mussler worked an additional twelve years as a permitting engineer for the Solid Waste Section. As Permitting Supervisor, Mussler is responsible for the supervision and training of, and consultation with, the professional staff who review SWS permit applications to determine if such applications meet the qualifications required to obtain a permit under the Coal Ash Management Act ("CAMA").

26. In November 2014, Respondent SWS received the subject permittees' structural fill permit applications. Mussler and his professional staff performed an extensive and thorough review of such permit applications to ensure the applications met all of the CAMA requirements.

a. Mussler visited the Colon Road site and the Brickhaven site around late November or early December 2014. Mussler observed parts of the site had been mined. He understood the mine had been mined for a clay-like material to make brick. (T. pp. 94-96)

b. Mussler and his staff's review of the applications included, but was not limited to, a review of the type of facility to be permitted (structural fill), the type of waste (coal combustion products), the type of liners to be utilized in these structural fills, the type of testing to be employed to characterize the toxic constituents of the coal combustion products, the need for additional mandatory permits (modified mining permits and 401 water quality certification permits), environmental justice concerns, and the financial assurance mechanisms required under the law.

c. The SWS staff and Mussler attended the public comment and hearing process for each proposed facility site. They considered all comments from the hearing, and reviewed other comments submitted to SWS. Included in those comments were written comments by (1) Drs. G. Fred Lee and Anne Jones-Lee, two consultants and researchers who commented on the environment, public health issues, and water quality, and (2) Dr. Dennis Lemly, Research Associate Professor of Biology at Wake Forest University, who commented on technical and scientific issues with coal ash structural fills.

27. On June 5, 2015, Mr. Mussler issued a Structural Fill Permit to Construct and Operate, Permit No. 5306-STRUC-2015 for the Colon Mine to Charah, Inc. and Green Meadow, LLC and a Structural Fill Permit to Construct and Operate, Permit No. 1910-STRUC-2015 for the Brickhaven No. 2 Tract "A" Mine to Charah, Inc. and Green Meadow, LLC. Both permits incorporated the applicants' permit applications, which included their operating plans.

28. At the contested case hearing, Mr. Mussler explained that before the CAMA was passed, a "large scale structural fill" was undefined, and "structural fills" were handled under other environmental rules. His agency and specifically DWM is required to follow the mandates of CAMA in fulfilling his permitting duties. He may not vary from that mandate, "not if I want to keep my job." (T. pp. 125-126)

29. As to Petitioner's Claim A, Mr. Mussler explained that attempting to compare a solid waste landfill to a structural fill is like “comparing apples to oranges” as they each serve a different purpose.

a. The purpose of a landfill is for the ultimate disposal of specific types of waste, such as municipal solid waste, industrial solid waste, construction and demolition debris, or inert debris, for a specific area of the State. A landfill is an engineered structure whose purpose is to entomb the solid waste, and keep it there to protect the public health and environment. (T. p. 127) Most landfills, at least in North Carolina, operate in excess of 20 to 30 years.

b. Whereas, the purpose of a structural fill is for a projected beneficial end use of some material in replacement of another. CAMA specifically provides for structural fill permits using coal combustion products as structural fill in open pit clay mines. A structural fill project is anticipated to last "probably five to seven years." (T. p. 128)

c. Mr. Mussler opined that the proposed coal ash disposal facilities at Brickhaven and Colon Road are "structural fills" as that term is defined in the North Carolina CAMA statutes that were in effect when the facilities at issue were permitted. (T. p. 119) Since the federal rule, which defines a project as a landfill, wasn't released until December [of 2015], and wasn't effective until April [of 2016], the federal rule did not have any bearing on decisions made at the state level in terms of issuing permits. (T. p. 119)

d. Mussler explained that the structural fill permit applications for the Brickhaven and Colon sites at issue met all of the requirements under CAMA, the beneficial use of which is mine reclamation. He described how:

The project [that is a structural fill under North Carolina CAMA], is designed with six feet of soil cover on top and three on the side slopes. The thickness of soil combined with the engineering placement of coal combustion products makes it amendable to development with proper knowledge and precautions.

(T. pp. 118-119)

30. As to Claim B, Mr. Mussler expounded how the financial assurance required under CAMA for structural fill facilities was more extensive than that required for solid waste landfills. CAMA specifically requires financial assurance to cover funding for closure of a facility, post-closure maintenance and monitoring of a facility for thirty years, and any corrective action that DWM may require, which is also required for solid waste landfills. The closure and post-closure amounts are the fund amounts it would take a third party to close a structural fill site/facility in the absence of the facility owner being around to close a facility. (T. p. 132) In fact, the applicant is required to tell Respondent agencies what they think are the closure and post-closure amounts, and the Respondent agencies review those costs. (T. pp. 132-133) In addition to the requirements for financial assurance for landfills, CAMA also requires financial assurance for any potential liability for sudden and non-sudden accidental occurrences, and any subsequent disaster response costs incurred by DWM. At the same time, the CAMA financial assurance provisions do not establish specific amounts of financial assurance that must be required. (T. p. 132)

31. In this case, Mr. Mussler determined the amount of financial assurance required for the permits at issue based upon his own, and his staff's long-term experience with solid waste facilities, including those dealing with coal ash, and based on Mussler's consultation with the Hazard Waste Section. DWM determined that a (1) \$10,200,560.00 Performance Bond required for closure, post-closure, and potential assessment and corrective action costs for the Brickhaven site, (2) the \$10,380,470.00 Performance Bond for closure, post-closure, and potential assessment and corrective action costs for the Colon site, (3) the Certificate of Liability Insurance for sudden and non-sudden events for \$4 million per occurrence and \$8 million annual aggregate for each site, and (4) the Surety Bond guaranteeing payment for disaster response costs for \$65,000.00 for each site, met the requirements for financial assurance under CAMA.

a. Respondent's SWS staff, of which the CAMA is a subset, and Respondent's Mining Section staff communicated with each other and discussed the permits, and whose responsibility rested in what area. The staff from each Section, Mr. Mussler, and Mr. Tracy Davis, head of Respondent's Mining Section relied upon each other to deal with the aspect of the permits for which each Section had expertise. (T. pp. 124-125)

b. Regarding the accidental insurance terms, the SWS sought guidance from other sections in the Division of Waste Management as "that was not something we normally did." (T. p. 133) SWS looked at what were typical amounts for what they considered equal risk, for the type of activities, and decided upon the four-million and eight-million dollar numbers. (T. p. 133)

c. To determine the "other number, in terms of reimbursement," Mussler and his staff examined the SWS' activities in responding to the hazardous waste problem that occurred in Apex several years ago, and based that number on the estimate of staff time to oversee the cleanup on site. (T. p. 133)

32. Regarding Claim C, Mr. Mussler noted that CAMA specifically approved of encapsulation liner systems based on either a composite liner utilizing a compacted clay liner, or a composite liner utilizing a geosynthetic clay liner. Mussler expounded that the liner system approved by DWM under the Structural Fill permits at issue met those requirements. Based upon his own experience and expertise in the permitting of solid waste facilities, and despite Drs. Fred Lee and Dennis Lemly's public comments and opinions, Mussler believed the liner system approved under the subject permits will "efficiently contain, collect, and remove leachate generated by the coal combustion products, as well as separate the coal combustion products from any exposure to surrounding environs" as mandated by CAMA. (Mussler Affidavit, Resp. Motion for Summary Judgment)

33. Specifically, as to Claim F, Mr. Mussler reviewed Petitioners' written comments, other public comments, and the Environmental Protection Agency's demographic charts and information regarding these sites. Mussler agreed with the Hearing Officer's Report that the examination of demographics did not support the hypothesis of an unjust or disproportionate impact, especially because the design and monitoring and other environmental safeguards provided within these permits are protective of the population in close proximity to the mines.

Mussler was also aware that the applicants were required to acquire an approved 404/401 water quality certification as a condition of the structural fill permits Mussler issued. The applicants were required to provide an environmental justice analysis to the US Army Corps of Engineers for the 404/401 water quality certifications. Mussler advised that if the US Army Corps had denied the 404/401 water quality certifications to the applicants, then the structural fill permits would have been deemed void. (Mussler Affidavit, Resp. Motion for Summary Judgment)

34. Before issuing the two structural fill permits for the Brickhaven and Colon Mines, Mussler was aware that these projects constituted the only coal ash structural fill projects existing, or proposed, for either Lee or Chatham Counties, and that there were, and currently are, no active or proposed municipal waste landfills, industrial landfills, or construction and demolition landfills located in either County.

35. As to Claim G, Mr. Mussler explained that CAMA mandates the use of the toxicity characteristic leaching procedure (“TCLP”) to characterize the toxic constituents in the coal ash. This mandate is carried out within the Structural Fill Permits as part of the Operation Plans. Despite Drs. Lee and Lemly’s public comments and opinions, and based upon his own experiences as a Professional Engineer and in the permitting of solid waste facilities, Mussler opined that the TCLP is a method that achieves the goals of the protection of public health and the environment.

36. Based on his experience as a Professional Engineer, and with 22 years of experience dealing in the area of solid waste permits, Mussler opined that the terms of the structural fill permits for the Brickhaven and Colon Mines will be protective of human health and the environment.

37. Tracy Davis is a licensed Professional Engineer, and the Director of DEMLR for the past three years. Mr. Davis has worked as the Chief Engineer, State Mining Specialist and/or Assistant State Mining Specialist for DEMLR for twenty-five years. As Director of DEMLR, he is responsible for reviewing mining permit applications to determine if they meet the qualifications required to obtain a permit pursuant to the Mining Act of 1971. Davis has looked over approximately 250 to 300 permits during the 16 years he was directly involved with the mining program. Generally, 50 to 60 new permits of different mineral types are issued by DEMLR each year. (T. p. 140)

38. While the permits at issue are the first ones permitted for coal ash, DEMLR has permitted a handful of landfills in mines throughout the State, including several in the Winston-Salem area. (T. p. 142)

39. The mining law does not say the purpose of reclamation is to bring the mining area up to grade. (T. p. 143) Instead, Davis explained, the mining law says the purpose of reclamation is to reclaim the mined area and its adjacent areas, anything affected by the mine operation, to a suitable use so that it's stable and it protects groundwater and surface water quality. (T. p. 143) DEMLR has had other mines that have been backfilled to above the natural grade to establish a footprint for a commercial or residential construction. (T. pp. 143-144) The Mining Act defines "reclamation" and defines "affected land which the reclamation definition cross-references.” (T. p. 145)

40. In November 2014, Mr. Davis' office received the subject permittees' mining modification applications for the Colon Road and Brickhaven sites. These were not new mining permits, because the sites were already permitted by General Shale Company, who was a brick producer. General Shale's mining permits were modified quite a few times over the years. (T. pp. 150-51, 175)

41. Green Meadow requested permit transfer of those original mining permits to put those permits in Green Meadow's name with the same mining plan, and reclamation plan as originally permitted. Green Meadow also asked for permit modifications to change the reclamation to "beneficial fill with coal ash, to change the footprint slightly, and add additional erosion control measures." (T. p. 149) Green Meadow's mining plan showed a mining boundary extending across the entire site, except for a 50-foot buffer along the permit boundary. There is an erosion control plan for the mining footprint, and a reclamation plan that shows the beneficial structural fills they are reclaiming in those footprints over time. (T. p. 150)

42. Mr. Davis and his staff performed an extensive and thorough review of such permit applications to ensure that the permits met all of the requirements of the Mining Act of 1971. Davis' staff, per their usual practice, conducts their own internal review at the central office level, and at the regional office level. After the mining staff performs its internal technical review, it drafts a mining permit, and sends it to Davis for review. Davis modifies such drafts, as necessary, based on his experience. (T. pp. 150-153) Such draft permits are then addressed during the public comment and internal hearing process sessions.

43. In this case, Davis and his staff followed the above-cited practice. Davis was involved throughout that process. Judy Wehner, Assistant Mining Specialist, primarily managed the review of these mining permit applications and modifications. (T. p.152) Davis' staff had several meetings discussing different concerns or issues with the applications regarding the seven statutory denial criteria, discussed who were the experts on those topics, and which permits would cover those conditions. (T. p. 178) The Raleigh regional office looked at erosion control reclamation aspects of the applications, buffer zones, the reclamation plan, and operation plan. (T. p. 151) Davis and his professional staff's review of the applications included, but was not limited to, a review of the type of mining operation and its associated potential environmental impacts, review of the applicant's compliance history, the need for additional mandatory permits (structural fill permits and 401 water quality certification permits), and the financial assurance mechanisms required under the Mining Act. DEMLR also requested additional information from the applicant.

44. As part of that investigation into the Brickhaven and Colon Road sites, Davis' mining staff also sent such applications to other State agencies such as the Division of Air Quality, the Division of Water Resources, and the NC Wildlife Resources Commission for review and comment based on each staff's expertise. (T. pp. 150-153, 156) Both the Division of Water Resources, the Groundwater Section and the Division of Waste Management employ hydrogeologists, while the Wildlife Resources Commission employs biologists. (T. p. 172) DEMLR did not conduct an independent investigation of those issues. Davis' office accepted those agencies' opinions as acceptable to meet the criteria for which each agency reviews these applications. (T. p. 156, 187) Mr. Davis has confidence in his counterparts at those agencies, and



their professional judgments, when they say they've looked at all the issues under that agency's purview. (T. pp. 156-57, 172)

45. For air quality, surface water quality, and groundwater quality criteria under N.C. Gen. Stat. § 74-51(d)(3), Davis noted:

We look at all of the engineering design on the sediment basis, diversion ditches, channels, if they're lined or unlined, the capacity of those basins to treat the surface water that it can be released . . . according to water quality standards. . .

We look at the dust control system, such as watering roads for keeping fugitive dust down on roads, sprinkler systems on stockpiles, so, and that was also in the mining permit conditions.

(T. pp. 157-158)

46. Davis personally did not examine hydrogeology in reviewing the modification of the mining permits, because he and his staff coordinated with other divisions, primarily Waste Management, who looked at hydrogeology from the structural fill aspect. (T. pp. 154-55) However, Davis' staff examined the "erosion sedimentation control, stormwater control around the perimeters, buffer zones, final slopes on the fill, and proper stabilization at reclamation or a phased reclamation approach." (T. p. 155)

47. Regarding criteria in N.C. Gen. Stat. § 74-51(d)(4), Davis explained that they looked at the sedimentation control plan and final slopes of the reclamation, the mine itself, and if there was a pit to remain or a pond, and structural fill final slopes. They did a full review of the public health and safety on the mine site, looking at those specifics. (T. p. 159)

48. In this particular case, there's a 50-foot buffer setback from the property line or permit boundary into the site before any perimeter roads or erosion control measures. The active mining and reclamation are proposed interior of that. (T. p. 159) Since there was no blasting at the site, there was no concern of any off-site impacts if the erosion sedimentation control retained sediment on the site before it reaches those buffers. (T. pp. 159-160) Based on that, Davis opined that the 50-foot buffer around the mining is adequate protection of public health and safety. (T. p. 160)

49. Mr. Davis further explained that his Division doesn't consider the cumulative impacts with other facilities surrounding or nearby the Brickhaven and Colon Road sites, because the mines are self-contained, and DEMLR's authority is on the mine site. They don't look at the impacts on any mine site. Instead, they try to deal with the environmental surface aspects of it on the mine through the mining permit. (T. p. 160)

50. DEMLR also requires the permittee to locate any wetlands existing within the mining permit footprint, and have a buffer to protect those wetlands. That boundary is also required since the permittee is applying for a (1) 401 Water Quality Certification, and (2) a U.S. Army Corps of Engineers 404 Wetland Permit to disturb the wetlands during the life of the mine site. (T. p. 161) Davis explained that you generally don't have mining in a flood plain or in a creek,

unless there is an in-stream mining operation. (T. p. 161) As part of that process, DEMLR would only review the impacts in a flood plan if it applies within the mining permit boundary. In determining the wetland issue, DEMLR generally determines if any streams are located on the property, provide a buffer along those, and provide erosion sedimentation control outside the buffer to keep sediment from going into the streams. Those streams are protected unless the applicant applies for and obtains a 401 and 404 permit to disturb those wetlands or flood plain areas. Davis further noted that DEMLR would grant a mining permit modification to a mining site in a flood plain only if the applicant has a 401 and 404 permit from the proper authorities. (T. p. 161)

51. Mr. Davis attended both public hearings on these proposed modifications, and read public comments that were emailed to staff in the months before his decision. He also reviewed the file folder that contained all the comments that had been received by DEMLR. Before June 5, 2015, Davis reviewed the hearing officer report, and some of the hearing officer's attachments, including the comments and PowerPoint presentation by Don Kovasckitz, the GIS person from Lee County. (T. p. 161-162)

52. In this case, the applicant proposed using backfill with coal ash structural fill in these mine pits, and continuing the footprint of what was already left behind from the prior mining. From there, DEMLR and DWM conducted the dual permitting process. Davis noted that CAMA allows open pit mine reclamation as an alternative. The Mining Act is very open to types of reclamation that can be done, and doesn't specify any type of structural fill. In fact, it can be any type of beneficial land use that an applicant or mine operator wants to propose. However, DEMLR may not approve all of them. It's up to the applicant to propose something Respondent feels is reviewable and approvable. (T. pp. 163-64)

53. The expedited permit provisions of CAMA require that any permits that touch coal ash management must go through the public notice process, and a public hearing before a decision is made on the permits. (T. p. 165) The Mining Act does not supersede local zoning regulations, so a mining permit anywhere in this State does not supersede the right for applicable local zoning. (T. p. 165)

54. The timeliness of the permit process depends on whether the application is complete when Respondent receives it. If an application is complete when it comes in under the Mining act, DEMLR has 60 days by statute to make a decision to grant or deny the permit. The clock resets if DEMLR asks for additional information from the permit applicant. The applicant has 180 days to respond back to the Department. If the applicant doesn't respond timely, then DEMLR can grant or deny the mining permit based on the information it has in their hands. (T. pp. 166-167)

55. In the final stages of drafting the mining permit in this case, Mr. Davis confirmed with Mr. Mussler that DWM had all the information they needed from the applicant. Davis also put a cross-reference in the mining permit requiring the applicant to follow CAMA, the structural fill, and listed the name of the permit so if there's a violation of the solid waste management structural fill permit, then it's a direct violation of the mining permit. (T. pp. 179-180)

56. On June 5, 2015, Mr. Davis issued to Green Meadow, LLC a mining permit modification Permit No. 53-05 for the Colon Mine, and a mining permit modification, Permit No. 19-25 for the Brickhaven No. 2 Tract "A" Mine. Both permits allowed a change in the method of reclaiming the mines by constructing structural fill from coal combustion by-products in accordance with the provisions of CAMA, and with the terms and conditions of a Permit to Construct and Operate Colon Mine Structural Fill Permit, No. 5306-STRUC-2015 and a Permit to Construct and Operate Brickhaven No. 2 Tract "A" Mine Structural Fill Permit, No. 1910-STRUC-2015, both issued by DWM.

57. Mr. Davis was not directly aware that several landowners around the existing Colon Road mine site have "Do Not Drink" letters issued by the NC Department of Public Health. He was not aware that Respondent was ever given any information that water contamination occurred while General Shale held mining permits. Although, he noted, if there was an allegation of that type, they [DEMLR] would take that matter seriously, and talk with their Groundwater Division with Water Resources, and see if it was tied to the mine site itself, or if it was some other contaminant source. (T. p. 168)

58. Mr. Davis opined that reclamation of an open pit mine is the reasonable rehabilitation of an affected land for useful purposes. An applicant may request any sort of reclamation in its proposed reclamation plan. He noted that using coal combustion by-products in constructing structural fill in an open pit mine, in accordance with the provisions of CAMA, is an acceptable form of reclamation. (T. p. 169)

59. Specifically, as to Claim B, Mr. Davis explained that the financial assurance required under the Mining Act of 1971 for mining permits allows an applicant the option of filing a blanket bond covering all its mining operations within the State for which the applicant holds a permit. Pursuant to the rules regarding bonding requirements, the bond for mine reclamation is calculated at \$500 per acre up to \$5000 per acres. The Mining Commission uses its rules, a worksheet, and a schedule of costs to calculate the appropriate amount of bond an applicant must provide. Once the Mining staff determines the total amount of blanket bond has reached the \$500,000 amount, which it did with these permit applications, and if the applicant has a good operating record, then a \$500,000 blanket bond is considered a sufficient bond amount. In other words, Respondent's rules mandate that \$500,000 is the maximum amount of blanket bond Respondent could require a permittee to post. (T. p. 186)

60. In this case, Respondent accepted Green Meadow, LLC's required blanket bond of \$500,000 since Green Meadow, LLC did not have any civil penalties assessed against it within the past consecutive two years. (T. pp. 170-171)

61. Davis opined that the Brickhaven and Colon Road mine sites are suitable mine reclamation sites. (T. p. 175-76) In Davis' opinion as a Professional Engineer with 28 years of experience in the area of mining permits, the terms of the modified mining permits for the Brickhaven and Colon Road Mines will be protective of human health and the environment based on several factors. These factors are the design of the facilities, the erosion sedimentation control around the sites, and the permit conditions in DEMLR's issued permits, the Waste Management permits, and the 401 Water Resources permits for each site. (T. pp. 175-176)

62. Davis explained that the fact that the Colon mine is only 38% excavated is not a problem for Green Meadow's mining permit modification. Once Green Shale's mining permit was transferred to Green Meadow, LLC, Green Meadow could mine the majority of the site beyond just the pits existing at the time of the permit transfer. The mining permit modification proposed the same mining footprint as in the Green Shale permit. In fact, Green Meadow is already "excavating the same depth basically as the existing pits and ponds that were out there." (T. pp. 176-77) In other words, Green Meadow is expanding the mine's footprint, and creating the lined cells that are proposed for the structural fill. (T. pp. 176-77) Additionally, the height of each site is shown in the applications, and on mine and reclamation maps with cross-sections in the footprint, and on slope angles. Davis opined a height of the site at 50 feet higher than the ground level is not unusual. (T. p. 177)

63. On cross-examination, Mr. Davis confirmed that a mining permit is valid from the day the permit is issued until the day the permit expires. A mining permit is good for up to ten years, and pursuant to the Mining Law, may be renewed within the last two years of that permit's life. (T. p. 181) A mining permit remains valid even if a mine becomes inactive for several months or several years. The permittee could reactivate or resume its mining operations of an inactive mine up until the date the mining permit expires. If a permittee renews its mining permit, then it could continue mining for another ten years. (T. p. 181) Similarly, Respondent can still enforce the conditions of a mining permit on the mine operator if a mine is inactive but still permitted. (T. p. 181)

64. Davis confirmed that before November 2014, Respondent granted General Shale's request to release two areas from its mining permit at the Colon Road mine site. As a result, those two areas were excluded from the Colon Road mining permit boundaries, and no coal ash could be placed on the areas that were released from such permit. (T. p. 183)

65. Davis opined that Respondent doesn't see any difference between excavating and mining. (T. p. 184) He verified that as of today, Green Meadow is expanding the footprint of the previous mining to provide an excavation or open pit to place the cells for beneficial fill. They are also stockpiling material on the site to use for liners, and possibly cover. Per their mining permit, Green Meadow is permitted to haul material off site at any time during the life of that permit. (T. p. 185) In Davis' opinion, Green Meadow's operation is a mining operation, not a structural fill operation. (T. p. 185)

66. Therese Vick is the Blue Ridge Environmental League ("BREDL") North Carolina Communities Campaign Coordinator. EnvironmentalLEE and Chatham Citizens Against Coal Ash are members of BREDL, and have representatives on the BREDL Board of Directors. Ms. Vick has worked with EnvironmentalLEE since 2012 and with Chatham Citizens since December 2014. (T. pp. 190-92)

67. Ms. Vick acknowledged that her role at BREDL is that of a community organizer. In this case, she reviewed permit applications, quite a bit of EPA guidelines that were released in December 2015, and studies done by experts on environmental justice, leachate treatment, and coal ash and air quality issues. Vick prepared public comments, and participated at the public

hearings regarding the subject permits. She submitted many public comments, including but not limited to, those written by Dr. Fred Lee and Dr. Dennis Lemly, to Respondent Agencies about the permits at issue.

68. At hearing, Ms. Vick voiced concern over the expediency with which Respondent acted in reviewing and issuing the subject permit decisions. However, she conceded that her understanding of how the permit decisions were made in this case was “certainly not clear.” (T. 212) Ms. Vick has an Associate’s degree in Human Services and Psychology, but no expertise in environmental effects on landfills or landfill liners. She solicited comments in a report from Dr. Lee and Dr. Jones-Lee, and from Dr. Lemly, because she knew those doctors possessed the expertise to look at the issues about which she and the other Petitioners were concerned. (T. pp. 213-216)

69. Petitioners’ eighth and final witness was Don Kovasckitz. Mr. Kovasckitz is the Director for the Lee County Strategic Services Division. At the contested case hearing, Mr. Kovasckitz gave a slide presentation, similar to one that he submitted to the Lee County Commissioners. Kovasckitz used digital GIS mapping to (1) determine if Green Meadow’s actions on the subject site constituted actual mine reclamation, (2) show where the reclamation was going to occur, and (3) demonstrate what the site would look like after all reclamation was complete. (T. pp. 228, 232)

70. Mr. Kovasckitz’ presentation illustrated the history of the mined areas of the Colon Road site since 1950, and demonstrated Kovasckitz’ opinion regarding the definition of reclamation.

a. Mr. Kovasckitz determined that of the total 118-plus acres that will be filled with coal ash at the Colon Road site, 29% has been excavated, and 71% was unexcavated. (T. p. 234)

b. Kovasckitz created a topological map based on the permittee’s reclamation plan and accepted GIS practices to show the Colon Road site’s appearance after reclamation is completed. The site’s topology starts at 330 feet above mean sea level, grades down to 320, and then, grades down 4-to-1 to 270 feet above mean sea level on the east side of the site. (T. pp. 235-36)

c. Mr. Kovasckitz also pointed out that the hydro-geological study drawn for the permittee’s reclamation plan failed to show a “finger of the flood plain that extends into a retention pond” in the southwest corner of cell 1. Whereas, the FEMA maps, Kovasckitz’ drawing, and the Buxton Engineering hydro-geological study all showed a retention pond in the southwest corner of cell 1. (T. pp. 242-44; Pet. Exh. 7)

71. During cross-examination, Mr. Kovasckitz admitted that he is neither a professional engineer nor a mining specialist. He did not submit his comments and presentation to the Respondent agencies during the public comment period. (T. p. 244) Kovasckitz also conceded on cross-examination that the maps/drawing from FEMA, Buxton Engineering, and Kovasckitz came

from the same source. He conceded that he did not know the source of the permittee's drawings or maps. (T. pp. 252-53)

72. On the morning of Tuesday, December 8, 2015, after approximately one and one half days of testimony, Petitioners rested their case with respect to Claims A (structural fill permit v. solid waste landfill permit issue), B (financial assurance issue) and F (environmental justice issue). (T. p. 254)

73. Following the close of Petitioners' case-in-chief, Respondents and Respondent-Intervenors renewed their Motions for Summary Judgment, requesting that the Undersigned dismiss Petitioners' case based on the fact that Petitioners had failed to meet their burden of proof, and had not presented any evidence to show that they had a right to relief. (T. pp. 258-269) Petitioners responded by oral argument. (T. pp. 269-273)

74. The OAH official record showed that on October 16, 2015, the Undersigned mailed an Amended Scheduling Order to the parties establishing deadlines for filing summary judgment motions, and responses. Such Order also advised the parties a hearing on any summary judgment motions would be before November 30, 2015 if the Court deemed it necessary.

75. Before the hearing began on December 7, 2015, Petitioners' counsel advised the Undersigned and opposing counsel that its two expert witnesses were unavailable to testify. Before the hearing began on December 7, 2015, the Undersigned offered Petitioner use of the videoconferencing system in the courtroom to allow Petitioner's two expert witnesses, Drs. Lee and Lemly, to testify the week of December 7-11, 2015.

76. After Petitioner rested its case in part, and in response to the Undersigned's questions, Petitioners' counsel confirmed that the petition for this contested case was filed on July 6, 2015, and the Notice of Hearing, scheduling the hearing in this case for December 7-11, 2015, was mailed to the parties on October 27, 2015. (T. p. 273) The OAH's official record for this case showed Petitioners' counsel received the Notice of Hearing setting the hearing on the merits of the case on October 30, 2015.

77. In court, the Undersigned summarized the Prehearing Conference with the parties' counsels, and asked Petitioners' counsel why his two experts were unavailable to testify that week using the court's video/audio conferencing system. Petitioners' counsel replied:

[W]e haven't contacted them about being available later on this week. We don't know what the cost would be for Dr. Lee. And I mean the reason that they're not here this week is Dr. Lee, was, you know, as an expert traveling across the country, was fairly costly. And before the decisions were made on the motions for summary judgment, we couldn't afford to have him sit around and maybe speak – maybe not testify this week. And Dr. Lemly would need an affidavit and try to work out a time frame.

(T. p. 274) Petitioners' counsel was unprepared to go forward with the remainder of its case during the current hearing period established by the Undersigned five weeks before hearing.

78. The Undersigned denied Petitioners' request to continue the case until January 2016 to present expert testimony. Petitioner had 39 days' notice that the hearing on the merits of the case would be conducted the week of December 7-11, 2015, and did not file a Motion to Continue the hearing. Neither did Petitioner provide "good cause" why its case should be continued until January 2016.

79. The Undersigned advised the parties that she would take the case under advisement. In considering Respondents' renewed Motion for Summary Judgment, the Undersigned instructed the parties that she would review the renewed Summary Judgment Motion, Responses, and the exhibits and affidavits attached to such Motion and Responses. In deciding the case on the merits, the Undersigned advised that she would base that decision on the evidence presented and admitted into evidence at hearing.

80. On January 11, 2016, thirty-four days after the contested case hearing in this case was concluded, Petitioners filed their Second Motion to Amend Petition, attempting to add a claim based on a January 6, 2016 newspaper article that described discussions between Governor Pat McCrory, a Duke Energy official and the Secretary of the Department of Environmental Quality that allegedly occurred on June 1, 2015. On January 11, 2016, the Undersigned issued a Request for Response to Petitioners' Motion to Amend Petition on or before January 22, 2016.

81. On January 19, 2016, the Undersigned issued an Order Staying this case and tolling all statutory time-frames, including the Undersigned's issuance of the Final Decision in this case, pending OAH's receipt of Respondent's Responses to Petitioners' Motion, and the Undersigned ruled on said Motion.

82. On February 10, 2016, the Undersigned issued an Order denying Petitioner's Second Motion to Amend Petition for being untimely filed, and denied Respondents' Motion to Summary Judgment. The Undersigned ruled that pursuant to Rule 41(b) of the North Carolina Rules of Civil Procedure, Petitioner's contested case was DISMISSED for failing to meet its burden of proof in its case-in-chief by (1) failing to show it had a right to relief, and (2) failing to show Respondent violated the criteria in N.C. Gen. Stat. § 150B-23. The Undersigned also ordered the Respondent to file a proposed Final Decision.

83. While Petitioners voiced many concerns about the placement and use of coal ash at the Brickhaven and Colon Road sites, they failed to present any physical, photographic, or scientific evidence, at hearing, supporting their claims that Respondent erred in approving and issuing the subject permits to Respondent-Intervenors.

### **CONCLUSIONS OF LAW**

1. All parties are properly before the Office of Administrative Hearings, and the Office has jurisdiction over the parties and the subject matter. To the extent the Findings of Fact contain Conclusions of Law, or that the Conclusions of Law are Findings of Fact, they should be so considered without regard to the given labels.

2. All parties have been correctly designated, and there is no question as to misjoinder or non-joinder.

3. Petitioners EnvironmentalLee and Chatham Citizens Against Coal Ash Dump are chapters of the Petitioner Blue Ridge Environmental Defense League Inc. The Blue Ridge Environmental Defense League Inc. (BREDL) is a non-profit organization focusing on environmental issues.

4. Petitioners have the burden of presenting evidence and proving that the Respondent agencies substantially prejudiced Petitioners' rights **and** that Respondents either exceeded their authority or jurisdiction, acted erroneously, failed to use proper procedure, acted arbitrarily and capriciously, or failed to act as required by law or rule, in violation of N.C. Gen. Stat. § 150B-23, in issuing the permits at issue.

5. Petitioners and Respondent-Intervenors are "persons" as defined by N.C. Gen. Stat. § 130A-2(7).

6. Respondent DWM is a State agency established pursuant to N.C. Gen. Stat. §§ 143B-279.1 through 143B-344.23, and vested with the statutory authority to enforce the State's environmental pollution laws, including laws enacted to regulate solid waste. The North Carolina General Assembly mandates that Respondent DWM promote and preserve an environment that is conducive to public health and welfare by establishing a statewide solid waste management program.

7. On June 5, 2015, DWM issued Respondent-Intervenors individual permits, pursuant to N.C. Gen. Stat § 130A-309.219(a)(2), to construct and operate a structural fill at the Brickhaven mine site in Chatham County, and at the Colon Road mine site in Lee County. Both the Brickhaven and Colon mine sites consist of projects using coal combustion products as structural fill involving the placement of 8,000 or more tons of coal combustion products per acre, or 80,000 or more tons of coal combustion products in total per project.

8. The issue in this contested case was whether Respondents acted properly in approving the subject permit applications, not if violations have occurred at the Colon Road site and Brickhaven site since the applicable permits were issued.

9. At the contested case hearing, Respondents presented evidence that before DWM issued structural fill permits to each permittee, DWM conducted a thorough and extensive review of the subject permit applications to ensure that the permits would meet all of the requirements of CAMA, as well as being vetted by the public comment and hearing process.

10. N.C. Gen. Stat §§ 130A-309.219(b)(1)(d) and (b)(2) require that persons proposing projects using coal combustion products as structural fill involving the placement of 8,000 or more tons of coal combustion products per acre, or 80,000 or more tons of coal combustion products in total per project shall provide to SWM:



A Toxicity Characteristic Leaching Procedure analysis from a representative sample of each different coal combustion product's source to be used in the project for, at a minimum, all of the following constituents: arsenic, barium, cadmium, lead, chromium, mercury, selenium, and silver.

In this case, DWM mandated Respondent-Intervenors provide a Toxicity Characteristic Leaching Procedure analysis consistent with these statutory requirements in both the Brickhaven and Colon mine structural fill permits. A preponderance of the evidence showed that Respondent-Intervenors complied with such requirement.

11. N.C. Gen. Stat § 130A-309.220 establishes the design, construction, and siting requirements for projects using coal combustion products for structural fill. N.C. Gen. Stat § 130A-309.220(b) lists the specific requirements for the liners, leachate collection system, cap, and groundwater monitoring system required for large structural fills with (b)(1); specifically setting out the requirements for a base liner, which is to consist of one of two optional designs: (a) a composite liner utilizing a compacted clay liner or (b) a composite liner utilizing a geosynthetic clay liner. In this case, DWM required that both the Brickhaven and Colon mine structural fill permits provide for a liner consistent with these statutory requirements.

12. N.C. Gen. Stat § 130A-309.221 sets out the financial assurance requirements for large projects using coal combustion products for structural fill. The applicant for a permit to construct or operate a structural fill must establish:

[F]inancial assurance that will ensure that sufficient funds are available for facility closure, post-closure maintenance and monitoring, any corrective action that the Department may require, and to satisfy any potential liability for sudden and non-sudden accidental occurrences, and subsequent costs incurred by the Department in response to an incident at a structural fill project, even if the applicant or permit holder becomes insolvent or ceases to reside, be incorporated, do business, or maintain assets in the State.

13. The preponderance of the evidence presented at hearing established that both the Brickhaven and Colon mine structural fill permits issued by DWM on June 5, 2015 meet these statutory requirements for financial assurance, and Respondent-Intervenors provided the requisite financial assurance mechanisms.

14. N.C. Gen. Stat § 130A-294(a)(4)c.9. requires DWM to “deny an application for a permit for a solid waste management facility” if:

[T]he cumulative impact of the proposed facility, when considered in relation to other similar impacts of facilities located or proposed in the community, would have a disproportionate adverse impact on a minority or low-income community protected by Title VI of the federal Civil Rights Act of 1964.

In this case, Petitioners failed to demonstrate by a preponderance of the evidence that the cumulative impact of the Brickhaven and Colon structural fill facilities would have a disproportionate adverse impact on the Lee or Chatham County communities.

15. Ed Mussler, a licensed Professional Engineer and the Permitting Supervisor of the Solid Waste Section of the Division of Waste Management, has been properly delegated the authority to issue structural fill permits which meet all of the requirements of CAMA under N.C. Gen. Stat. § 130A, Article 9. Mr. Mussler acted within his authority and jurisdiction when he issued the structural fill permits for the Brickhaven and the Colon mine sites.

16. Petitioners failed to establish by a preponderance of the evidence that Mr. Mussler and DWM substantially prejudiced Petitioners' rights, exceeded their authority or jurisdiction, acted erroneously, failed to use proper procedure, acted arbitrarily or capriciously, or failed to act as required by law or rule in following, or failing to follow, the procedural process for issuing a structural fill permit to Charah, Inc. and Green Meadow, LLC for both the Colon and Brickhaven mine sites.

17. Petitioners failed to establish that DWM substantially prejudiced Petitioners' rights, exceeded their authority or jurisdiction, acted erroneously, failed to use proper procedure, acted arbitrarily or capriciously, or failed to act as required by law or rule in drafting and issuing a structural fill permit to Charah, Inc. and Green Meadow, LLC for both the Colon and Brickhaven mine sites.

18. Respondent DEMLR is a State agency established pursuant to N.C. Gen. Stat. §§ 143B-279.1 through 143B-344.23 and vested with the statutory authority to enforce the State's environmental pollution laws, including laws enacted to regulate mining operations. The North Carolina General Assembly mandates that Respondent DEMLR promote and preserve an environment that is conducive to public health and welfare by establishing a statewide mining program.

19. N.C. Gen. Stat. § 74-52 (the Mining Act of 1971) described the bases upon which a mining permit may be modified. At the contested case hearing, Respondents presented evidence that before DEMLR issued the mining modification permits to Green Meadow, LLC for the Brickhaven and Colon mines, DEMLR conducted an extensive and thorough review of Green Meadow, LLC's mining modification permit applications, pursuant to the Mining Act of 1971.

20. DEMLR also sent a copy of the subject permit applications to other State Agencies, such as the Division of Air Quality, the Division of Water Resources, Division of Waste Management, US Fish and Wildlife, NC Wildlife Resources Commission for comments, based upon each agency's area of expertise. DEMLR collaborated with those agencies before drafting provisions of the mining modification permits that addressed those agencies' concerns. In addition, DEMLR staff considered public comments sent to DEMLR and presented at the public hearings.

21. N.C. Gen. Stat. § 74-54 and 15A NCAC 05B .0103 establish the requirements for a mining permit bond, and the calculations to be made to determine the amount of the bond.

Specifically, 15A NCAC 05B .0103 requires that once a determination is made that the total amount of a blanket bond has reached the amount of \$500,000, which it did with these permit applications, and the applicant has a good operating record, which Green Meadow, LLC had, then the amount of a \$500,000 blanket bond is considered sufficient to reclaim all sites, and no additional reclamation bond money is needed. The preponderance of the evidence established that Respondent-Intervenor Green Meadow, LLC provided the requisite bond.

22. Petitioner failed to present any evidence proving that Respondent was not bound by the statutory and administrative rules in determining the amount of the mining permit bond, and that Respondent was otherwise authorized, or had any discretion, to modify the statutory and regulatory requirements regarding the amount of financial assurance the permittee should post.

23. A preponderance of the evidence at hearing proved that Tracy Davis, a licensed Professional Engineer and the Director of the Division of Energy, Mineral and Land Resources (DEMLR), has been properly delegated the authority to issue mining permits, and modified mining permits which meet all of the requirements of the Mining Act of 1971 under N.C. Gen. Stat. § 74, Article 7. Mr. Davis acted within his authority and jurisdiction when he issued the modified mining permits for the Brickhaven and the Colon mine site.

24. Petitioners failed to prove that Mr. Davis and DEMLR substantially prejudiced Petitioners' rights, exceeded their authority or jurisdiction, acted erroneously, failed to use proper procedure, acted arbitrarily or capriciously, and failed to act as required by law or rule in following, or failing to follow, the procedural process for issuing modified mining permits to Green Meadow, LLC for the Colon and Brickhaven mine sites.

25. Petitioners failed to establish that Mr. Davis and DEMLR substantially prejudiced Petitioners' rights, exceeded their authority or jurisdiction, acted erroneously, failed to use proper procedure, acted arbitrarily or capriciously, or failed to act as required by law or rule in drafting and issuing a modified mining permit to Green Meadow, LLC for both the Colon and Brickhaven mine sites.

26. Petitioners failed to prove that Mr. Mussler and Mr. Davis (1) failed to discharge their duties in good faith, or (2) failed to exercise their powers in accord with the spirit and purpose of the law they were delegated to enforce.

27. While Petitioners voiced many concerns about the placement and use of coal ash at the Brickhaven and Colon Road sites, they failed to present any physical, photographic, or scientific evidence, at hearing, supporting their claims that Respondent erred in approving and issuing the subject permits to Respondent-Intervenors.

28. Giving due regard to each Respondent agency's demonstrated knowledge and expertise regarding the facts and inferences within the specialized knowledge of the Respondent agencies, Petitioners failed to prove by a preponderance of the evidence that Respondents substantially prejudiced Petitioners' rights, exceeded Respondents' authority or jurisdiction, acted erroneously, failed to use proper procedure, acted arbitrarily or capriciously, or failed to act as required by law or rule. Instead, the preponderance of the evidence showed that Respondents

fairly and carefully considered the facts surrounding issuance of the subject permits, and applied the applicable law regarding each subject permit as required by law.

29. Respondents and Respondent-Intervenors renewed their Motion for Summary Judgment at the end of Petitioners' case, wherein they requested Petitioners' claims be dismissed, because Petitioners had shown no right to relief. Respondents' and Respondent-Intervenors' renewed Motion for Summary Judgment was, in essence, a request for involuntary dismissal pursuant to N.C. Gen. Stat. §1A-1, Rule 41(b), and shall be so converted and Granted as such.

30. Dismissal on motion of respondent at close of petitioner's case in nonjury trial is left to sound discretion of trial court. Rules Civ. Proc., Rule 41(b), G.S. § 1A-1. *Matter of Isaac OGHENEKEVEBE*, 123 N.C.App. 434, 473 S.E. 2d 393(1996)

31. Motion for dismissal made at close of plaintiff's evidence in nonjury trial not only tests sufficiency of plaintiff's proof to show right to relief, but also provides procedure whereby judge may weigh evidence, determine facts, and render judgment on merits against plaintiff, even though plaintiff may have made out prima facie case. Rules Civ. Proc., Rule 41(b), G.S. § 1A-1. *Matter of Isaac OGHENEKEVEBE*, 123 N.C.App. 434, 473 S.E. 2d 393(1996)

32. Based on the foregoing Findings of Fact and Conclusions of Law, Petitioners failed to prove by a preponderance of the evidence that it had a right to relief.

### **FINAL DECISION**

Based upon the foregoing Findings of Fact and Conclusions of Law, the undersigned determines:

1. Respondents' and Respondent-Intervenors' Motion for Summary Judgment is hereby **DENIED**.

2. Respondents' and Respondent-Intervenors' converted Motion for Involuntary Dismissal pursuant to Rule 41(b) of the North Carolina Rules of Civil Procedure is hereby **GRANTED**. The decision by DWM to issue two permits on June 5, 2015 for a Structural Fill Permit to Construct and Operate, Permit No. 5306-STRUC-2015 for the Colon Mine to Charah, Inc. and Green Meadow, LLC and a Structural Fill Permit to Construct and Operate, Permit No. 1910-STRUC-2015 for the Brickhaven No. 2 Tract "A" Mine to Charah, Inc. and Green Meadow, LLC is hereby **UPHELD**. Further, DEMLR's decision to issue two permits on June 5, 2015 for a mining permit modification, Permit No. 53-05 for the Colon Mine to Green Meadow, LLC and mining permit modification, Permit No. 19-25 for the Brickhaven No. 2 Tract "A" Mine to Green Meadow, LLC is hereby **UPHELD**.

### **NOTICE**

This is a Final Decision issued under the authority of N.C. Gen. Stat. § 150B-34. Under N.C. Gen. Stat. § 150B-45, any party wishing to appeal this Final Decision must file a Petition for Judicial Review in the Superior Court of the county where the person aggrieved by the administrative decision resides, or in the case of a person residing outside the State, the county

where the contested case which resulted in the Final Decision was filed. **The appealing party must file a Petition for Judicial Review within 30 days after being served with a written copy of this Final Decision.**

Under N.C. Gen. Stat. § 150B-47, the Office of Administrative Hearings is required to file the official record in the contested case with the Clerk of Superior Court within 30 days of receipt of the Petition for Judicial Review. N.C. Gen. Stat. § 150B-46 describes the contents of the Petition for Judicial Review, and requires service of the Petition for Judicial Review on all parties. Consequently, a copy of the Petition for Judicial Review must be sent to the Office of Administrative Hearings at the time the appeal is initiated in order to ensure the timely filing of the record.

This the 5th day of May, 2016.

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Melissa Owens Lassiter  
Administrative Law Judge

STATE OF NORTH CAROLINA  
COUNTIES OF CHATHAM & LEE

IN THE OFFICE OF  
ADMINISTRATIVE HEARINGS  
15 EHR 04772

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ENVIRONMENTALEE, CHATHAM )  
CITIZENS AGAINST COAL ASH DUMP, )  
& BLUE RIDGE ENVIRONMENTAL )  
DEFENSE LEAGUE INC. )  
    Petitioners )  
  
    v. )  
  
  
NC DEPARTMENT OF ENVIRONMENT )  
AND NATURAL RESOURCES, DIVISION )  
OF WASTE MANAGEMENT, AND )  
DIVISION OF ENERGY, MINERAL, AND )  
LAND RESOURCES, )  
    Respondents, )  
  
and )  
  
GREEN MEADOW, LLC, )  
AND CHARAH, INC., )  
    Respondent-Intervenors. )

**ORDER AMENDING  
FINAL DECISION**

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Pursuant to 26 NCAC 3.0129, for the purpose of correcting a clerical error, IT IS HEREBY ORDERED that the above-captioned Decision, issued from this Office on May 5, 2016 is amended to correct the word Petitioners to Respondent in the first sentence of the third paragraph under Preliminary Matters and to include the transcript page reference as follows:

Following all parties' arguments on the Summary Judgment Motion, the Undersigned Granted Summary Judgment for **Respondent** as to Petitioners' Claim D, Denied Summary Judgment on all other claims. Petitioners opted to Voluntarily Dismiss with prejudice Petitioner's Claim D in lieu of an Order for Partial Summary Judgment. After the Undersigned's ruling, Petitioners and Respondent-Intervenors advised the Undersigned that they had reached a settlement as to Claim E regarding the issue of coal dust. (T. pp. 46-48)

Except for the above amendment, the Final Decision issued on May 5, 2016 remains in effect.

This the 6th day of May, 2016.

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Melissa Owens Lassiter  
Administrative Law Judge