NCDENR
North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

June 5, 2015

Mr. Charles Price
Green Meadow, LLC
12601 Plantside Drive
Louisville, Kentucky 40299

RE: Mining Permit No. 19-25
Brickhaven No. 2 Mine Tract "A"
Chatham County
Cape Fear River Basin

Dear Mr. Price:

Your application for renewal and modification of the above referenced mining permit has been approved. The modification is to redesign the erosion and sedimentation control measures throughout the site and reduce the affected acreage to 267 acres as indicated on the Mine Maps last revised December 31, 2014. The modification also includes changing the method for reclaiming the mine by constructing structural fill using Coal Combustion Byproducts (CCBs) in accordance with the provisions of the Coal Ash Management Act of 2014 and the terms and conditions of Permit to Construct and Operate Brickhaven No. 2 Mine Tract "A" Mine Structural Fill Permit No. 1910-STRUC-2015 issued by the Division of Waste Management on June 5, 2015. A copy of the renewed and modified mining permit is enclosed. The new expiration date is June 5, 2025.

The conditions in the renewed and modified permit were based primarily upon the initial application. Modifications were made as indicated by the renewal and modification requests and as required to insure compliance with The Mining Act of 1971. I would like to draw your particular attention to the following conditions where minor additions or changes were made: Operating Condition Nos. 1B, 1C, 3C, 3D, 4B, 4C, 5, 10B, and 12A and Reclamation Condition Nos. 1, 2A, 2E, 3, 4A and 4B.

G.S. 74-65 states that any actions taken under the Mining Act of 1971, such as the issuance of mining permits, shall not be construed to supersede or otherwise affect or prevent the enforcement of any zoning regulation or ordinance duly adopted by an incorporated city or county or by any agency or department of the State of North Carolina, except insofar as a provision of said regulation or ordinance is in direct conflict with the Mining Act of 1971. Thus, the responsibility of compliance with any applicable zoning regulations lies with you.

As a reminder, your permitted acreage at this site is 301 acres and the amount of land you are allowed to disturb is 267 acres.

Please review the renewed and modified mining permit and contact Ms. Judy Wehner, Assistant State Mining Specialist, at (919) 707-9220 should you have any questions concerning this matter.

Sincerely,

Tracy E. Davis, PE, CPM
Director
Division of Energy, Mineral, and Land Resources

TED/jw

Enclosures

cc: Mr. John Holley, PE, DEMLR Raleigh Regional Office Supervisor
Mr. Bradley Bennett, DEMLR Stormwater Permitting Supervisor
Ms. Janet Boyer, PE, DEMLR State Mining Specialist
Mr. Ed Mussler, PE, Division of Waste Management Permitting Supervisor
Mr. Jay Zimmerman, Director, Division of Water Resources
Mr. William Gerringer-Mine and Quarry Bureau, w/o enclosures

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF ENERGY, MINERAL AND LAND RESOURCES

LAND QUALITY SECTION

P E R M I T

for the operation of a mining activity

In accordance with the provisions of G.S. 74-46 through 68, "The Mining Act of 1971," Mining Permit Rule 15A NCAC 5 B, and other applicable laws, rules and regulations

Permission is hereby granted to:

Green Meadow, LLC

Brickhaven No. 2 Mine Tract "A"

Chatham County - Permit No. 19-25

for the operation of a

Clay Mine

which shall provide that the usefulness, productivity and scenic values of all lands and waters affected by this mining operation will receive the greatest practical degree of protection and restoration.

MINING PERMIT EXPIRATION DATE: June 5, 2025

In accordance with the application for this mining permit, which is hereby approved by the Department of Environment and Natural Resources, hereinafter referred to as the Department, and in conformity with the approved Reclamation Plan attached to and incorporated as part of this permit, provisions must be made for the protection of the surrounding environment and for reclamation of the land and water affected by the permitted mining operation. This permit is expressly conditioned upon compliance with all the requirements of the approved Reclamation Plan. However, completed performance of the approved Reclamation Plan is a separable obligation, secured by the bond or other security on file with the Department, and may survive the expiration, revocation or suspension of this permit.

This permit is not transferable by the permittee with the following exception: If another operator succeeds to the interest of the permittee in the permitted mining operation, by virtue of a sale, lease, assignment or otherwise, the Department may release the permittee from the duties imposed upon him by the conditions of his permit and by the Mining Act with reference to the permitted operation, and transfer the permit to the successor operator, provided that both operators have complied with the requirements of the Mining Act and that the successor operator agrees to assume the duties of the permittee with reference to reclamation of the affected land and posts a suitable bond or other security.

In the event that the Department determines that the permittee or permittee's successor is not complying with the Reclamation Plan or other terms and conditions of this permit, or is failing to achieve the purposes and requirements of the Mining Act, the Department may give the operator written notice of its intent to modify, revoke or suspend the permit, or its intent to modify the Reclamation Plan as incorporated in the permit. The operator shall have right to a hearing at a designated time and place on any proposed modification, revocation or suspension by the Department. Alternatively and in addition to the above, the Department may institute other enforcement procedures authorized by law.

Definitions

Wherever used or referred to in this permit, unless the context clearly indicates otherwise, terms shall have the same meaning as supplied by the Mining Act, N.C.G.S. 74-49.

Modifications

October 5, 1995: This permit has been modified to increase the affected acreage from 17 acres to 83.5 acres, approve the pit expansion and the upgrading of the associated sediment and erosion control measures as per the Mine Site Map dated August 27, 1995, and allow modification to the spray irrigation system as approved by the Division of Water Quality.

August 2, 1996: This permit has been modified to change the corporate name from Cherokee Sanford Group, Inc. to Cherokee Sanford Group, LLC.

September 24, 1998: This permit has been modified to allow the temporary use (two year approval) of Photafloc polymer for enhanced sediment control experimentation purposes, with stipulations as outlined in the approval letter.

November 4, 1999: This permit has been modified to increase the affected acreage at the site to 337 acres as indicated on the mine map dated September 9, 1999. This modification also includes the revised erosion and sediment control plan dated September 22, 1999 and allows the use of Calgon Catr-Floc DL for flocculation of fine particles in the basins onsite.

April 6, 2005: This permit has been modified to change the corporate name from Cherokee Sanford Group, LLC to General Shale Brick, Inc.

October 10, 2007: This permit has been modified to increase the permitted acreage to 648.65 acres and the affected acreage at this site to 590.89 acres as indicated on the Mine Details Map last revised April 23, 2007. The modification includes the addition of several tracts to the east and south of the existing permit boundaries. In addition, the modification includes expansion of the mine excavation area into said tracts and installation and includes the maintenance of all associated erosion and sediment control measures.

October 20, 2014: This permit has been modified to establish the permitted acreage as 301 acres and the affected acreage at this site as 270.16 acres as indicated on the Tract "A" Overall Site Topography Map dated September 3, 2014. Mining Permit No. 19-08 has been split into two separate mining permits, Brickhaven No.2 Mine Tract "A" (mining permit No. 19-25) and Brickhaven No. 2 Mine Tract "B" (Mining Permit No. 19-08).

January 23, 2015: This permit has been transferred in its entirety from General Shale Brick, Inc. to Green Meadow, LLC.

April 23, 2015: This permit has been modified to replace the flocculant currently permitted with FLOC-UL8 and GT Clear, manufactured by Green Technologies, to improve settling efficiency of suspended solids in the mine discharge water at this site provided these products are used in accordance with the manufacturer's instructions as outlined in the letter and supplemental information received by the Land Quality Section on April 10, 2015.

June 5, 2015: This permit has been modified to redesign the erosion and sedimentation control measures throughout the site and reduce the affected acreage to 267 acres as indicated on the Mine Maps last revised December 31, 2014. The modification also includes changing the method for reclaiming the mine by constructing structural fill using Coal Combustion Byproducts (CCBs) in accordance with the provisions of the Coal Ash Management Act of 2014 and the terms and conditions of Permit to Construct and Operate Brickhaven No. 2 Mine Tract "A" Mine Structural Fill Permit No. 1910-STRUC-2015 issued by the Division of Waste Management on June 5, 2015.

Expiration Date

This permit shall be effective from the date of its issuance until June 5, 2025.

Conditions

This permit shall be subject to the provisions of the Mining Act, N.C.G.S. 74-46, et. seq., and to the following conditions and limitations:

OPERATING CONDITIONS:

1. A. Any wastewater processing or mine dewatering shall be in accordance with the permitting requirements and rules promulgated by the N.C. Environmental Management Commission. **GS 74-51 (d) (3)**

   B. Any approvals or permits required to collect, handle, and properly dispose of any water contacting Coal Combustion Byproducts (CCBs) shall be obtained prior to any placement of CCBs within the mining permit boundary. **GS 74-51 (d) (3)**

   C. Any stormwater runoff from the affected areas at the site shall be managed in accordance with any applicable permit requirements and regulations promulgated by the Environmental Management Commission. It shall be the permittee's responsibility to contact the Stormwater Program to secure any necessary stormwater permits, permit modifications, or other approval documents. The terms and conditions of NPDES General Permit No. NCG020354 last revised December 16, 2014 shall be followed. **GS 74-51 (d) (3)**

2. A. Any mining process producing air contamination emissions shall be subject to the permitting requirements and rules promulgated by the N.C. Environmental Management Commission and enforced by the Division of Air Quality. **GS 74-51 (d) (3)**

   B. During mining operations, water trucks or other means that may be necessary shall be utilized to prevent dust from leaving the permitted area. **GS 74-51 (d) (3)**

3. A. Sufficient buffer shall be maintained between any affected land and any adjoining waterway or wetland to prevent sedimentation of that waterway or wetland from erosion of the affected land and to preserve the integrity of the natural watercourse or wetland. **GS 74-51 (d) (2)**

   B. Any mining activity affecting waters of the State, waters of the U. S., or wetlands shall be in accordance with the requirements and regulations promulgated and enforced by the N. C. Environmental Management Commission. **GS 74-51 (d) (2)**

   C. Buffers shall be maintained as indicated on the Mine Maps last revised December 31, 2014. **GS 74-51 (d) (2)**

D. No land disturbing activities shall be allowed within 50 feet of any wetland or waterway until proof has been submitted to the Land Quality Section that all necessary permits/certifications have been obtained from the US Army Corps of Engineers and the Division of Water Resources. **GS 74-51 (d) (2)**

4. A. Adequate mechanical barriers including but not limited to diversions, earthen dikes, check dams, sediment retarding structures, rip rap pits, or ditches shall be provided in the initial stages of any land disturbance and maintained to prevent sediment from discharging onto adjacent surface areas or into any lake, wetland or natural watercourse in proximity to the affected land. **GS 74-51 (d) (6)**

B. In order to improve settling efficiency of suspended solids in the mine discharge water at this site, the operator shall use the flocculants FLOC-UL8 and GT Clear, manufactured by Green Technologies, provided these products are used in accordance with the manufacturer's instructions as outlined in the letter and supplemental information received by the Land Quality Section on April 10, 2015. **GS 74-51 (d) (6)**

C. All mining activities and any land disturbing activities conducted within the mining permit boundary associated with the construction of the Coal Combustion Byproducts (CCBs) structural fill, including the installation and maintenance of all associated erosion and sediment control measures, shall be conducted as indicated on the Mine Maps last revised December 31, 2014 and the supplemental information received by the Land Quality Section on November 21, 2014, January 6, 2015 and March 17, 2015. **GS 74-51 (d) (1-7)**

5. Groundwater monitoring and sampling prior to, during and post-disposal of Coal Combustion Byproducts (CCBs) into the mined pits shall be implemented as outlined in the Coal Ash Management Act and per the plan prepared for and approved by the Division of Waste Management through Permit to Construct and Operate Brickhaven No. 2 Mine Tract "A" Mine Structural Fill Permit No. 1910-STRUC-2015 issued on June 5, 2015. **GS 74-51 (d) (2 and 3)**

6. All affected area boundaries (267 acres) shall be permanently marked at the site on 100-foot intervals unless the line of sight allows for larger spacing intervals. **GS 74-51 (d) (4)**

7. The angle for graded slopes and fills shall be no greater than the angle that can be retained by vegetative cover or other adequate erosion control measure, structure, or device. In any event, exposed slopes or any excavated channels, the erosion of which may cause off-site damage because of siltation, shall be planted or otherwise provided with ground cover, devices or structures sufficient to restrain such erosion. **GS 74-51 (d) (4)**

8. The affected land shall be graded so as to prevent collection of pools of water that are, or likely to become, noxious or foul. Necessary structures such as drainage ditches or conduits shall be constructed or installed when required to prevent such conditions. **GS 74-51 (d) (2)**

9. Existing vegetation or vegetated earthen berms shall be maintained between the mine and public thoroughfares whenever practical to screen the operation from the public. **GS 74-51 (d) (4)**

10. A. Sufficient buffer shall be maintained between any excavation and any mining permit boundary to protect adjacent property. **GS 74-51 (d) (4)**

    B. Buffers shall be maintained as indicated on the Mine Maps last revised December 31, 2014. **GS 74-51 (d) (4)**

11. A physical barrier consisting of a fence or earthen berm, etc., shall be maintained around the perimeter of any highwall. **GS 74-51 (d) (4)**

12. A. The on-site disposal of Coal Combustion Byproducts (CCBs) as structural fill within the mining permit boundary shall be conducted in accordance with the Coal Ash Management Act and Permit to Construct and Operate Brickhaven No. 2 Mine Tract "A" Mine Structural Fill Permit No. 1910-STRUC-2015 issued by the Division of Waste Management on June 5, 2015. **GS 74-51 (d) (7)**

    B. Notwithstanding the above condition, no on-site disposal of refuse or other solid waste that is generated outside of the mining permit area shall be allowed within the boundaries of the mining permit area <u>unless</u> authorization to conduct said disposal has first been obtained from both the Division of Waste Management and the Land Quality Section, Department of Environment and Natural Resources. The method of disposal shall be consistent with the approved reclamation plan. **GS 74-51 (d) (7)**

    C. Mining refuse as defined by G.S. 74-49 (14) of The Mining Act of 1971 generated on-site and directly associated with the mining activity may be disposed of in a designated refuse area. All other waste products must be disposed of in a disposal facility approved by the Division of Waste Management. No petroleum products, acids, solvents or their storage containers or any other material that may be considered hazardous shall be disposed of within the permitted area. **GS 74-51 (d) (7)**

    D. For the purposes of this permit, the Division of Energy, Mineral and Land Resources considers the following materials to be "mining refuse" (in addition to those specifically listed under G.S. 74-49 (14) of the N.C. Mining Act of 1971): **GS 74-51 (d) (7)**

1. on-site generated land clearing debris
2. conveyor belts
3. wire cables
4. v-belts
5. steel reinforced air hoses
6. drill steel

E. If mining refuse is to be permanently disposed within the mining permit boundary, the following information must be provided to and approved by the Division of Energy, Mineral, and Land Resources prior to commencement of such disposal: **GS 74-51 (d) (7)**

1. the approximate boundaries and size of the refuse disposal area;
2. a list of refuse items to be disposed;
3. verification that a minimum of 4 feet of cover will be provided over the refuse;
4. verification that the refuse will be disposed at least 4 feet above the seasonally high water table; and,
5. verification that a permanent vegetative groundcover will be established.

13. An Annual Reclamation Report shall be submitted on a form supplied by the Department by February 1 of each year until reclamation is completed and approved. **GS 74-55**

14. The operator shall notify the Department in writing of the desire to delete, modify or otherwise change any part of the mining, reclamation, or erosion/sediment control plan contained in the approved application for a mining permit or any approved revision to it. Approval to implement such changes must be obtained from the Department prior to on-site implementation of the revisions. **GS 74-52 (a)**

15. The security, which was posted pursuant to N.C.G.S. 74-54 in the form of a $500,000.00 blanket bond, is sufficient to cover the operation as indicated in the approved application. This security must remain in force for this permit to be valid. The total affected land shall not exceed the bonded acreage. **GS 74-54**

16. A. Authorized representatives of the Division of Archives and History shall be granted access to the site to determine the presence of significant archaeological resources. **GS-74-50 (b3) (7)**

B. Pursuant to N. C. G. S. 70 Article 3, "The Unmarked Human Burial and Human Skeletal Remains Protection Act," should the operator or any person in his employ encounter human skeletal remains, immediate notification shall be provided to the county medical examiner and the chief archaeologist, North Carolina Division of Archives and History. **GS-70-3**

APPROVED RECLAMATION PLAN

The Mining Permit incorporates this Reclamation Plan, the performance of which is a condition on the continuing validity of that Mining Permit. Additionally, the Reclamation Plan is a separable obligation of the permittee, which continues beyond the terms of the Mining Permit.

The approved plan provides:

Minimum Standards As Provided By G.S. 74-53

1. The final slopes in all excavations in soil, sand, gravel and other unconsolidated materials shall be at such an angle as to minimize the possibility of slides and be consistent with the future use of the land.

2. Provisions for safety to persons and to adjoining property must be provided in all excavations in rock.

3. All overburden and spoil shall be left in a configuration which is in accordance with accepted conservation practices and which is suitable for the proposed subsequent use of the land.

4. No small pools of water shall be allowed to collect or remain on the mined area that are, or are likely to become noxious, odious or foul.

5. The revegetation plan shall conform to accepted and recommended agronomic and reforestation practices as established by the North Carolina Agricultural Experiment Station and the North Carolina Forest Service.

6. Permittee shall conduct reclamation activities pursuant to the Reclamation Plan herein incorporated. These activities shall be conducted according to the time schedule included in the plan, which shall to the extent feasible provide reclamation simultaneous with mining operations and in any event, provide reclamation at the earliest practicable time after completion or termination of mining on any segment of the permit area and shall be completed within two years after completion or termination of mining.

RECLAMATION CONDITIONS:

1. Provided further, and subject to the reclamation schedule, the planned reclamation shall be to backfill the mine excavation with Coal Combustion Byproducts (CCBs) in accordance with the Coal Ash Management Act and Permit to Construct and Operate Brickhaven No. 2 Mine Tract "A" Mine Structural Fill Permit No. 1910-STRUC-2015 issued by the Division of Waste Management on June 5, 2015. In addition, any disturbed areas shall be regraded and revegetated as indicated on the Reclamation Plan, Sheet 03C-02, dated November 2014. **GS 74-53**

2. The specifications for surface gradient restoration to a surface suitable for the planned future use are as follows: **GS 74-53**

A. All the final perimeter side slopes shall be graded to a 3 horizontal to 1 vertical or flatter slope.

B. Any settling ponds or sediment basins shall be backfilled and stabilized.

C. The processing, stockpile, and other disturbed areas neighboring the mine excavation shall be leveled and smoothed.

D. Compacted surfaces shall be disced, subsoiled or otherwise prepared before revegetation.

E. Materials not specifically approved within this mining permit shall not be permanently disposed of at the mine site. On-site disposal of Coal Combustion Byproducts (CCBs) and mining refuse shall be conducted in accordance with Operating Condition Nos. 11A through 11E.

F. The affected land shall be graded to prevent the collection of noxious or foul water.

3. Revegetation Plan:

After site preparation, all disturbed land areas shall be revegetated as per the Seeding Plan submitted on the Erosion and Sedimentation Control Details, Sheet 3 of 3, last revised December 31, 2014. **GS 74-53**

Whenever possible, disturbed areas should be vegetated with native warm season grasses such as switch grass, Indian grass, bluestem and gamma grass. **GS 74-51 (d) (2)**

In addition, the permittee shall consult with a professional wildlife biologist with the N.C. Wildlife Resources Commission to enhance post-project wildlife habitat at the site. **GS 74-51 (d) (2)**

4. Reclamation Plan:

A. Reclamation shall be conducted simultaneously with mining to the extent feasible. In any event, reclamation shall be initiated as soon as feasible after completion or termination of mining of any mine segment under permit. **GS 74-53**

B. Specific reclamation phases and schedules shall be followed as described in the Reclamation Timeline, Section C, submitted with the supplemental information received by the Land Quality Section on January 6, 2015 as follows: **GS 74-53**

		Acres	Estimated Completion
Phase 1	(Cells1 and 2)	62.5	December 2019
Phase 2	(Cells 3 and 4)	47.5	July 2021
Phase 3	(Cell 5)	34.8	August 2022

This permit, issued to Cherokee Brick Company on August 30, 1985, transferred to Cherokee Sanford Group on November 4, 1988, simultaneously renewed and modified October 5, 1995, modified August 2, 1996, September 24, 1998, November 4, 1999, and April 6, 2005, renewed September 15, 2005, modified October 10, 2007 and October 20, 2014, transferred to Green Meadow LLC January 23, 2015, and modified April 23, 2015, is hereby simultaneously renewed and modified this 5th day of June, 2015 pursuant to **G.S. 74-52.**

By:_____

Tracy E. Davis, PE, CPM, Director
Division of Energy, Mineral, and Land Resources
By Authority of the Secretary
Of the Department of Environment and Natural Resources