Mines - Individual Operating Permit New

version 4.2

(Submission #: HQC-BZCD-951BY, version 5)

Details

Submission ID HQC-BZCD-951BY

Form Input

Form Instructions

The South Carolina Mining Act,&#65533; Sections 48-20-10 through 48-20-310, Code of Laws of South Carolina, 1976, as amended provides in part: &#65533;No operator may engage in mining without having first obtained from the Department an operating permit which covers the affected land and which has not been terminated, been revoked, suspended for the period in question, or otherwise become invalid.&#65533; (Section 48-20-60)

Applicant Information

How are you applying for this permit?
As a Business Entity

Type of Business Entity
Corporation

Applicant (Business Entity)

Organization Name
Luck Stone Corporation

Phone Type	Number	Extension
Business	804-784-6300	

Fax
NONE PROVIDED

Office Address

515 Stone Mill Dr.
PO Box 29682
Richmond, VA 23242
United States

Additional Contact(s) (1 of 3)

Contact Roles
Mining Billing
Mining Contact

Contact

Prefix
NONE PROVIDED

First Name	Last Name
Kate	Kosloski

Title
Greenfield Development Manager

Organization Name
Luck Stone Corporation

Phone Type	Number	Extension
Business	804-400-2591	

Email
kkosloski@luckcompanies.com

Address
515 Stone Mill Dr.
PO Box 29682
Richmond, VA 23242
United States

Additional Contact(s) (2 of 3)

Contact Roles
Additional Contact

Contact

Prefix
NONE PROVIDED

First Name	Last Name
Brian	Parker

Title
Engineer

Organization Name
Luck Stone Corporation

Phone Type	Number	Extension
Business	804-514-8670	

Email
brian.parker@luckstone.com

Address
515 Stone Mill Dr
PO Box 29682
Richmond, VA 23242
United States

Additional Contact(s) (3 of 3)

Contact Roles
Consultant

Contact

Prefix
NONE PROVIDED

First Name	Last Name
Craig	Kennedy

Title
Principal

Organization Name
Kennedy Consulting Services, LLC

Phone Type	Number	Extension
Mobile	803-960-2562	

Email
craigkennedy.kcs@gmail.com

Address
PO Box 364
Irmo, SC 29063
United States

Site Information

Name of Proposed Mine
Luck Stone Corporation/Luck Cherokee

County
Cherokee

Proposed Mine Address
297 Old Post Road
Gaffney, SC 29341

Proposed Mine Physical Location
35.07597630263242,-81.74721892079816

Is the land to be mined owned or leased by the mine operator (both can be chosen, if applicable)?
Owned

CORRECTION REQUEST *(APPROVED)*
Parcels Owned/Leased

According to Cherokee County GIS, neither of these parcels are owned by Luck Stone. Please update to "leased" or provide a copy of the deeds or purchase agreement to the Department
Created on 6/6/2025 8:45 AM by **Colby Myers**

1 COMMENT
Craig Kennedy (craigkennedy.kcs@gmail.com) (6/12/2025 4:11 PM)
It is correct that Luck Stone does not currently own these parcels. As explained in the letter from Ben Thompson that was submitted with the LEAs, Luck Stone has purchase agreements with the landowners. Once the permit is issued, the sales will close, and proof of purchase will be provided to DES. Records will be updated as necessary. Furthermore, please refer to the attorney letter where he attests that there are Agreements for Purchase and Sale of Real Estate in place. As with all of Luck Stone's previous permits in South Carolina, we hope that the attorney's acknowledgement of the purchase contracts will suffice.

If land is owned by the applicant/mine operator, input the landowner name exactly as shown on county tax records.
Luck Stone Corporation

Parcel(s) owned by mine operator:

Tax Map Parcel Number	Landowner name (as shown on county tax records)
045-00-00-0533000	Luck Stone Corporation

Tax Map Parcel Number	Landowner name (as shown on county tax records)
027-00-00-035.000	Luck Stone Corporation

CORRECTION REQUEST *(APPROVED)*

Parcel Ownership

According to Cherokee County GIS, neither of these parcels are owned by Luck Stone. Please update to "leased" or provide a copy of the deeds or purchase agreement to the Department
Created on 6/6/2025 8:45 AM by **Colby Myers**

1 COMMENT

Craig Kennedy (craigkennedy.kcs@gmail.com) (6/12/2025 4:13 PM)
As stated previously, these parcels are not currently leased by Luck Stone nor will they be in the future. Luck Stone has purchase agreements with the landowners that will be executed after the permits are issued. It has been standard practice, on all previous permit applications to complete ePermitting as land owned by Luck Stone in the application and then provide the Department with a new attorney letter as necessary and proof of ownership after the closing.
Luck Stone requests that the Department reconsider this change to the application.

Will river dredging take place under this permit?
No

MR-400 Application for a Mine Operating Permit

General Characteristics of Mine

Materials to be mined:
Gneiss

CORRECTION REQUEST *(APPROVED)*

Material to be mined

Throughout the rest of the application, there are instances where the mined material is stated to be granite as well. Please state all materials that are being requested to be mined and update accordingly throughout the application.
Created on 6/4/2025 2:01 PM by **Colby Myers**

Provide a detailed description of how the mine will be operated, including a list of equipment to be used.
Typical equipment to be used in the mining process includes hydraulic excavator, off road haul trucks, blast hole drill(s), bull dozers, wheel loaders, hydraulic rock breakers, road grader and possibly pans. The mining process will start with establishing erosion and sediment control Best Management Practices, timbering and clearing of existing vegetation and stripping overburden. Removed overburden to be placed in permanent storage areas at designated locations. The gneiss will be drilled, explosives loaded and blasted to fragment stone into manageable sizes to facilitate loading into haul trucks and crushing by primary crusher.

Will there be a process plant located at the mine site within the boundary of the permitted area?
Yes

An Air Construction permit may be required.

Provide a brief description of the plant equipment and function of the plant.
The process plant will consist of a primary, secondary and possibly tertiary crushers with conveyors to move and stockpile stone. Screens will be used to size stone for processing and creating marketable products. A wash plant may be used to remove fines from some products.

Do you anticipate blasting as part of the mining operation?
Yes

Distance to the nearest inhabited structure not owned or leased by the applicant.
800

CORRECTION REQUEST *(APPROVED)*

Blasting setback from structures not owned by the operator

Under R.89-150(I), the minimum distance will be set by the Department after considering a variety of factors, including (but not limited to) the method of mining, site conditions, proposed directions of blasting, type and use of neighboring structures, previous blasting records, and other factors deemed appropriate by the Department.

In order to set a minimum blasting setback of 800ft, please provide written justification from a licensed blaster in South Carolina. Without this justification, the Department is not comfortable setting the minimum distance as low as 800ft and is only comfortable with a minimum 1,000ft setback, based on previous consultation with the blasting industry and their general recommendations for a granite site.

Please either increase the blasting setback from structures not owned by the operator to 1000ft, or provide a detailed justification including the information above to justify a blasting setback of 800ft.
Created on 6/4/2025 2:06 PM by **Colby Myers**

1 COMMENT

Craig Kennedy (craigkennedy.kcs@gmail.com) (6/12/2025 4:33 PM)
See letter from SC Licensed Blaster in Additional Information for Consideration section discussing methods and procedures to prevent flyrock.

How will flyrock be prevented from being projected from the permitted area?
Flyrock will be prevented with proper blast design and procedures developed and implemented under the direction of a SC Licensed Blaster. Blasting occurring between 800 – 1000 feet of closest structure will orient the face away from structure. A preliminary map and list are being provided in this application. A final list with map based on Cherokee County's tax map showing the – mile radius will be provided to DES to comply with R.89-150 A after the mine operating permit is issued. Pre-blast surveys will be completed before blasting operations begin.

See letter from SC Licensed Blaster in Additional Information for Consideration discussing methods and procedures to prevent flyrock.

Additional Blasting Information Template

Please download the excel spreadsheet, fill out and resubmit on the attachment below.
Additional Blasting Information Template Link

Additional blasting information

DES Spreadsheet Pre-Blast Survey list - Luck Cherokee.xlsx - 05/08/2025 11:16 AM
Luck Cherokee Pre-Blast Survey List.pdf - 05/08/2025 11:19 AM
Luck Cherokee BLASTING SETBACK & PREBLAST SURVEY MAP (3) 400 24X36; v1.1; Sht 3 OF 3 Aug 1, 2025.pdf - 08/01/2025 05:05 PM

Comment
NONE PROVIDED

Has the site been mined in the past?
Yes

Indicate the present condition of the land.
Approximately 45 acres along Old Post Road is being mined as a highway borrow pit.

What is the expected maximum depth of this mine? Provide any additional information about the final depth of the mine that would be useful to the Department.
Depth of mining will be an average of 400 feet BGS with a final pit floor elevation of 350 feet msl.

Determination of Permitted Acreage, Affected Acreage, & Reclamation Bond

Permitted acreage should include the following: 1) acres of land to be affected (excavation, processing plant, stockpiles, etc.); 2) future area(s) to be mined and 3) land to be used for buffer zones around the affected land. The permitted area should be the property described in the LAND ENTRY AGREEMENT(S) (FORMS MR-600 or MR-700).

Total acres for which permit is being requested

Acres owned by the mine operator	Acres leased by the mine operator
347.6	

Total Permitted Acres
347.6

Affected acreage may include: 1. Area used for sediment control ponds, 2. Area used for stockpiles of unprocessed minerals, 3. Area used for spoil (overburden) banks, topsoil and disposal refuse (exclusive of tailings impoundments), 4. Areas used for on-site processing facilities and stockpiles of processed minerals, 5. Areas used for tailings pond (waste material from mineral processing), 6. Area for access or haul roads, 7. Area for excavation during the period of this permit.

Total Affected Acres
253.3

Will mining and reclamation be done in segments?
No

Bond Amount (based on total affected acreage above)
See warning below

Applicant may submit a reclamation cost estimate for mines that will affect greater than 25ac. Estimate should be based upon requirements in Regulation 89-200B. and accurately reflect the costs of an independent, third-party contractor.

Reclamation Cost Estimate
NONE PROVIDED
Comment
Reclamation bond estimate will be provided after DES' technical review is complete.

0.00 - 9.99 acres (bond amount - $10,000)
10.00 -14.99 acres (bond amount - $15,000)
15.00 - 24.99 acres (bond amount - $25,000)
25.00 + acres (bond amount - $25,000 or greater)

Applicant may submit a reclamation cost estimate for mines that will affect greater than 25 acres. Estimate should be based upon requirements in Regulation 89-200 B, and accurately reflect the costs of an independent, third-party contractor.

Future Reserves Acreage
0.0

Buffer Acreage
94.3

Number of years for which this permit is requested:
Life of Mine

The requested number of years the permit is requested should coincide with the Schedule of Reclamation as proposed by the applicant in the RECLAMATION PLAN.

Protection of Natural Resources

Please describe how waste or process water will be treated.
Wastewater generated from washing the stone is circulated through a series of settling basins to remove fines created from the rock crushing and screening process. The clarified water in the last pond in the closed looped system will be recycled to the plant and water reused. The treatment of the wash water from the plant is typical Best Management Practices using settling ponds to remove suspended solids. Should it become necessary to release water from the wash water system, the release will be directed to the NPDES outfall designated for discharge for process water and groundwater.

Which type of permit from the Bureau of Water will/have you applied for?
NPDES General Permit for Discharges Associated with Nonmetal Mineral Mining Facilities (SCG730000)

Provide information as to how stormwater and groundwater will be managed.
The point source discharge from the mine will be primarily groundwater from mine dewatering and stormwater routed into the pit. Should it become necessary to release water from the wash water system, the release will be directed to the NPDES outfall designated for discharge for process water and groundwater.

Please provide any sediment & erosion control designs in support of your application.
LUCK-CHEROKEE-ESC CALCS.pdf - 05/09/2025 02:01 PM
LUCK-CHEROKEE-ESC PLAN July 2025.pdf - 08/01/2025 05:00 PM
Comment
Revised mine maps to relocate haul roads. This relocation of haul roads necessitated revised erosion control plan. No change in the calculations.

Will there be air contaminant emissions from your plant or mine requiring an Air Quality Permit?
Yes

An application for an Air Quality permit will need to be completed.

Do you anticipate pumping of groundwater?
Yes

Describe pumping of groundwater.
The site is in the Piedmont with crystalline rocks at shallow depths. Groundwater seepage is expected into the pit from the saprolite (weathered gneiss) and the fractures in the upper zone of the gneiss. The groundwater seepage will collect in the pit sump(s), stored (along with stormwater) until pumped to surface ponds to be used for process water and dust suppression.

Please provide any groundwater modeling reports, groundwater monitoring plans, or groundwater contingency plans in support of your application.
Luck Cherokee Hydrogeologic Assessment 24-24056_reduced.pdf - 05/15/2025 07:57 AM
FINAL Luck Cherokee GW Monitoring Plan 24-24056.pdf - 05/15/2025 07:58 AM
Comment
Groundwater assessment and monitoring plan uploaded May 15, 2025

Will jurisdictional wetlands be affected, filled or altered in any fashion that will require a Section 404 Dredge and Fill Permit?
Yes

Please provide any wetland delineation and/or USACE jurisdictional determinations or other permits in support of your application.
Delineation Concurrence - Luck Cherokee.pdf - 05/07/2025 07:58 AM
Comment
NONE PROVIDED

Are there any known cultural or historic sites located within the proposed area to be permitted?
Yes

Please indicate these areas on your mine map with an appropriate undisturbed buffer distance.

Please provide any cultural or historic reports in support of your application.
7099 Cherokee Quarry Recon.pdf - 05/07/2025 07:59 AM
Comment
NONE PROVIDED

Will any part of the permitted area be used as a laydown yard to temporarily store equipment, such as spare parts, scrap metal, or other waste?
Yes

Describe how waste, trash, scrap metal material, or garbage will be handled.
Scrap metal and used mine materials are typically stored on-site for reuse and recycling when the opportunity arises. Trash, garbage, and waste materials will be removed from mine and disposed of in appropriately permitted landfills.

Describe the wildlife or freshwater, estuarine or marine fisheries in the area of the mining operation. Also provide information about any ponds and/or streams that may be located in the proposed permitted area.
Thicketty Creek flows west to east initially along the northern mine permit boundary and then through the permit area north of Phase 2 Pit and south of C berm/overburden storage area. Thicketty Creek Reservoir #19 is north of the mine permit boundary. US Army Corps of Engineers jurisdictional wetlands are located within the floodplain of Thicketty Creek and tributaries. The dam for Thicketty Creek Reservoir is a regulated dam pursuant to the SC Dams and Reservoirs Safety Act.

Please provide any threatened or endangered species reports in support of your application.
Luck Stone_Cherokee_T&E Assessment and Survey.pdf - 05/08/2025 10:05 AM
Response from USFWS to submission of HHNT's Threatened or Endangered Species Assessment - Luck Stone' Luck Cherokee project.pdf - 05/15/2025 08:00 AM
Comment
Response from USFWS to HHNT's report uploaded May 15, 2025

State the land cover and land uses on the permitted land area and contiguous tracts of land to the permitted land area.
The site consists of planted pine stands, mixed hardwoods, and aquatic features (wetlands and streams) and streamside riparian areas inclusive of Thicketty Creek and Thicketty Mountain Creek floodplains. The properties adjacent to the site consist of rural residences, forested land, and places of worship.

Describe measures to be taken to insure against (1) substantial deposits of sediment in neighboring streams, rivers lakes or ponds; (2) landslides; (3) acid water formation and discharge.
(1) Sediment control basin locations are based upon topography and are designed to control the sediment from 10 year-24-hour storm events. The erosion and sediment control plan developed by HHNT provides maps and design calculations for the sediment control basins. Additionally, brush barriers, silt fencing and stormwater diversions will be used where and as necessary, typically around the down gradient perimeter of any land disturbances, to provide sediment control for mine disturbed areas not feasible to route into a sediment control basin or pit. To increase the effectiveness of sediment control, land disturbance will be kept to a minimum and to what is necessary to support mining activities. Non-vegetated areas will be graded and seeded as soon as feasible to stabilize the soil, reduce erosion and prevent sediment.
(2. Unconsolidated materials shall be sloped to a stable configuration no steeper than 2H:1V during active mining. Per the Mine Safety Health Administration (MSHA) requirements, the hard rock pit walls shall be benched to maintain stability and provide safety. Upon final reclamation, all unconsolidated materials shall be sloped no steeper than 3H:1V, unless approved by the director.
(3) Not applicable to this geology

Safety

Describe methods to be used during the time the mine operating permit is active to prevent physical hazards to persons and to any neighboring dwelling, house, school, church, hospital, commercial or industrial building or public road. If applicable, provide the zoning designation for the property to permitted.

Blasting

Explosives will be used to mine the gneiss. Blasting is a common technique in mining and used in a variety of settings ranging from rural to urban areas. Blasting operations will be under the direction of a SC Licensed Blaster. The closest inhabited structure to blasting operations is 800 feet and there will be no blasting within 250 feet of the mine permit boundary. When blasting 800 to 1,000 feet from the inhabited structure, the active mine face will be oriented away from the structure. Explosives will not be stored on site and only transported to the site on the actual days blasting operations are planned.

Ground vibration from blasting will be controlled through properly designed blasting operations that minimize vibration and maintain them at acceptable levels that prevent damage to structures. All blasting will be monitored with a seismograph. Owners of all structures within 1/2 mile of blasting will be offered the opportunity to have a pre-blast inspection of their structure(s) to establish baseline conditions. This baseline information will be beneficial should there become concerns of vibration damage in the future

Groundwater Withdrawals

The potential for Luck Cherokee to adversely impact wells on neighboring properties is considered low. This concept is based on geology, experience at other quarries in the Piedmont and surface hydrology in and around the mine permit area. Furthermore, fracture analysis of the planned pit area to determine basic information on the location and orientation of fractures that are conduits for groundwater flow in crystalline rock formations. This information is being used to design a hydrogeologic assessment of Luck Cherokee to determine any potential impacts to the groundwater levels from pit development and dewatering the open pit. The hydrogeologic assessment study at the time of the mine operating permit application submittal is ongoing and will be provided to the Department upon its completion.

Luck Stone has developed a Groundwater Monitoring Plan that provides a methodology to track groundwater drawdown in the permit area. This information will be used to assess, on a continuing basis, the unlikely possibility of adverse impacts on neighboring wells. The data from the observation wells will be used in determining whether the quarry is a factor should a neighboring well experiences a malfunction. Groundwater monitoring wells will be placed at strategic locations at the perimeter of the mine permit area to observe the response to groundwater dewatering in the mine. Upon approval and issuance of the mine permit, the monitoring wells will be constructed.

During mining if a neighboring well is determined to be impacted due to pit dewatering of the Luck Cherokee open pit, Luck Stone commits to repairing the impacted well or re-drilling a new well to ensure the affected neighbor has water. Luck Stone will also provide a temporary water supply to the neighbor until the repair or replacement well is completed.

Are there any publicly-owned parks, publicly-owned forests, or publicly-owned recreation areas within one (1) mile of the proposed affected area?

No

Describe measures to be taken for screening the operation from view from public highways, public parks or residential areas.

The site is in a rural area with forested land on three sides of the permit area. Interstate 85 runs north-south along the southern mine permit boundary. Rural residential homes and churches are located nearby. Vegetated earthen berms will be constructed to visually screen mining operations from the public road and rural residences.

Mine Map

Attach a copy of a map of the site (referred to as the MINE MAP) that shows A through P, if applicable (see below):

Luck Cherokee MINE MAP-29- 400 24X36; v 1.1; Sht 1 of 3 Aug 1, 2025.pdf - 08/01/2025 05:01 PM

Comment

Mine map revised to relocate haul roads and Sed basins SB-2 & SB-9.

CORRECTION REQUEST *(APPROVED)*

Blasting Limits

Please indicate the proposed blasting limits on the proposed mine map
Created on 6/6/2025 10:11 AM by **Colby Myers**

1 COMMENT

Craig Kennedy (craigkennedy.kcs@gmail.com) (6/12/2025 4:35 PM)

The current mine map shows the 250-foot setback where property lines are near the pit where blasting operations will be conducted. The mine map does not show the blasting limits within the pit because the overburden thickness can be estimated by competitors. The 250-foot blasting setback is based upon the edge of the pit without consideration of the overburden sloping to a 3:1 grade. This is a very conservative approach because blasting operations will be in excess of 250 feet from the property line.

A. Outline of the area to be affected by mining during the number of years for which the permit is requested. See Section III, Question 1 on page 3 of this application form.

B. Outline of the permitted area that shows the buffers zones, future mine areas and areas to be affected by mining.

C. Outline of the planned pits or excavations for which your company has detailed plans. If your company has reason to believe that additional land may be mined in the future within the permitted area but is not feasible to show as planned excavations; indicate these areas as FUTURE RESERVES on this site map.

D. Outline of areas for the storage of naturally occurring soil that will be suitable for the establishment of vegetation in final reclamation.

E. Outline of planned areas for disposal of refuse, exclusive of tailings ponds.

F. Outline of planned spoil, overburden or other similar waste material disposal areas.

G. Locations of planned access and haul roads on the area to be affected.

H. Outline of planned tailings ponds.

I. Locations of sediment control pond(s) and other sediment control structures within the affected area. Outline of areas on which temporary or permanent vegetation will be established to control erosion during the mine operation.

J. Location and name (if appropriate) of streams, lakes, wetlands and existing drainage ditches within the area to be permitted. Use arrows to indicate direction of water flow in such streams and drainage ditches.

K. Boundary for the 100 year floodplain, where appropriate.

L. Outline of areas for stockpiles of unprocessed minerals.

M. Outline of area of previously mined land that will not be affected.

N. Outline of the area to be occupied by processing facilities including stockpiles of processed minerals if such facilities are to be an integral on-site part of the mining operation.

0. Show location of the two permanent survey control points.

P. A legend showing the name of applicant, name of the proposed mine, north arrow, county, scale, date of preparation and name and title of person who prepared the site map. THE REQUIRED SITE MAP SHALL HAVE A NEAT, LEGIBLE APPEARANCE AND BE OF SUFFICIENT SCALE TO CLEARLY SHOW THE REQUIRED INFORMATION LISTED ABOVE. THE BASE FOR THE MAP SHALL BE EITHER A SPECIALLY PREPARED LINE DRAWING, AERIAL PHOTOGRAPH, ENLARGED USGS TOPOGRAPHIC MAP OR A RECENTLY PREPARED PLAT.

Adjacent Land Owner List Template

Please download the excel spreadsheet, fill out and resubmit on the attachment below.
Adjacent Land Owner List Template

Attach the most recent county tax map that shows all adjacent land owners of the permitted mine site. Provide name and addresses of all land owners contiguous to the proposed permitted mine site.

Cherokee County GIS Map w-Adj LO List.pdf - 05/08/2025 11:36 AM
DES Spreadshee Adjacent Landowners - Luck Cherokee.xlsx - 05/08/2025 11:36 AM
Comment
NONE PROVIDED

Attach letter from an attorney attesting to (1) the ownership of the property, (2) ownership of the mineral rights and (3) that the applicant has the legal right to mine the proposed mineral resource on the property as described in this application.

Revised Attorney Letter - Cherokee Dv 6.5.25.pdf - 06/12/2025 04:24 PM
Comment
NONE PROVIDED

Additional Information for consideration

Cherokee Blasting Buffer Letter - Jeff Magnuson.pdf - 06/12/2025 04:34 PM
Comment
NONE PROVIDED

MR-500 Reclamation Plan for an Individual Mine Operating Permit

Environmental Protection

Describe practices to protect adjacent resources such as roads, wildlife areas, woodland, cropland and others during mining and reclamation.
The mine permit area is located in a rural area with land cover consisting of hardwood and pine forests for managed timber. Of the permitted land, 94.3 acres will be undisturbed buffer to provide additional protections to adjacent properties, creeks and other sensitive areas. Based on a Threatened and Endangered species assessment the endangered species plant, Dwarf-flowered Heartleaf, was found within the permit area. Luck Stone will avoid the plant locations as shown in HHNT's Threatened and Endangered Species Assessment and Survey Report attached to this application. Luck Stone will consult with US Fish and Wildlife and SC Department of Natural Resources on how best manage this plant.

Describe proposed methods to limit significant adverse effects on adjacent surface water and groundwater resources.
Proper reclamation of the mine site will include stabilizing all overburden storage piles with vegetation, removal of mine equipment both mobile and stationary, clean-up of any spillage of petroleum products, and removal of scrap material. Once mining is terminated, groundwater levels will rebound to approximate original levels. The mining process will not use chemicals in the mining or processing of crushed stone; consequently, there is no potential for chemical contamination to groundwater resources. Additionally, vegetative filters of existing vegetation will provide redundancy to active sediment control measures to further protect adjacent surface water resources.

Describe proposed methods to limit significant adverse effects on known significant cultural or historic sites within the proposed permitted area.
New South Associates, Inc. identified two resources of possible eligibility to be listed in the National Registry of Historic Places. A Pre-Contact Resources area identified within the mine permit area will be avoided and protected by a 100-foot buffer. The Stone Structure located in the Thickette Creek floodplain will be protected by buffers around the streams and wetlands.

Describe method to prevent or eliminate conditions that could be hazardous to animal or fish life in or adjacent to the permitted area.
Proper reclamation of the mine site will include stabilizing all overburden storage piles with vegetation, removal of mine equipment both mobile and stationary, clean-up of any spillage of petroleum products, and removal of scrap material. Setbacks, established buffers and soil stabilization along stream banks will provide protection to fisheries in nearby streams. Establishing 3:1 slopes around the pit and overburden storage areas will remove hazardous conditions for the public and indigenous animal populations. On final reclamation, a fence or other suitable and approved barrier around the pit will be constructed. The undisturbed buffer will provide wildlife corridors and natural habitat.

Describe how applicant will comply with State air quality and water quality standards as established by the South Carolina Department of Environmental Services.
To operate the mine and processing plant, the mine operator will obtain the Air Quality Construction Permit and the Air Quality Operating Permit. These permits set the quantity of air particulates that can be emitted to be protective of air quality standards.

With the termination of mining all mobile mine equipment and processing plant equipment will be removed from site. Once the process plant equipment is removed from site, the Air Quality Operating Permit can be terminated. Stone stockpiles, fines and barren soils, (potential sources of dust after mining), will be either removed (stone stockpiles) or stabilized with vegetation to eliminate windblown dust.

Discharges from the quarry will qualify for the NPDES General Permit for Discharges Associated with Nonmetal Mineral Mining Facilities. These standards are set to be protective of aquatic life and human health and safety. Prior to discharge into waters of the State, stormwater and groundwater will be treated by appropriately sized and designed sediment basins. Upon final reclamation, vegetation will be established to control erosion and protect water quality.

Reclamation of Affected Area

State useful purpose(s) the affected land is being proposed for reclamation.
Grassland
Lake or Pond

Feasibility Documentation Attachment
NONE PROVIDED
Comment
Standard reclamation practices that does not necessitate closure plans or backfilling. Not applicable

Will the final maximum surface gradient (slope) in soil, sand, or other unconsolidated materials be steeper than 3 Horizontal : 1 Vertical (18 degrees or 33 percent)?
No

How will the final slopes in unconsolidated material be accomplished?
The overburden stripped to expose gneiss will be placed in overburden storage areas or earthen berms. The final overburden slope around the pit perimeter will be cut slopes at a 3:1 grade for stability and safety. Backfilling is not necessary within the pit to achieve final 3:1 slopes.

If the slope will be by backfilling, demonstrate that

there is adequate material to accomplish the stated final gradient. If gradient is to be achieved by bringing in material from outside the permitted area, state the nature of the material and approximate quantities. If the gradient is to be achieved by grading, show that there is adequate area for grading to achieve gradient (i.e., adequate distance between the property line and edge of highwall).

Final slopes calculations or other supporting information attachment(s)

NONE PROVIDED

Comment
Slopes will be obtained by grading. Backfilling to obtain 3:1 slopes will not be necessary.

Describe the plan for revegetation or other surface treatment of affected area(s). The revegetation plan shall include but not be limited to the following: (a) planned soil test; (b) site preparation and fertilization; (c) seed or plant selection; (d) rate of seeding or amount of planting per acre; (e) maintenance.

(a) Planned Soil Test
Soil analysis will be performed to determine the need for pH adjustment and nutrients. Different soils will be sampled separately. Soil samples will be taken in advance of planting. Soil samples will be submitted to the cooperative NRCS or Clemson extension services or commercial lab for analysis.

(b) Site Preparation & fertilization
Grading, shaping, and other earth moving will be completed to the extent necessary to permit seeding or planting. Tillage shall be the minimum needed to break compaction; incorporate fertilizers when incorporation of them is required; and provide enough loose soil to cover the seed when seed are to be drilled or covered by harrowing or cultipacking.

Soil amendments will be added as necessary to promote conditions suitable for plant growth (i.e., organic matter). Agricultural limestone will be uniformly spread and incorporated as soon as possible to allow for the pH adjustment. Incorporation also benefits relatively immobile nutrients such as phosphorus when needed. Type and rate of fertilization will be determined based upon soil analysis.

(c) & (d) Seed or Plant Selection and Seeding Rates
Plants shall be selected based on species characteristics, site and soil conditions, the planned land use and maintenance of the area, the time of year the planting is made, and the needs and desires of the land user. Availability of seed will be one of the criteria for plant selection.

Piedmont
Spring Seeding Mix

Grass or legume Optimum
Planting Date Seeding Rate
(# per acre) Comments
Browntop millet April- August 10 Serve as short term cover
Bermudagrass (common)
or
Coastal Panicgrass March–June

February - June 4

20 broadcast, 12 drilled Hulled (chaff removed)

Pure Live Seed (PLS)
Annual lespedeza (Kobe) March - July 10 Use scarified seed and inoculate

Piedmont
Fall Seeding Mix
Grass or legume Optimum
Planting Date Seeding Rate
(# per acre) Comments
Rye (Abruzzi) or Oats Sept-Dec. 10 Serve as short term cover
Bermudagrass (common)
or
Switchgrass Aug-Nov

Oct-May 8

10 Unhulled (in chaff)
Crimson clover (optional) Aug - Dec 10 Serve as short term cover, inoculate

(e) Maintenance
The revegetated site will be maintained through periodic inspections to detect areas with significant erosion, seed germination failure or significant plant die off. Additionally, site will be inspected after significant storm events to detect wash outs or gullies in planted areas. Damaged areas will be repaired where necessary by fixing erosion damage and reseeding as necessary.

Does the possibility exist for (a) acid rock drainage; (b) where the National Pollutant Discharge Elimination Systems (NPDES) Permit has discharge limitation parameters other than pH and Total Suspended Solids (TSS); (c) chemically treated tailings or stockpiles (excludes fertilizer or lime for revegetation purposes)?
No

Describe the methods to control contaminants and permanently dispose any mine waste. This includes any soil, rock (overburden), mineral, scrap, tailings, fines, slimes, or other material directly connected with the mining, cleaning, and preparation of mineral substances mined. It also includes all waste material deposited on or in the permit area from any source.
Fines created from processing gneiss are not "clay slime"; thus, they will not create an unstable sediment mass in settling ponds. These fines will accumulate in the clarification ponds of the wash circuit and periodically removed and either sold as a by-product or placed in overburden storage.

Describe the method of reclaiming settling and/or sediment ponds.
Fines created from processing gneiss are not "clay slime"; thus, they will not create an unstable sediment mass in settling ponds. These fines, that are chemically inert, will accumulate in the clarification ponds of the wash circuit and periodically removed and either sold as a co-product or placed in overburden storage that will be reclaimed. Stormwater sediment basin reclamation will be determined at end of mining. Ponds either will be left as viable ponds or dams breached, site graded and revegetated.

Describe the method of restoring or establishing stream channels, stream banks, and site drainage to a condition to minimize erosion, siltation, and other pollution.
Stream crossings from pit to Berm/Overburden Storage B and from Berm/Overburden Storage B to Berm/Overburden Storage C will be temporary crossings. At the end of mining, all fill within wetlands or streams will be removed, original grades restored, and sites revegetated.

What are the maintenance plans to insure that the reclamation practices established on the affected land will not deteriorate before released by the Department?
Areas that have undergone final reclamation practices will be maintained through periodic inspections and conducting any necessary repairs in a timely manner.

For final reclamation, submit information about practices to provide for safety to persons and to adjoining property in all excavations. Identify areas of potential danger (vertical walls, unstable slopes, unstable surface on clay slimes, etc.) and provide appropriate safety provisions.
Prior to commencing final reclamation activities, the operator intends to conduct both market, community, and zoning investigations to determine the best and proper utilization for post mine development. By example, this may include uses such as parks & community space, agricultural/timber, commercial ventures, or residential uses. Upon determination, any plans shall incorporate all necessary activities associated with necessary and responsible bonded reclamation requirements. This shall include continued focus to provide safety to persons and adjoining areas. The outer perimeter of the reclaimed pit will be secured by fencing or other approved and appropriate security practice.
The following mine segments will be reclaimed to provide safety to persons and adjoining areas.
Highwalls -- The relative shallow overburden will be sloped to a 3:1 gradient around the pit perimeter. Due to the sloped overburden and water filled pit, exposure of rock highwalls will be limited.
Unstable Slopes -- All overburden storage areas will be sloped to 3h:1v gradient and vegetated. Soils placed to a 3:1 gradient are stable and are not prone to landslides.

What provisions will be taken to prevent noxious, odious, or foul pools of water from collecting and remaining on the mined area? For mines to be reclaimed as lakes or ponds, provide supporting information that a minimum water depth of four (4) feet on at least fifty percent (50%) of the pond surface area can be maintained.
The final pit will be reclaimed as a lake and will meet the above referenced regulatory requirement for sufficient depth. Areas of the affected land not reclaimed to ponds will be properly graded to prevent unwanted pools of water from collecting and prevent foul water from forming.

Identify any structures (e.g. buildings, roads) that are proposed to remain as part of final reclamation. Provide justification for leaving any structures.
The office building and other support buildings may be left upon final reclamation as future tenants on the property may have use for these facilities. Also, some of the haul roads may be left to provide access to the property. All areas will be sloped and stabilized to prevent erosion and control sediment.

Attach a copy of a map of the area (referred to as the RECLAMATION MAP) that shows the reclamation practices and conservation practices to be implemented. The following should be shown (A through P - see below):
Luck Cherokee - RECLAMATION MAP-3- 400 24X36; v1.1; Sht 2 of 3 Aug 1, 2025.pdf - 08/01/2025 05:05 PM
Comment
NONE PROVIDED

CORRECTION REQUEST ***(APPROVED)***
Pond bank sloping

R.89-330.D.b states that sites reclaiming as a pond/lake must have "side slopes no steeper than 3H:1V extending to the anticipated average water level except for excavations in rock or where other special considerations are approved by the Department".

Please extend the 3H:1V sloping into the proposed pond for this site.
Created on 6/6/2025 10:37 AM by **Colby Myers**

1 COMMENT

Craig Kennedy (craigkennedy.kcs@gmail.com) (6/12/2025 4:36 PM)

It is not likely the groundwater will rebound above top of rock in post mining reclamation. Consequently, the overburden that will be sloped to a 3:1 grade will NOT intercept the ponded water in the quarry. There will be hard rock highwalls exposed in the reclaimed quarry. The reclamation map reflects this likely post mining condition. Regulations do not require hard rock to be sloped to a 3:1 grade. For safety, the unconsolidated overburden will be sloped and the perimeter of the pit fenced.

A. The outline of the proposed final limits of the excavation during the number of years for which the permit is requested.

B. The approximate final surface gradient(s) and contour(s) of the area to be reclaimed. This would include the sides and bottoms of mines reclaimed ponds and lakes.

C. The outline of the tailings disposal area.

D. The outline of disposal areas for spoil and refuse (exclusive of tailings ponds).

E. The approximate location of the mean shore line of any impoundment or water body and inlet and/or outlet structures which will remain upon final reclamation.

F. The approximate locations of access roads, haul roads, ramps or buildings which will remain upon final reclamation.

G. The approximate locations of various vegetative treatments.

H. The proposed locations of re-established streams, ditches or drainage channels to provide for site drainage.

I. The proposed locations of diversions, terraces, silt fences, brush barriers or other Best Management Practices to be used for preventing or controlling erosion and off-site siltation.

J. Proposed locations of the measures to provide safety to persons and adjoining property.

K. Segments of the mine that can be mined and reclaimed as an ongoing basis.
L. The boundaries of the permitted area.

M. The boundaries of the affected area for the anticipated life of the mine.

N. The boundaries of the 100-year floodplain, where appropriate.

O. Identify sections of mine where the final surface gradient will be achieved by grading and/or backfilling.

P. A legend showing the name of the applicant, the name of the proposed mine, the north arrow, the county, the scale, the date of preparation and the name and title of the person who prepared the map.

THE REQUIRED RECLAMATION MAP SHALL HAVE A NEAT, LEGIBLE APPEARANCE AND BE OF SUFFICIENT SCALE TO CLEARLY SHOW THE REQUIRED INFORMATION LISTED ABOVE. THE BASE FOR THE MAP SHALL BE EITHER A SPECIALLY PREPARED LINE DRAWING, AERIAL PHOTOGRAPH, ENLARGED USGS TOPOGRAPHIC MAP OR A RECENTLY PREPARED PLAT. RECLAMATION MAP SHOULD BE THE SAME SCALE USED FOR THE SITE MAP.

Schedule for Implementation of Conservation and Reclamation Practices

As stated in Section 48-20-90 of the S.C. Mining Act, reclamation activities, to the extent feasible, must be conducted simultaneously with mining operations. Identify which areas or segments of the mine are not feasible to reclaim simultaneously with mining. Provide reasons why reclamation can not proceed simultaneously with mining in these areas.

The open pit to mine the gneiss will not be feasible to mine and reclaim in segments.

Schedule for Implementing Conservation and Reclamation Practices

Conservation & Reclamation Practices	Segment # or Area	Planned Amount	Planned Year	*Applied Amount	*Applied Year	Notes
Mark wetland & property line buffers along access road, berms & streams	PLB-1, SWB-3	27.4 ac	2027			*NONE PROVIDED*

Conservation & Reclamation Practices	Segment # or Area	Planned Amount	Planned Year	*Applied Amount	*Applied Year	Notes
Mark wetland buffers & FEMA line for Pit Phase 1 & Ovbn Storage B	SWB-2, B-2, B-3, SWB-3, PLB-4 & B5	34.7 ac	2027			*NONE PROVIDED*
Mark property line buffers along process plant & Pit Ph 1	PLB-1, PLB-2	8.0 ac	2027			*NONE PROVIDED*
Construct Sediment Basins and associated diversion channels for plant	SB-1 & SB-8	7.3 ac	2027/28			*NONE PROVIDED*
Construct Sediment Basins and associated diversion channels Pit Phase 1	SB-2, SB-4, SB-5, SB-6	2.9 ac	2027/28			*NONE PROVIDED*
Construct berms, slope and revegetate	Berms A & Visual Screen	19.4 ac	2027/28			*NONE PROVIDED*
Deploy sediment control to construct temporary haul road from pit to Ovbn B	Haul Road	2.5 ac	2027/28			*NONE PROVIDED*
Construct Berm/Overburden Storage - grading to 3:1 slopes and revegetating	Berm/Ovbn B	27.0 ac	2026			*NONE PROVIDED*
Deploy silt fencing and/or other sediment control BMPs	Where necessary	As necessary	All times			*NONE PROVIDED*
Slope overburden to 3:1 slope along terminal pit wall and revegetate	Pit Phase 1	13.7 ac	TBD			As feasible
Mark wetland buffers & FEMA line for Pit Phase 2	SWB-3 & B2	25.0 ac	TBD			*NONE PROVIDED*
Route stormwater into pit	Pit Phases 1 & 2	As necessary	All times			Where feasible
Slope overburden to 3:1 slope along terminal pit wall and revegetate	Pit Phase 2	10.0 ac	TBD			*NONE PROVIDED*
Mark Pre-Contact Resource preservation and buffer area	Pre-Contact Area & B8	6.8 ac	TBD			*NONE PROVIDED*
Temporary Haul Road crossing Thicketty Creek to Ovbn C	Thicketty Creek (STH)	1.7 ac	TBD			Haul Road to overburden storage areas C
Construct Sediment Basins and associated diversion channels Ovbn storage C	SB-11 & SB-12	4.3 ac	TBD			*NONE PROVIDED*
Development of overburden storage grading to 3:1 slopes and revegetating	Ovbn Storage C	25.8 ac	TBD			*NONE PROVIDED*
Mining exempted stream crossings by haul roads will be restored to original grade and reclaimed	Stream SSC & SSD	*NONE PROVIDED*	End of mining			Haul Road to overburden storage areas B & C
Construction perimeter fence or other suitable barrier around final pit	Pit	11,000 feet	End of mining			*NONE PROVIDED*
Remove mine equipment, process plant equipment, and stone stockpiles	Plant	34.5 Ac	End of mining			*NONE PROVIDED*

*Applied fields to be completed by department

MR-600 Land Entry Agreement for Land Owned by Mine Operator

MR-600 Document Link

MR-600 Signature Attachments

Luck Stone LEA MR-600 -Beeson Tract-p.pdf - 05/05/2025 03:39 PM
Luck Stone LEA MR-600 - Kirby Tract-p.pdf - 05/05/2025 03:40 PM
Cherokee Land Entry Agreement Signed 042825.pdf - 05/06/2025 09:02 AM

Comment

NONE PROVIDED

Revisions

Revision	Revision Date	Revision By
Revision 1	5/5/2025 1:34 PM	Craig Kennedy
Revision 2	5/15/2025 7:56 AM	Craig Kennedy
Revision 3	6/6/2025 3:02 PM	Craig Kennedy
Revision 4	6/18/2025 4:43 PM	Craig Kennedy
Revision 5	8/1/2025 4:57 PM	Craig Kennedy