MINE OPERATING PERMIT

PART I:

DLI Plantation Egeria Mine
Dorchester Logistics, Inc.

Dorchester Logistics, Inc., a corporation, has been granted a Mine Operating Permit, Mine Permit Number I-002170 to operate the DLI Plantation Egeria Mine in accordance with the S.C. Mining Act (S.C. Code Sections 48-20-10 et seq., 1976) and Regulations 89-10 et seq. The operator shall conduct this operation as represented in documents submitted to support the issuance of this permit.

[Signature]
JOAN F. LITON, DIRECTOR
DIVISION OF MINING AND SOLID WASTE MANAGEMENT

PERMIT NUMBER: I-002170
ORIGINALLY ISSUED: February 9, 2018
MODIFIED: Not Applicable

In accordance with Section 48-20-60 of the South Carolina Mining Act, this Mine Operating Permit will remain valid unless it terminates as set forth in R.89-270 or is revoked in accordance with Section 48-20-160 and R.89-280. The anticipated mining completion date is shown on the Schedule for Conservation and Reclamation Practices in the Reclamation Plan.

The approved Permit Application, Reclamation Plan, and all supplemental information referenced herein, are an integral part of this permit. Land Entry Agreements and Mine Maps as identified in Part II and Part IV, respectively, are also a part of this permit.
Dorchester Logistics, Inc.

Home Office Address:  Dorchester Logistics, Inc.
PO Box 365
Harleyville, SC  29448

Local Office Address: None

Address for Official Mail:  Dorchester Logistics, Inc.
PO Box 365
Harleyville, SC  29448

Company personnel and title to be the contact for official business and correspondence
[South Carolina Department of Health and Environmental Control (DHEC) should be notified in
writing immediately of any change in contact, address, telephone or fax numbers]:

  Todd Muckenfuss  Telephone:  843-462-2600
  Vice-President  Fax:  843-462-2929

LOCATION:  The mine is located on the Pringletown, SC  U.S.G.S.  7.5' Topographic Map.  The
approximate geographic coordinates for the site are:

  Latitude:   33.196484  Longitude:   -80.349327

The operation is located in Dorchester County approximately 5.8 miles east of Harleyville, SC.
Specifically the site is located approximately 0.8 mile north-northeast of the junction of SC Secondary
Highways S-18-28 (Beidler Forest Road) and S-18-132 (Mallard Lake Road).  The site is north of Old
Pond Road 0.1 mile north-northeast of its junction with Beidler Forest Road.
Part II: MINE OPERATIONS

Dorchester Logistics, Inc. also referred to as the operator, is permitted to mine sand/clay at the DLI Plantation Egeria Mine. The maximum depth to the pit floor will be twenty feet below ground surface. Mining will take place on a tract of land leased by the referenced operator. The tract of land is identified in the submitted Land Entry Agreement (LEA).

MINE/PIT CHARACTERIZATION: The sand/clay and topsoil will be excavated. Various equipment (trackhoes, backhoes, bulldozers) will be used to clear, excavate, stockpile and load material. Dump trucks will be loaded from stockpiles and used to haul material off-site. Adequate amounts of topsoil shall be stockpiled for reclamation of the affected area; excess topsoil not needed for reclamation may be sold.

PROCESSING PLANT LOCATED ON MINE SITE: No processing will be done on site.

MINE DEWATERING: Water table at mine site is relatively shallow and lowering of the water table is necessary to facilitate mining. Any accumulation of groundwater and stormwater will be pumped into a sediment basin. All water discharged from the mine must be discharged through an outfall regulated by a NPDES permit.

BLASTING: Blasting operations are not permitted at this mine site.

SIGNIFICANT CULTURAL OR HISTORICAL SITES: No significant cultural or historical sites have been identified. Note Part X: Additional Terms and Conditions of this Mine Operating Permit.

VISUAL SCREEN: To appropriately screen the operation from view, the operator shall maintain undisturbed buffer from all property lines as depicted on the mine map. If the Department determines this buffer is inadequate, the operator may be required to supplement this vegetation by constructing an earthen berm toward the mine side of the buffer.

NOISE MONITORING AND CONTROL: The operator shall use Best Management Practices (BMPs) to minimize noise from the mine site. This noise BMP should include, at a minimum, proper maintenance of mufflers on equipment (trucks, trackhoes, pumps, etc.) and consideration of special buffering measures if planning to operate equipment during nighttime hours.

OTHER STATE OR FEDERAL PERMITS: The operator must obtain, maintain, and update, as appropriate, all necessary State and Federal permits in order to construct and operate the mine.

LAND ENTRY AGREEMENTS: The operator is required to furnish and maintain up-to-date Land Entry Agreements on all lands covered under this permit. Any change in ownership on any portion of land covered by this permit, the operator is responsible for furnishing the appropriate and completed Land Entry Agreements (Forms MR-600 or MR-700) to the DHEC within 30 days of the change of ownership.

Land Owner(s) as Listed on Land Entry Agreement(s):

Hugh E. Long TMS# 051-00-00-003

Total acres of the contiguous tract(s) of land for which the permit is granted:

OWNED 0.0 LEASED 27.7 TOTAL 27.7
Part III: PERMITTED LAND

This permit allows the operator to conduct mining operations within the permitted land as defined through the Land Entry Agreement submitted as part of the application. Permitted land as defined by Section 48-20-40(18) is "the affected land in addition to (a) lands identified for future mining to become affected land; (b) and undisturbed or buffer area that is or may become adjacent to the affected land." Therefore, this permit grants the operator the right to conduct active mining operations within the specified affected land, delineate land for future mine areas as future reserves and to establish undisturbed buffer zones to mitigate any adverse affects to the surrounding environment.

**AFFECTED LAND:** 24.0 acres of land are to be affected by Dorchester Logistics, Inc. under the current mine plan. The operator is permitted to affect up to 24.0 bonded acres of land at any point in time in accordance with the Schedule for Conservation and Reclamation Practices in the approved Reclamation Plan. Once affected land is released as reclaimed by the Department in accordance with R.89-330, that land is no longer considered affected and the mine operator carries no further reclamation liability. The affected acres are derived from the operator's response in the Application for a Mine Operating Permit (Form MR-400), page 3, line 2H.

**FUTURE RESERVES:** 0.0 acres are identified as future mine reserves and are specified on the mine site map. Prior to the initiation of activity in future reserves, the operator shall submit detailed mine and reclamation plans. Failure to submit such plans to the SCDHEC and obtain approval prior to commencement of mining activities would be a violation of this permit.

**BUFFER AREAS:** 3.7 acres are identified as buffer area, setbacks or areas that will not be disturbed beyond the pre-mine natural state. These buffer areas are identified on the mine site map. Acres designated as buffer areas are not bonded under the reclamation bond. Any disturbance of the buffer areas (i.e. removal of timber) requires this Mine Operating Permit to be modified prior to any such disturbance.

**TOTAL PERMITTED AREA:** 27.7 acres as submitted on the Land Entry Agreement(s).
Part IV: MAPS

The permitted maps are listed herein. The maps are dated and further identified with DHEC assigned map number as listed and are part of the operating permit.

MINE MAP:
   SM-2170-1V1   Mining Plan Map   April 19, 2017/ revised July 11, 2017

RECLAMATION MAP:
   RM-2170-1V1   Reclamation Map   April 19, 2017

Part V: RECLAMATION BOND

The Reclamation Bond is based upon the total affected acres. Pursuant to Section 48-20-70 and R.89-200, the reclamation bond for this mining permit is set at $25,000.00. The reclamation bond shall remain in force and continuous throughout the life of the mining operation and shall only be released, partially or in full, back to the operator after the operator has completed reclamation in accordance with the approved Reclamation Plan and the minimum standards in R.89-330.
Part VI: PROTECTION OF NATURAL RESOURCES

1. Describe the area of and around the mine site. Specify topography, surface water systems, wildlife habitats, residential houses, commercial properties, recreational areas and/or public roads.

   The site is located within a 119 acre tract of land in a rural area of Dorchester County. Uses of adjacent properties are a mix of forested/silviculture and agriculture; few residences are in the vicinity.

   The property has been clear-cut and has sparse scrubby vegetation. Several access roads exist in the mine area. Mine activity was initiated along Old Pond Road under GP1-001844.

   The tract has a slight topographic break from Old Pond Road toward the back of the permitted area. Wetlands delineated in the lower areas drain to Four Hole Swamp located east of the site. Soils onsite consist mainly of Chipley Sand and Bonneau fine sand.

2. Methods used to prevent physical hazards to persons and to any neighboring dwelling, house, school, church, hospital, commercial or industrial building or public road.

   A gate will be installed at the entrance to the mine site and kept locked during inactive periods. Warning and/or Danger signs shall be posted around the perimeter of the property. To reduce the potential of accidental falls, the operator shall grade side slopes as excavations progress to minimize highwalls.

   With the exception for the existing perimeter road, the operator shall maintain a 50’ undisturbed buffer/setback along the wetlands and property lines. This setback will lessen potential impacts to adjacent properties and Old Pond Road.

   Operator shall use Best Management Practices (BMPs) to prevent accumulation of sediment/soil on public roads carried by trucks and other vehicles exiting the mine site. At a minimum, accumulations shall be removed by the operator on a daily basis but more frequently if needed.

   The operator shall establish a protected area or establish procedures to minimize fuel spillage or incidental spillage of other petroleum products during storage, refueling of equipment or in the performance of routine maintenance on equipment. Contaminated materials resulting from contact with petroleum products must be removed from the site and disposed properly to prevent contamination to ground and surface water resources.

3. Methods used to prevent an adverse effect on the purposes of a publicly owned park, forest or recreation area.

   There are no publicly owned parks, forest or recreational areas near this mine site.

4. Measures taken to insure against substantial deposits of sediment in stream beds or lakes.

   The operator shall comply with the NPDES discharge permit and Stormwater Pollution Prevention Plan developed for the mine.

   With the exception for the existing perimeter road, the operator shall maintain a 50’ undisturbed buffer along the wetlands and property lines. Appropriate Best Management Practices (BMPs) shall be installed to ensure no sediment encroaches wetland areas. BMPs shall be installed to the mine-side of the undisturbed buffer or along the outside of the access road.

   Active pumping and discharge of water from the active pit through the sediment basin shall cease if the dewatering discharge causes flooding conditions to property downstream of the mine site.

5. Measures taken to insure against landslides or unstable mine walls.

   Final slopes will be 3H:1V to minimize potential for landslides or unstable mine walls. The operator is responsible for maintaining stable mine walls and appropriate setbacks to prevent significant slumping that may encroach into non-permitted lands.

6. Measures taken to insure against acid water generation at the mine site that may result in pollution on adjacent property.

   Acid water is not anticipated to be generated from the oxidation of existing minerals currently found on site.

7. Measures taken to minimize or eliminate fugitive dust emissions from the permitted area.

   The mine operator will use appropriate measures (i.e. water truck, dust suppressants, etc.) to control fugitive dust created by moving equipment along haul roads. The operator, where feasible, shall establish vegetation in non-active mine areas barren of vegetation to stabilize the soil and reduce potential for wind erosion and blowing dust.
Part VII: STANDARD CONDITIONS OF MINE OPERATING PERMIT

1) SURVEY MONUMENTS: In accordance to R.89-130, the operator shall install and maintain the two required permanent survey monuments or control points within the permitted area as shown on the mine site map. At the discretion of DHEC the operator may be required to mark the area to be affected with flagging or other appropriate measures.

2) RIGHT OF ENTRY: Pursuant to Section 48-20-130 and R.89-240, the operator shall grant DHEC and/or duly appointed representatives access to the permitted area for inspection to determine whether the operator has complied with the reclamation plan, the requirements of this chapter, rules and regulations promulgated hereunder, and any terms and conditions of this permit.

3) RECORDS RETENTION: All records are to maintained through additional terms and conditions of this permit or by regulations, shall be kept on site or at the office identified for receipt of official mail and open for inspection during normal business hours. The records shall be maintained for a minimum of three (3) years or as specified by DHEC. The operator shall furnish copies of the records upon request to DHEC.

4) PERMIT MODIFICATIONS: Pursuant to Section 48-20-80, the operator may modify the permit and/or Reclamation Plan upon approval by DHEC. Requests for permit and/or Reclamation Plan modifications may be made to DHEC on Form MR-1300. The operator shall submit any requested supporting data for consideration during DHEC's evaluation of the modification request. If a modification request is determined to be substantial by DHEC, the modification request will be public noticed pursuant to R.89-100 and a modification fee will be required as specified in R.89-340. If DHEC determines activities proposed under the Reclamation Plan and other terms and conditions of the permit are failing to achieve the purpose and requirements of the S.C. Mining Act and Regulations, DHEC shall notify the operator of its intentions to modify the permit and/or Reclamation Plan pursuant to Section 48-20-150.

5) TRANSFER OF PERMIT: Pursuant to Section 48-20-70, this permit may be transferred to another responsible party. The transfer of the permit must be conducted in accordance with R.89-230. The transferor of the permit will remain liable for all reclamation obligations until all required documents; plans and the replacement reclamation bond have been submitted and approved by DHEC. The transfer will be considered complete when all parties have received notification by certified letters of the approval of the transfer by DHEC.

6) DURATION OF MINE OPERATING PERMIT: In accordance with Section 48-20-60 this Mine Operating Permit will remain valid unless this permit terminates as set forth in R.89-270 or is revoked in accordance with Section 48-20-160 and R.89-280. The termination date of this permit may not be extended for the sole purpose of postponing reclamation of the mine site. Reclamation activities in the absence of active mining may be required pursuant to R.89-270.

Pursuant to R.89-80 (B), the operator shall conduct reclamation simultaneously with mining whenever feasible. Reclamation shall be initiated at the earliest practicable time, but no later than within 180 days following termination of mining of any segment of the mine and shall be completed within two years after completion or termination of mining on any segment of the mine.

Part VIII: ENFORCEMENT ACTIONS

Pursuant to Section 48-20-30 of the S.C. Mining Act, "DHEC has ultimate authority, subject to the appeal provisions of this chapter, over all mining, as defined in this chapter, and the provisions of the chapter regulating and controlling such activity." This allows DHEC to assist, cooperate with or supersede other State agencies in taking enforcement action on violations of the State Regulations or violations of the S.C. Mining Act to ensure the purposes of this Act are enforced.
COMPLIANCE: The operator shall comply at all times with all conditions of this mine operating permit. Non-compliance with this mining permit, statute, or regulations could lead to permit revocation and bond forfeiture pursuant to Sections 48-20-160 and 48-20-170 or other enforcement action allowed by law.

Compliance with the Mine Operating Permit requires the operator to conduct the mining operation as described in the approved Application for a Mine Operating Permit. Variance from the Application for a Mine Operating Permit, this permit, statute or regulation, without first receiving DHEC approval, shall be deemed non-compliance with the permit.

An operator or official representative of the mine operator who willfully violates the provisions of the S.C. Mining Act, rules and regulations or willfully misrepresents any fact in any action taken pursuant to this chapter or willfully gives false information in any application or report required by this chapter shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined not less than one hundred dollars nor more than one thousand dollars for each offense. Each day of continued violation after written notification shall be considered a separate offense.

The operator is responsible for all mining activity on the permitted mine site.

Part IX: REPORTS

1) ANNUAL RECLAMATION REPORTS: The operator shall comply with Section 48-20-120 and Regulation 89-210 and submit an Annual Reclamation Report on Form MR-1100 as supplied by DHEC. The form for the report will be sent by regular mail to the operator to the mailing address shown on the previous year's Annual Reclamation Report. The operator should receive the report form from DHEC by July 1 of each year; however, the operator is ultimately responsible for obtaining the Annual Reclamation Report form and is not excused from penalty fees for failure to submit the report on time.

The Annual Operating Fee is a part of the Annual Reclamation Report. Failure to submit a complete Annual Reclamation Report (i.e. information and fee) in accordance with Section 48-20-120 and R.89-340 will result in a late penalty payment. The Annual Reclamation Report and Annual Operating Fee is required if there is any permitted land not fully reclaimed and released by DHEC by June 30 of each year.

2) SPECIAL REPORTS: DHEC may at any time request information, data, or explanations from the operation as to conditions relating to the permitted mine site. Such request from DHEC shall be made in writing to the operator with appropriate time frame stated for the submittal of the requested information to DHEC. The operator must produce the information requested within the timeframe specified by DHEC.
Part X: ADDITIONAL TERMS AND CONDITIONS

1. If archaeological materials are encountered prior to or during the construction of mine facilities or during mining, the S.C. Department of Archives and History, the South Carolina Institute of Archaeology and Anthropology, and the S.C. Department of Health and Environmental Control should be notified immediately. Historic or cultural resources consist of those sites listed in the National Register of Historic Places and those sites that are eligible for the National Register. Archaeological materials consist of any items, fifty years or older, which were made or used by humans. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, oyster shell, worked wood, bone and stone, metal and glass objects, human skeletal remains, and concentrations of charcoal and stones below the ground surface. These materials may be present on the ground surface and/or under the surface of the ground.

2. In the future, if determined to be necessary by the Department, an appropriate fence will be installed around the affected area.

3. Temporary or permanent placement of refuse and debris from off-site locations is prohibited. Topsoil, free of debris and contaminants and as defined in Regulation 89-10D, may be brought in from off-site sources, but only for the purposes of mine land reclamation.

4. The operator shall maintain buffers/setbacks as depicted on the mine map. The buffer/setback shall be permanently flagged prior to the initiation of any mine activity or preparation. The flags shall be maintained throughout the operation/reclamation of the site. To ensure proper buffering, any expansion or improvements to the existing perimeter road must be made along the mine side of the road.

5. Active pumping of water from the pit and discharge through the sediment pond shall cease if the dewatering discharge causes flooding conditions to property downstream of the mine site.

6. If the Department determines a drinking water well or water supply well is being adversely affected by dewatering activities at the mine, the operator shall be responsible for repairing, deepening or re-drilling such wells. If an impact to a well occurs, the operator shall supply the owner with a temporary water supply (e.g. bottled water for drinking, provisions for laundry services, etc.) until a permanent water supply is re-established.

7. The operator shall comply with the approved Coastal Zone Consistency Determination issued under the SC Coastal Zone Management Program by the Department's Office of Ocean and Coastal Resource Management (OCRM). See Appendix B.
<table>
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<th>APPROVAL DATE</th>
<th>DESCRIPTION OF MODIFICATION</th>
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<td>Issued</td>
<td>2/9/18</td>
<td>Permit issued; PA = 27.7 ac., AA = 24.0 ac., FR= 0.0 ac, B = 3.7 ac; Cancellation of GP1-001844</td>
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APPENDIX B

Coastal Zone Consistency Determination
CZC-17-1313
Office of Ocean and Coastal Resource Management
Coastal Zone Consistency Determination

To: Wendy Hamilton, BLWM Mining and Solid Waste Permitting
From: Sarah Reed, OCRM Coastal Zone Consistency Section
Applicant: Dorchester Logistics, Inc.
Project Name: DLI Plantation Egeria Mining
Site location: Beidler Forest Road, Dorchester County, SC
Finding: Consistent with the S.C. Coastal Zone Management Program
CZC #: CZC-17-1313
PN#: I-002170 (Mining)
Date: December 20, 2017

The proposed activity consists of mining, or excavation, of sand and clay. This project involves increasing the mining area of an existing GP1 mining project from 5 acres to 27.74 acres which will involve upgrading the mine to an individual mine operating permit. The material will be mined in layers, deposited into piles, and then loaded onto trucks or moved to a storage location on the mine property. The mining pit will have a 3:1 slope and will be excavated to a maximum depth of 20'. The project also proposes the installation of erosion and sediment control BMPs. The applicant has an approved (BLWM) reclamation plan that will be implemented after mining operations cease at 5-6 years. Once mining operations are complete, the mine will be reclaimed as a lake.

We hereby certify that the project, as proposed, is Consistent with the Guidelines for Evaluation of All Projects, as well as the (1) Coastal Industries (Mining) and the (2) Stormwater Management (Mines) policies contained in the S.C. Coastal Zone Management Program provided the following conditions are included in the permits and adhered to by the applicant.

1. In the event that any historic or cultural resources and/or archaeological materials are found during the course of work, the applicant must notify the State Historic Preservation Office and the South Carolina Institute of Archaeology and Anthropology. Historic or cultural resources consist of those sites listed in the National Register of Historic Places and those sites that are eligible for the National Register. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials.

2. Upon completion of construction activities, all disturbed areas, including those impacted for access, must be immediately stabilized.
3. Best management practices located at the spillway must be installed, inspected, and maintained through the life of the project to prevent discharged wastewater from negatively affecting receiving wetlands and waterbodies.

4. The pumping of groundwater from sediment basins must be done with floating intakes only. Pumping of the basin must cease whenever the water levels come to within 2 feet of the pond bottom.

5. The project must be fully consistent with all local zoning, ordinances, comprehensive plans, and other specific local authorizations prior to land disturbance.

This determination shall serve as the DHEC OCRM State Coastal Zone Consistency Determination for the work described above. This determination does not serve as the final permitting decision and does not alleviate the applicant's responsibility to obtain the final authorizing State or Federal permit(s). Local government authorizations may also be required.
RECLAMATION PLAN

DHEC FORM 500 DATE VERSION ADOPTED 7/1/94

As required in Section 48-20-90 of the South Carolina Mining Act, "An operator shall submit with his application for an operating permit a proposed reclamation plan. The reclamation plan for an operating permit only must be furnished to the local soil and water conservation district in which the mining operation is to be conducted. The plan must include as a minimum each of the elements specified in the definition of 'reclamation plan' in Section 48-20-40 and information required by the department. The reclamation plan must provide that reclamation activities, particularly those relating to control of erosion, to the extent feasible, must be conducted simultaneously with mining operations and be initiated at the earliest practicable time after completion or termination of mining on a segment of the permitted land. The plan must provide that reclamation activities must be completed within two years after completion or termination of mining on each segment of the area for which an operation permit is requested unless a longer period specifically is permitted by the department."

I. APPLICANT INFORMATION

1. Name of Company: DORCHESTER LOGISTICS, INC

2. Name of Proposed Mine: OLI PLANTATION EGERIA County: DORCHESTER

3. Home Office Address: 261 SEVEN MILE RD/PO BOX 365 843-462-2600
   (Street and P.O. Box) Hartsville SC 29598 843-672-2927
   (City) (State) (Zip Code) (Telephone No.)

4. Local Office Address: SAM B
   (Street and P.O. Box) (City) (State) (Zip Code) (Telephone No.)

5. Name of company personnel and their title to be the contact for official business
   and correspondence: MICHAEL TODD MUCKENTJASS: VICE PRESIDENT

   (State or County Hwy No.) (Nearest Town or City)

II. ENVIRONMENTAL PROTECTION

1. Describe practices to protect adjacent resources such as roads, wildlife areas, woodland, cropland and others during mining and reclamation.
   Soil berm, filter cloth, swales, retention ponds

2. Describe proposed methods to limit significant adverse effects on adjacent surface water and groundwater resources.
   Any disturbed area run-off will be channeled to main pit. Filter cloth will be used on soil berms and seeded to prevent sediment run-off.

3. Describe proposed methods to limit significant adverse effects on known significant cultural or historic sites within the proposed permitted area.
   No sites on property.
4. Describe method to prevent or eliminate conditions that could be hazardous to animal or fish life in or adjacent to the permitted area.

   NO FISH LIFE IN AREA. BANK OF PIT WILL BE SLOPED IN ONE AREA FOR ESCAPE OF ANY WILDLIFE WHICH ENTER PIT.

5. Describe how applicant will comply with State air quality and water quality standards as established by the S.C. Department of Health and Environmental Control.

   ALL EQUIPMENT WILL BE IN GOOD MAINTENANCE. PREVENTATIVE MAINTENANCE WILL BE CONDUCTED TO PREVENT ANY AIR OR GROUND WATER POLLUTION.

III. RECLAMATION OF AFFECTED AREA

6. State useful purpose(s) the affected land is being proposed for reclamation. More than one purpose may be checked, but information should be submitted to support the feasibility for each proposed purpose.

   a. Lake or pond ☑️
   b. Agriculture ☑️
   c. Woodlands ☑️
   d. Residential ☑️
   e. Commercial ☑️
   f. Grassland ☑️
   g. Recreation ☑️
   h. Wetlands ☑️
   i. Park ☑️
   j. Other ☑️

7. State the final maximum surface gradient(s) (slope) in soil, sand, or other unconsolidated materials on reclaimed land. Surface gradients steeper than 3H:1V (18 degrees or 33 percent) may be required to submit geotechnical data and studies to demonstrate that the steeper slopes will remain stable following final reclamation.

   Final slope 3:1 AND SEEDED

8. How will the final slopes in unconsolidated material be accomplished? 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 source 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 highest). Operator shall show calculations or other appropriate information to demonstrate that there is adequate material in backfilling and grading to meet the requirements for final slope.

   Final slope will be worked in as mining progresses. Adequate setbacks and berms will be in place to achieve required slope.

9. 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 seed list; (b) site preparation and fertilization; (c) seed or plant selection; (d) rate of seeding or amount of planting per acre; (e) maintenance.

   All of the above, operator has hydro seeders to which will be used to seed and maintain slope.
10. Provide, as a separate document, a closure plan of the mine and permitted facilities to prevent a release of contaminants from being harmful to the environment. A closure plan is not necessary for all mines, but is required where the possibility exists for (a) acid rock drainage; (b) where the National Pollutant Discharge Elimination System (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 vegetation purposes).

Should not apply. Only mining or sand/clay will be done, then return pit to recreation fishing lake.

11. Method of control of contaminants and disposal of mine waste soil, rock, mineral, scrap, tailings, climes, and other material directly connected with the mining, cleaning, and preparation of mineral substances mined and includes all waste materials deposited on or in the permit area from any source.

Should not apply. Mining or fill dirt only.

12. Method of reclaiming settling and/or sediment ponds.

Will be part of main lake when completed.

13. Describe method of restoration or establishment of stream channels, stream banks and site drainage to a condition minimizing erosion, siltation and other pollution.

Slopes on banks will be maintained to keep erosion inside existing pit. Finished banks will be 3:1 and seeded when completed.

14. What are the maintenance plans to ensure that the reclamation practices established on the affected land will not deteriorate before released by the Department?

Operator, employees and owner will monitor site. Site conditions will influence overall final results. It is in our best interest to maintain site in excellent

15. 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 climes, etc.) and provide appropriate safety provisions. These provisions can include but are not limited to barriers, fencing.

All slopes will be graded as required, gates will be locked and signs will be posted about mining sites and no trespassing.

16. What provisions will be taken to prevent noxious, odious, or foul poisons 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.

Mine pit depth will be 20'. This depth will prevent weeds from growing and water from warming. Water table in area is 4-5' which will be sufficient to keep lake at an acceptable level and water quality acceptable.
17. Identify any structures (e.g. buildings, roads) that are proposed to remain as part of final reclamation. Provide justification for leaving any structures.

**NO BUILDINGS OR STRUCTURES WILL REMAIN.**

18. Attach here (2) copies 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. 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 slopes 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 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 vegetation 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, fill 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 AN EASILY READABLE APPEARANCE AND BE OF SUFFICIENT SCALE TO CLEARLY SHOW THE REQUIRED INFORMATION LISTED ABOVE. THE BASE FOR THE MAP SHALL BE EITHER A SPECIALIZED 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.

IV. SCHEDULE FOR IMPLEMENTATION OF CONSERVATION AND RECLAMATION PRACTICES

19. As stated in Section 49-20-90 of the B.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.

**GRADING OF SIDEWALLS WILL BE COMPLETED AS MINING IS COMPLETED ON CERTAIN SECTION TO STABILIZE THE WALL.**
20. Section 48-20-40(16)(1) of the S.C. Mining Act requires a time schedule, including the anticipated years for completion of reclamation by segments. This time schedule should meet the requirements of Section 48-20-90 of the Mining Act.

SCHEDULE FOR IMPLEMENTING CONSERVATION AND RECLAMATION PRACTICES

<table>
<thead>
<tr>
<th>Conservation &amp; Reclamation Practices</th>
<th>Segment # or Area</th>
<th>Planned</th>
<th>*Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Amount</td>
<td>Year</td>
</tr>
<tr>
<td>Excavation initiated under GP1-001844</td>
<td>GP1</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>Install survey control markers</td>
<td>PA</td>
<td>GP1</td>
<td></td>
</tr>
<tr>
<td>Flag buffer area</td>
<td>PA</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>Post Warning signs</td>
<td>PA</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>Install stormwater BMPs along wetlands, access road; basin</td>
<td>PA</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>Clear/ stockpile topsoil</td>
<td>AA</td>
<td>24.0</td>
<td>2017-2024</td>
</tr>
<tr>
<td>Remove/(stockpile overburden</td>
<td>AA</td>
<td>24.0</td>
<td>2017-2024</td>
</tr>
<tr>
<td>Excavate</td>
<td>AA</td>
<td>24.0</td>
<td>2017-2024</td>
</tr>
<tr>
<td>Grade final side slopes 3H:1V</td>
<td>final banks</td>
<td>~4.0</td>
<td>2017-2024</td>
</tr>
<tr>
<td>Topsoil, fertilize, seed slopes</td>
<td>final banks</td>
<td>~4.0</td>
<td>2017-2024</td>
</tr>
<tr>
<td>Grade out sediment basin</td>
<td>basin</td>
<td></td>
<td>2024</td>
</tr>
<tr>
<td>Inspect, repair, maintain</td>
<td>final banks</td>
<td>24.0</td>
<td>2017-2024</td>
</tr>
</tbody>
</table>

Notes:
1. Two permanent survey markers within the permitted area shall be located at least 100 feet apart as required in R.89-130.
2. Markers should be located prior to the start of mining. Permanently flag buffers associated with property line and wetlands
3. Best Management Practices shall be installed and maintained as necessary to ensure stormwater is retained on site. Water discharged from the mine must be discharged through an outfall regulated by a NPDES permit.
4. Enough topsoil for reclamation must be stockpiled at the site
5. Minimize the amount of disturbed acreage to reduce the potential for offsite sediment and erosion control concerns.
6. Slopes shall be graded as excavations progress.
7. Topsoil placement, fertilizing, seeding of final banks shall be done as soon as feasible
8. Reclamation/vegetation shall be inspected on a regular basis and corrective measures taken to prevent erosion of final slopes


* Completed by the Department
YOU ARE NOTIFIED THAT:

1) You, the operator, must file an application to modify the reclamation plan in the event actual reclamation varies from the set forth hereinabove; and

2) If at any time it appears to the Department that the activities under the reclamation plan are failing to achieve the purposes and requirements of the S.C. Mining Act, the Department may modify the RECLAMATION PLAN in accordance to Section 48-20-150.

Signature of Applicant/Operator or his Authorized Representative

Michael Todd-Muckemeyer
Printed Name of Applicant/Operator or his Authorized Representative

Title

Date 6-1-17

Department Use Only

Permit No.: I-002170 Date Application Approved: 2/9/18 Date Bond Rec'd: 2/7/18

Bond Amount: $25,000.00 Blanket or Single Bond: single Permit Issuance Date: 2/9/18

ACTION TAKEN ON THIS RECLAMATION PLAN

Approved Denied X Approved with Additional Terms and Conditions

By: [Signature] DIVISION DIRECTOR

Date: February 9, 2018