APPLICATION I-002310
Sassafras Timber, LLC
Sassafras Mine

LOCATION INFORMATION*:
Dorchester County
TMS# 178-00-00-001
Latitude: 32.896427982
Longitude: -80.19134868

APPLICATION INFORMATION*:
1. Mine Permit Application
2. Reclamation Plan
3. General Coastal Zone Consistency (GCZC) Certification Request Forms
   a) CZC Certification Request Form
   b) Policy Group III - Coastal Industries
   c) Policy Group XIII - Stormwater Management
4. US Army Corps of Engineers Jurisdictional Determination (JD)/Delineation

*Information included is provided by the applicant; details may change with the public notice/technical review process. No decision has been made on this application.
APPLICATION FOR A MINE OPERATING PERMIT
DHEC FORM MR-400  DATE VERSION ADOPTED 7/1/94

"The South Carolina Mining Act," Sections 48-20-10 through 48-20-310, Code of Laws of South Carolina, 1976, as amended, provides in part: "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obtained from the Department an operating permit which covers the affected land and which has not been terminated, been revoked, suspended for the period in question, or otherwise become invalided." (Section 48-20-60)

I. APPLICANT INFORMATION

1. Name of Company: Sassafras Timber, LLC
   Check form of business entity: ☑ Corporation ☐ Partnership
   ☐ Limited Partnership ☐ Sole Proprietorship

2. Name of Proposed Mine: Sassafras Mine
   County: Dorchester

3. Home Office Address: 14120 Ballantyne Corp. Place, Suite 525
   Charlotte, NC 28277
   (Street and P.O. Box) (City) (State) (Zip Code) (Telephone No.)
   (Telephone No.)

4. Local Office Address: N/A
   (Street and P.O. Box) (City) (State) (Zip Code) (Telephone No.)
   (Fax No.)

5. Designate to which office Official Mail is to be sent (check one):
   [X] Home Office ☐ Local Office

6. Name of company personnel and their title to be the contact for official business and correspondence:
   Cory Dukes

7. Location of Mine: Off of Hwy 165
   (State or County Hwy No.) North Charleston
   (Nearest Town or City)

8. Locate accurately on a county map, USGS 7.5' Topographic Map, or draw a detailed map to scale of: (1) how to get to your local office and (2) how to get to the mine (attach to this application).

9. If land is leased, complete the following: N/A
   A. Name of landowner:

   Landowner's Address:
   (Street and PO Box) (City)
   (State) (Zip Code) (Telephone Number)

   B. Date lease became effective:

   Date of lease termination:

   Name of lessee:
II. GENERAL CHARACTERISTICS OF MINE:

1. Material(s) to be mined: Topsoil, sand, fill dirt

2. Mining Method:
   
   A. List equipment to be used for mining and provide a brief description as to how the mine will be operated.
   Sand, fill dirt and topsoil is to be excavated and deposited in dump trucks for removal. The operations will be conducted with track-hoes and other earth moving equipment. De-watering activities will include pumping groundwater into sediment basins and/or pumped from segment to segment.

   B. Will there be a process plant located at the mine site within the boundary of the permitted area?
      ☐ Yes  ☑ No   If yes, please provide a brief description of the plant equipment and function of the plant.

3. Do you anticipate blasting as part of the mining operation? ☐ Yes  ☑ No   If yes, provide the distance to the nearest inhabited structure not owned or leased by the applicant. Also, provide as an attachment to this application the names and addresses of all the owners of all structures within one-half mile from the nearest point of blasting during the life of the proposed mine. How will flyrock be prevented from being projected from the permitted area?

4. Has this site been mined in the past? If so, please indicate the present condition of the land.
   Two small non-jurisdictional upland burrow pits exist on-site (1.59 ac & 2.19 ac).

5. 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. (Example: Final depth of pit will be level to adjacent road, elevation above Mean Sea Level (MSL)).
   Final depth of pit will be no more than 20 ft below existing grade.
III. DETERMINATION OF PERMITTED ACREAGE, AFFECTED ACREAGE AND RECLAMATION BOND

1. Total acres for which permit is being requested:

   171.5 Permitted acres owned by the operator

   0 Permitted acres leased by the operator

Note: 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).

2. Total affected acreage:

   A) Area used for sediment control ponds  
      Acres

   B) Area used for stockpiles of unprocessed minerals  
      N/A

   C) Area used for spoil (overburden) banks, topsoil and disposal refuse (exclusive of tailings impoundments) Topsoil will be used in the construction of perimeter berm.  
      N/A

   D) Areas used for on-site processing facilities and stockpiles of processed minerals  
      N/A

   E) Areas used for tailings pond (waste material from mineral processing)  
      N/A

   F) Area for access or haul roads  
      3.0

   G) Area for excavation during the period of this permit

      OR

      If mining and reclamation are to be done in segments, state the size of each segment (acres) ___________. Multiply the size of the segments by 3 and enter the resulting number. ___________  
      163.0

   H) TOTAL OF 2A THROUGH 2G  
      167.0

3. Check acreage to be bonded: total affected acreage calculated from Section 2.

   [ ] 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.

4. Will this operation be covered by a blanket bond? [ ] Yes [ ] No  
   If yes, please list your company's other permitted mining operations in South Carolina giving mine names, permit numbers and state the present reclamation bond amount on file with this Department.
5. Number of years for which this permit is requested. 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, (Form MR-500). 15 years

IV. PROTECTION OF NATURAL RESOURCES

1. Will there be a waste water treatment system at your mine site? ☑ Yes ☐ No
2. Will there be a point source discharge from your plant or mine requiring an NPDES Permit? ☑ Yes ☐ No
   If yes, provide information as to how stormwater and groundwater will be managed? See attached
3. Will there be air contaminant emissions from your plant or mine requiring an Air Quality Permit? ☐ Yes ☑ No
4. Do you anticipate pumping of groundwater? ☑ Yes ☐ No
   If yes, describe. See attached
5. Will jurisdictional wetlands be affected, filled or altered in any fashion that will require a Section 404 Dredge and Fill Permit? ☐ Yes ☑ No
6. Are there any known cultural or historic sites located within the proposed area to be permitted? ☐ Yes ☑ No
7. Will any part of the permitted area be used as a solid waste describe how waste, trash, scrap metal material, garbage will be handled. ☑ Yes ☐ No

*NOTE: For questions 1-7 that need additional space for explanations, please provide additional information on an attached sheet to this application.

8. 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.

   Deer and small animals may periodically occupy the permitted area. The current condition of the permitted area is woodlands. No wetlands are located in the proposed mine boundary. There are two Non-jurisdictional upland burrow pits on-site.

9. State the land cover and land uses on the permitted land area and contiguous tracts of land to the permitted land area.

   The property is currently woodlands and is surrounded by woodlands. A 170' Santee Cooper power easement is located on the northeast border.

10. 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. Attach any supporting documents (engineering designs, calculations, sediment & erosion control plan, setbacks, geotechnical information, acid prediction test etc.) to this application.

   A sediment pond will be used to prevent deposits into neighboring streams or watering systems. A 3:1 slope will be established along with grasping efforts as the mine progresses to eliminate the risk of landslides in those areas. Acid water formation is typically not an issue in similar mines in the area. Monitoring will be conducted to comply with NPDES Permit NDG730000.
V. SAFETY

1. 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.

   **A gate will be installed at the mine entrance and berms built around the edge of the segments to keep unauthorized vehicles/people from entering the site and the mine areas.** The proposed mine site has no immediate neighboring dwellings, schools, churches, hospitals, commercial or industrial building or public roads.

2. Describe methods to be used to prevent an adverse effect on the purposes of a publicly-owned park, publicly-owned forest, or publicly-owned recreation area. If any of these facilities are within one (1) mile of the proposed affected property, please locate on mine location map and the submitted U.S.G.S topographic map for this application.

   **No publicly-owned parks, forests, or recreation exist in the vicinity of the project area, or within a one mile radius.**

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

   **The proposed mine is located internal to a larger property under the same ownership and is not adjacent to any public highways, parks or residential areas.**

VI. MINE MAP

1. Provide the U.S.G.S. topographic map(s) that contains the proposed mine site. The proposed permitted area should be outlined on this submitted topographic map.

2. Attach **two (2)** copies of a map of the site (referred to as the MINE MAP) that shows the following:

   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.

O. 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.

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

4. Provide letter from an attorney attesting to (1) the ownership if 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.

We hereby certify that all information and details contained hereinabove, within any supporting documents and on the map are true and correct to the best of our knowledge. We fully understand that any willful misrepresentation of facts will be cause for permit revocation.

Signature of Applicant/Operator or his Authorized Representative

Cory Dukes
Printed Name of Applicant/Operator or his Authorized Representative

Senior Investment Forester
Title

August 20, 2020
Date
Department Use Only

Application No.: __________ Date Application Approved: __________ Date Bond Rec'd: __________

Bond Amount: __________ Blanket or Single Bond Permit Issuance Date: __________

ACTION TAKEN ON THIS APPLICATION

________ Approved __________ Denied __________ Approve with additional Terms and Conditions

By: ____________________________

Section Manager

Date: ____________________________
IV. PROTECTION OF NATURAL RESOURCES

2. Will there be a point source discharge from your plant or mine requiring an NPDES Permit?  
   _X_ Yes _____ No  
   If yes, provide information as to how stormwater and groundwater will be managed?  
   Water will be pumped from the excavation pit into a sediment pond within the mine limits. This  
   water will overflow into one of the adjacent ditches.

4. Do you anticipate pumping of groundwater? _X_ Yes _____ No If yes, describe.  
   Groundwater will be pumped into a sediment pond within the mine limits where it can flow  
   through erosion control measures into adjacent ditches.
I. APPLICANT INFORMATION

1. Name of Company: Sassafras Timber, LLC

2. Name of Proposed Mine: Sassafras Mine

3. Home Office Address: 14120 Ballantyne Corp. Place, Suite 525
   Charlotte, NC
   (404) 736-3528

4. Local Office Address: N/A
   (Street and P.O. Box)
   (City) (State) (Zip Code) (Fax No.)

5. Name of company personnel and their title to be the contact for official business
   and correspondence: Cory Dukes

6. Location of Mine: Off of Hwy 165
   State or County Hwy No. North Charleston
   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.
   There are no public roads adjacent to the mine area, only private agricultural roads. Due to the size and nature of the surrounding property, currently being largely managed for recreational uses and forestry, the wildlife on the property has habitat not affected by the mining activity. Sedimentation ponds and following best management practices will protect adjacent woodlands.

2. Describe proposed methods to limit significant adverse effects on adjacent surface water and groundwater resources.
   No adverse affects on adjacent surface water are anticipated. Ground and storm water will collect within the mine excavation area area and be pumped into a sediment basin, subsequently out-falling to adjacent ditches.

3. Describe proposed methods to limit significant adverse effects on known significant cultural or historic sites within the proposed permitted area.
   There are no known significant cultural or historic sites within the proposed mine area. Should any cultural resources be discovered during mining activities, all mining shall cease until further investigation is complete.
4. Describe method to prevent or eliminate conditions that could be hazardous to animal or fish life in or adjacent to the permitted area.

Conditions that could be hazardous to animal or fish life are not anticipated to develop as a result of the mining activity. It is expected, upon completion, this site will provide habitat for bald eagles, waterfowl, amphibians, and reptiles.

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.

Airborne dust will be controlled via water truck on an as needed basis, and is expected to be the only potential air quality control issue.

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.

   3V:1H

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 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). Operator should show calculations or other appropriate information to demonstrate that there is adequate materials in backfilling and grading to meet the requirements for final slope.

   Final grading will be accomplished using the on-site overburden along pond edges. The overburden material location will be adjacent to the mine.

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

   No additional soil tests or fertilization is planned. Site preparation will consist of grading banks and disturbed areas and seeding according to the attached seeding plan.
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 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).

N/A

11. Method of control of contaminants and disposal of mine waste soil, rock, mineral, scrap, tailings, slimes, 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.

There will no contaminants, waste soil, rock, minerals, scrap, tailings, or slime produced that will need to be disposed of.

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

Sediment basins will be incorporated into the pond area and reclaimed as part of the individual segments as previously described. Existing segments will be used as sediment basins when possible.

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

Stream banks or stream channels do not currently existing on-site other than roadside swales. Erosion and siltation will be minimized through the use of best management practices.

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

Natural vegetation will be used as primary ground cover. With this reclamation scheme, it is unlikely that there will be any deterioration before release. Regular inspections will be carried out to identify areas of erosion which will be repaired accordingly. Additional seeding will be applied as necessary to ensure ground cover.

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 slimes, etc.) and provide appropriate safety provisions. These provisions can include but are not limited to setbacks, fencing.

There are no residential properties directly adjacent to the site. There is a 50' buffer along adjacent property lines, but those properties are undeveloped woodlands. A gate will be installed on the agricultural road leading into the site and will remain locked when site is unoccupied.

16. 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 geotech report indicates that groundwater tables are 3.5 - 4.0' below existing grade. It is anticipated water depths will be 10 - 15' deep.
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 existing structures except an outfall structure will remain to provide an outlet for water level control.

18. Attach two (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 sides and bottoms of mine 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 SUITABLE 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.

IV. SCHEDULE FOR IMPLEMENTATION OF CONSERVATION AND RECLAMATION PRACTICES

19. 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. N/A
20. Section 48-20-40(18)(i) 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**

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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segment 7 *</td>
<td>7</td>
<td>2031-2036</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inspect, Repair, Maintain</td>
<td>AA</td>
<td>2021-2036</td>
<td></td>
<td></td>
<td></td>
<td>LOM: Until released by department</td>
</tr>
</tbody>
</table>

* Location, wetland delineation, and related approval items to be completed prior to initiation of mining activities
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

Cozy Dukes
Printed Name of Applicant/Operator or his Authorized Representative

Senior Investment Forester
Title

August 20, 2020
Date

Department Use Only

Permit No.: ________ Date Application Approved: __________ Date Bond Rec'd: __________

Bond Amount: ____________ Blanket or Single Bond: _________ Permit Issuance Date: __________

ACTION TAKEN ON THIS RECLAMATION PLAN

_________ Approved _________ Denied _________ Approved with Additional Terms and Conditions

By: ____________________________
SECTIONS MANAGER

Date: ___________________________
## DHEC OCRM State Coastal Zone Consistency (CZC) Certification Request Form

**Project Name:**
Sassafras Mine

<table>
<thead>
<tr>
<th><strong>Applicant Information:</strong></th>
<th><strong>Agent/Engineer Information:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Name</td>
<td>Contact Name</td>
</tr>
<tr>
<td>Cory Dukes</td>
<td>Newkirk Environmental</td>
</tr>
<tr>
<td>Address</td>
<td>Address</td>
</tr>
<tr>
<td>14120 Ballantyne Corp. Pl.</td>
<td>1887 Clements Ferry Rd, Charleston, SC 29492</td>
</tr>
<tr>
<td>Phone #</td>
<td>Phone #</td>
</tr>
<tr>
<td>(404) 736-3528</td>
<td>(843) 388-6585</td>
</tr>
<tr>
<td>E-mail</td>
<td>E-mail</td>
</tr>
<tr>
<td><a href="mailto:dukes@tirlc.com">dukes@tirlc.com</a></td>
<td><a href="mailto:jim@newkirkenv.com">jim@newkirkenv.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Site details:</strong></th>
<th><strong>TMS:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Location/Address:</td>
<td>178-00-00-001</td>
</tr>
<tr>
<td>Off of Hwy 165 - Dorchester County</td>
<td></td>
</tr>
<tr>
<td>County:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Type of Permit Requested:</strong></th>
<th><strong>Name of Permitting Authority(s):</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(ex. Landfills, Mining, Wastewater, etc.)</td>
<td>(ex. DHEC Bureau of Water)</td>
</tr>
<tr>
<td>Mining, Stormwater</td>
<td>DHEC Bureau of Land and Waste Management</td>
</tr>
<tr>
<td></td>
<td>Division of Mining and Solid Waste Permitting</td>
</tr>
</tbody>
</table>

**Description of Proposed Activity(s):**
- including total disturbed area, name of and distance to nearest waterbody, and onsite non-jurisdictional wetland impacts and acreage.

Sassafras Timber, LLC is proposing the use of approximately 171.5 acres for resource extraction as described in the MR-400 application for removal of topsoil and fill dirt. Of the 171.5 acres, 100 acres are segmented for mining, 3 acres for haul roads, and approximately 60 acres held for the future. Wetland delineation, location, and related approvals will be obtained prior to initiation of mining activities. The total property is approximately 2,660 acres but is not entirely included in the mining permit. The mine segments will be reclaimed as ponds and grasslands in accordance with the reclamation plan. Stormwater and groundwater will be discharged after settling through wetlands associated with Rantowles Creek. No wetland impacts are anticipated with the proposed mining activity.

All applicable Project Policy Checklist(s) that apply to the proposed project must be submitted with this request form. (See www.scdhec.gov/environment/ocrm/czc for available Policy Checklists)

Submitted By: [Signature]
Date: 2/26/21

DHEC 0478 (03/2013)
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
The Agency's Coastal Zone Consistency (CZC) certification review of all activities within the Coastal Zone that require a State permit will be based on the policies contained within the project based checklists. For the CZC request to be complete, you must answer the questions contained within the policies segment relative to your project by checking off all that apply. More than one checklist may apply to your project based on the plan proposal. For example, a road or highway project might also require dredging and filling of coastal wetlands.

A. **Agriculture:**

**Required:** Will your proposed agriculture operation project or plans...

<table>
<thead>
<tr>
<th>a)</th>
<th>avoid impacts to productive tidal salt, brackish and freshwater wetlands by filling or other permanent alteration, including ditching for drainage from uplands?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
<tr>
<td>b)</td>
<td>(for filling, ditching, clearing, or excavation of wetlands) demonstrate mitigation sites or practices to offset the losses of wetlands consistent with the Division's Mitigation Guidelines? The types of mitigation include wetland buffers, creation of wetlands, and restoration of existing wetlands, offsite mitigation, and mitigation banking. Provide a summary of mitigation details on an attached document.</td>
</tr>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
<tr>
<td>c)</td>
<td>minimize negative impacts to water quality from sedimentation and erosion utilizing conservation techniques, including:</td>
</tr>
<tr>
<td></td>
<td>i. methods or techniques such as contouring to reduce direct surface water runoff in to adjacent wetlands or water bodies;</td>
</tr>
<tr>
<td></td>
<td>ii. maintenance and utilization of the natural drainage pattern of the land is encouraged as much as possible;</td>
</tr>
<tr>
<td></td>
<td>iii. use of buffer strips of natural vegetation along the edge between watercourses and cultivated soils is encouraged;</td>
</tr>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
<tr>
<td>d)</td>
<td>include best management practices (and any resultant regulations) designed to control nonpoint source runoff developed as part of the 208 Water Quality Planning process through the local Council of Governments?</td>
</tr>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
<tr>
<td>e)</td>
<td>be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage?</td>
</tr>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
</tbody>
</table>

**Recommended policies to be considered for agriculture projects in the Coastal Zone:**

a. Encouraging the utilization of detailed soil surveys prepared by the appropriate Federal and State Agencies whose responsibility is soil conservation;

b. That local land use plans consider the protection of agricultural lands from premature or undesirable conversion into other development activities;

c. Encouraging the full implementation of existing laws by local governments within the coastal zone to allow property tax incentives to protect farmlands from conversion to other uses;

d. That the soil testing facilities at Clemson Extension be utilized to determine the correct types and amounts of fertilizers to be applied to agricultural lands.
As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date

4.21.2020

B. Forestry

Required: Will your proposed forestry operation project or plans...

<table>
<thead>
<tr>
<th>a)</th>
<th>☐ encourage good forest management practices in order to maintain a supply of good quality timber into the future while protecting other forest values?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☑ or is this N/A?</td>
</tr>
<tr>
<td>b)</td>
<td>☐ avoid the disruption of salt, brackish or freshwater marshes for drainage or access ways where no feasible alternatives exist or provide mitigation measures as identified in the policies for each related activity? Explain the feasible alternatives that will be implemented in the summary section below.</td>
</tr>
<tr>
<td></td>
<td>☑ or is this N/A?</td>
</tr>
<tr>
<td>c)</td>
<td>☐ encourage erosion control methods for all phases of timber operations in order to reduce excessive erosion and sedimentation and avoid disruption to hydrologic cycles?</td>
</tr>
<tr>
<td></td>
<td>☑ or is this N/A?</td>
</tr>
<tr>
<td>d)</td>
<td>☐ include any onsite processing of timber products consistent with the Manufacturing Policies contained in Chapter IV of the CZMP?</td>
</tr>
<tr>
<td></td>
<td>☑ or is this N/A?</td>
</tr>
<tr>
<td>e)</td>
<td>☐ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Policies and Priority of Uses document located on the Resources section of the CZC webpage?</td>
</tr>
<tr>
<td></td>
<td>☑ or is this N/A?</td>
</tr>
</tbody>
</table>

Recommended policies to be considered for forestry project in the Coastal Zone:

a. Timber harvesting should be carried out in such a manner as to minimize effects on and protect soils, watersheds, aesthetics, wildlife, and recreational values. If damage does occur, restoration plans should be developed and carried out within a reasonable time;

b. Local land use plans should include retaining prime forest areas for sustained timber productivity in the future.

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date

9.21.2020
C. Mineral Extraction (Mining)

Required: Will your mining activity project or plans...

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| a) | ☑ require applicants for mining permits must submit an approved reclamation plan as required by the Agency's Mining and Reclamation Section under the S.C. Mining Act?  
  | ☐ or is this N/A?  |
| b) | ☑ exclude dredge or strip mining operations in wetland areas unless no feasible alternatives exist and the benefits of mining outweigh the adverse impacts and is consistent with the Dredging Policies contained in Chapter VIII of the CZMP?  
  | ☐ or is this N/A?  |
| c) | ☑ prevent direct stormwater discharge from upland sites into adjacent wetlands or water bodies to minimize negative impacts on water quality that includes the use of vegetated buffer areas, silt curtains or other erosion or sedimentation control methods?  
  | ☐ or is this N/A?  |
| d) | ☑ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs); as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage?  
  | ☐ or is this N/A?  |

Recommended policies to be considered for mineral extraction project in the Coastal Zone:

a. Provision of scenic buffer areas around active mining sites;

b. That study of mineral resources be made before land is committed to development, and those areas found to contain significant mineral resources be identified in local land use plans.

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date

[Signature]

9/21/2020
D. Manufacturing

Required: Will your manufacturing activity project or plans...

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>a.</td>
<td>☐ require the facility to be located on the waterfront based on an activity that would benefit from being located on shorefront areas unless there are no feasible alternatives?</td>
</tr>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
<tr>
<td>b.</td>
<td>☐ exclude the filling or other permanent alteration of productive fresh, brackish and saltwater wetland areas unless no feasible alternatives exist and any substantial environmental impact can be minimized?</td>
</tr>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
<tr>
<td>c.</td>
<td>☐ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Policies and Priority of Uses document located on the Resources section of the CZC webpage?</td>
</tr>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
<tr>
<td>d.</td>
<td>☐ (for filling, ditching, clearing, or excavation of wetlands) demonstrate mitigation sites or practices to offset the losses of wetlands consistent with the Division’s Mitigation Guidelines? The types of mitigation include wetland buffers, creation of wetlands, and restoration of existing wetlands, offsite mitigation, and mitigation banking. Provide a summary of mitigation details on an attached document.</td>
</tr>
<tr>
<td></td>
<td>☐ or is this N/A?</td>
</tr>
</tbody>
</table>
| e. | ☐ reduce erosion and sedimentation and limit the impacts from direct stormwater discharge into adjacent water bodies and wetlands by designing manufacturing operations away from sensitive areas by demonstrating the following means of reducing these problems and use of these methods where appropriate:  
  i. provide a buffer of natural vegetation between the facility and any wetland by utilizing a sufficient visual screen, a noise buffer, a purification system for stormwater runoff, or a protective area for more ecologically sensitive shoreline areas, especially fringing wetlands;  
  ii. control stormwater runoff, soil erosion, and accidental placement of sediments in wetland areas during site preparation;  
  iii. employ the use of permeable surfaces in parking lots and bulk storage areas to provide water recharge areas and minimize the effects of stormwater runoff;  
  iv. retain open space or natural (undisturbed) areas around manufacturing sites as buffer zones and recharge areas? |
|   | ☐ or is this N/A? |
| f. | ☐ avoid or minimize the disruption of wetlands by locating the industrial facility where waste discharges present the least ecological threat particularly in areas with good tidal flushing and water circulation and along watercourses with relatively low water quality classifications? (The goal is to meet applicable water quality and effluent limitation standards of the EPA and DHEC, under the National Pollution Discharge Elimination System (NPDES), Sections 431 and 402 of the Federal Water Pollution Control Act (PCA) Amendments.) |
|   | ☐ or is this N/A? |
g. □ meets applicable State and Federal air pollution standards and controls, as based on the National Clean Air Act, as amended?

☐ or is this N/A?

h. □ consider groundwater resources utilization either in the processing or effluent discharge stages of the production process by:
   i. meeting existing standards and/or management programs of the Agency’s BOW Groundwater Permitting;
   ii. prevent saltwater intrusion and land subsidence, to the extent feasible;
   iii. provide natural vegetated areas on the site where aquifer recharge can occur to mitigate the impacts of groundwater withdrawals, where feasible?

☐ or is this N/A?

i. □ meet applicable flood plain management and construction requirements based on the Federal Flood Insurance Program when located in flood zone areas?

☐ or is this N/A?

j. □ be designed so that the facility is located on maintained channels (to the maximum extent feasible) to reduce the need for dredging of new channels for new water-dependent industries?

☐ or is this N/A?

k. □ include docks or piers and berthing facilities associated with the manufacturing activity that minimize possible negative impacts?

☐ or is this N/A?

Recommended policies to be considered for manufacturing projects in the Coastal Zone:

a. Siting of industrial plants where they are served by existing transportation infrastructure, i.e. roads and highways, rail, ports and airports;

b. Development of local plans which direct manufacturing growth into areas committed to industrial use where services can be most readily provided;

c. Development of local plans which encourage comprehensive-type industrial parks, to facilitate well planned, well-managed manufacturing and industrial centers that promote the advantages of locating in the State;

d. Encouraging manufacturing that will provide significant new employment opportunities for coastal residents;

e. Considerations for minimizing noise and aesthetic impacts of manufacturing activities;

f. Considerations for allowing limited public access to the buffer zone as a recreational area.

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable policies, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date

9.21.2020
E. **Fish and Seafood Processing**

Required: Will your fish and seafood processing project or plans...

<p>| | | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>a.</td>
<td>□ meet applicable State and Federal water quality standards for drainage or discharge from the proposed seafood packing or processing operations?</td>
<td>☑ or is this N/A?</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>□ comply with policies for docks/piers and dredging/filling, where applicable?</td>
<td>☑ or is this N/A?</td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>□ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses document located on the Resources section of the CZC webpage?</td>
<td>☑ or is this N/A?</td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td>□ avoid significant adverse impacts on salt, brackish or freshwater wetlands, to the extent feasible unless no feasible alternatives exist and the public benefits outweigh the adverse impacts. Explain the feasible alternatives that will be implemented in the summary section below.</td>
<td>☑ or is this N/A?</td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>□ provide for adequate facilities for proper handling of sewage, litter and other waste products along the seafood processing docking areas?</td>
<td>☑ or is this N/A?</td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td>□ comply with the Agency's BoW and U.S. Coast Guard in the discharge of water used to pump out the holds of fishing vessels so that water quality is not unnecessarily degraded?</td>
<td>☑ or is this N/A?</td>
<td></td>
</tr>
</tbody>
</table>

*Recommended policies to be considered for fish and seafood processing projects in the Coastal Zone:*

a. *Consideration should be given to the utilization of fish wastes or by products for meal or fertilizers.*

**Required:**

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

[Signature]

9/21/2020

Signature and date
**F. Aquaculture**

**Required:** Will your aquaculture operation project or plans...

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
</table>
| a. | □ avoid the impoundment of previously undisturbed, productive salt, brackish or freshwater wetlands for aquaculture where other feasible alternatives exist?  
  ☑ or is this N/A? |
| b. | □ demonstrate compliance with applicable State and Federal water quality standards for discharge or drainage?  
  ☑ or is this N/A? |
| c. | □ consider the value and yield which is anticipated from the project weighed against any environmental damage, such as loss of habitat from impounded areas?  
  ☑ or is this N/A? |
| d. | □ include an acceptable operations management plan?  
  ☑ or is this N/A? |
| e. | □ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Polices and Priority of Uses documen: located on the Resources section of the CZC webpage?  
  ☑ or is this N/A? |

**Recommended policies to be considered for aquaculture projects in the Coastal Zone:**

<p>| | |</p>
<table>
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<th></th>
</tr>
</thead>
</table>
| a. | Encouraging research efforts for "passive aquaculture" as opposed to use of artificial impoundments including:  
  i. fixed structure aquaculture for example, setting supports and lines. This should be limited to open water areas where they can be placed on the periphery and not interfere with navigation;  
  ii. tray culture for shellfish;  
  iii. penning areas for soft shell crabs;  
  iv. trap culture for fish;  
  v. bottom culture, to avoid navigational problems;  
  vi. "agrarian" approaches, such as mechanized harvesters, seed beds, and restocking. |

**Required:**

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

*Signature and date*

9.21.2020
Sassafras Mine CZC – Coastal Industries
Supplemental Answers

A. AGRICULTURE
The project is not proposing agricultural operations.

B. FORESTRY
The project is not proposing any forestry operations.

D. MANUFACTURING
The project is not proposing any manufacturing operations.

E. FISH AND SEAFOOD PROCESSING
The project is not proposing any fish and seafood operations.

B. AQUACULTURE
The project is not proposing any aquaculture operations.
The Agency's Coastal Zone Consistency (CZC) certification review of all activities within the Coastal Zone that require a State permit will be based or the policies contained within the project based checklists. For the CZC request to be complete, you must answer the questions contained within the policies segment relative to your project by checking off all that apply. More than one checklist may apply to your project based on the plan proposal. For example, a road or highway project might also require dredging and filling of coastal wetlands.

A) Stormwater Runoff Storage – all projects located within one-half (1/2) mile of a receiving water body (not contiguous via an outfall or similar structure with a tidal water body):

Required: Will your proposed development project or plans...

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>□ demonstrate that storage of the first 1/2 inch of runoff from the entire site or storage of the first one (1) inch of runoff through retention, detention or infiltration systems, from the built-upon portion of the property, whichever is greater? (Storage may be accomplished through retention, detention, or infiltration systems as appropriate for the specific site.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>□ (for those projects which are located within one thousand feet of shellfish beds) demonstrate the first one and one half (1 1/2) inches of runoff from the built-upon portion of the property be retained on site?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>□ be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Policies and Priority of Uses document located on the Resources section of the CZC webpage?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non Applicable Policies:

Briefly provide reasons (for non applicability) on a supplemental page and attach to this checklist if any of these questions (policies) do not apply to the project.

Required:

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date: 9.21.2020

B) Golf Courses Adjacent to Receiving Water Bodies:

Required: Will your golf course project or plans...

<table>
<thead>
<tr>
<th></th>
<th>N/A</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>□ incorporate a minimum setback of 20 feet from any receiving water body for all manicured areas of the golf course (fairways, greens and tees) unless other acceptable management techniques are approved and implemented to mitigate any adverse impacts?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>□ demonstrate that all drainage from greens and tees will be routed to interior lagoons or an equivalent stormwater management system?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>□ demonstrate that all outfalls (from any lagoon system) is located at an elevation above the critical area (and if the discharge is to critical area) AND is above the normal water elevation a distance to allow for storage of the first one inch of runoff to prevent the conversion of the stormwater management system to critical area and to maintain positive drainage at high tides?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
d. **☐** demonstrate the conveyance of all drainage to the interior lagoon system or to an equivalent onsite stormwater management system for all greens and tees proposed to be located on marsh hummocks or islands, if applicable?

e. **☐** provide for a minimum 20 foot buffer, or an accepted alternative, between manicured areas (fairways, greens and tees) to limit stormwater impacts to freshwater wetlands?

f. **☐** be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Policies and Priority of Uses document located on the Resources section of the CZC webpage?

g. **☐** include an integrated pest management system designed in accordance with current best technology practices on the golf course to limit the application of chemicals which, if over applied, may leach into the ground and adjacent surface waters?

h. **☐** include a two (2) foot separation between the surface of the golf course and the groundwater table where spray effluent is applied?

i. **☐** demonstrate that the normal ground water elevation has been established by a registered engineer or soil scientist?

j. **☐** retain the first 1.5 inches of runoff as otherwise described in Policy Question c. for all projects which are within 1000 feet of shellfish beds?

k. **☐** demonstrate that in the event spray effluent or chemicals are applied to the turf via the irrigation system, all spray heads are located and set so as to prevent any aerosols from reaching adjacent critical areas?

**Non Applicable Policies:**

Briefly provide reasons (for non applicability) on a supplemental page and attach to this checklist if any of these questions (policies) do not apply to the project.

**Required:**

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date

9.21.2020

**C) Mine and Landfills:**

Required: Will your mine or landfill project or plans (for mines or landfills located within ¼ mile of a receiving waterbody)...

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td><strong>☐</strong> demonstrate that when pumping ground water from sediment basins, only floating intakes are used and that pumping ceases when water levels come to within two feet of the pond bottom?</td>
</tr>
<tr>
<td>b.</td>
<td><strong>☐</strong> be consistent with the Priority of Uses of each listed Geographic Areas of Particular Concern (GAPCs) as discussed in the Geographic Areas of Particular Concern (GAPCs) Policies and Priority of Uses document located on the Resources section of the CZC webpage?</td>
</tr>
</tbody>
</table>

**Non Applicable Policies:**

Briefly provide reasons (for non applicability) on a supplemental page and attach to this checklist if any of these questions (policies) do not apply to the project.

**Required:**

As applicant or agent, having completed all appropriate checklists and having read the applicable polices, I certify that this project is consistent with the South Carolina Coastal Zone Management Program based on the information outlined above and supplemental information attached.

Signature and date

9.21.2020
Sassafras Mine CZC – Stormwater Management

Supplemental Answers

A. STORMWATER MANAGEMENT

The project is not proposing any built upon portions of the property and is not located within 1,000 feet of shellfish beds.

B. GOLF COURSES ADJACENT TO RECEIVING WATER BODIES

The project is not proposing any golf course development.
May 19, 2021

Regulatory Division

Mr. Luke Bozich
Newkirk Environmental, Inc.
1887 Clements Ferry Road
Charleston, South Carolina 29492
luke@newkirkenv.com

Dear Mr. Bozich:

This is in response to your request for an Approved Jurisdictional Determination (AJD) (SAC-2020-01142) received in our office on August 19, 2020, for a 133-acre site located at 4421 Ashley River Road in Summerville, Dorchester County, South Carolina (Latitude: 32.8962°, Longitude: -80.1917°). An AJD is used to indicate that the U.S. Army Corps of Engineers (Corps) has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status as waters of the United States pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344) and/or navigable waters of the United States pursuant to Sections 9 and 10 of the Rivers and Harbors Act of 1899 (RHA) (33 U.S.C. § 401 et. seq.). This AJD is issued in accordance with the definition of Waters of the United States in Corps regulations at 33 C.F.R. §328.3, as revised by the Navigable Waters Protection Rule: “Definition of Waters of the United States,” 85 Fed. Reg. 22250 (April 21, 2020), which became effective on June 22, 2020.

The site is shown on the attached depiction entitled “Sassafras Timber Mining Permit Dorchester County, South Carolina” and dated August 2020 prepared by Newkirk Environmental, Inc. Based on Lidar data, a review of aerial photography, topographic maps, National Wetlands Inventory maps, soil survey information, and Wetland Determination Data Form(s), we conclude the site, as shown on the referenced depiction, does not contain any aquatic resources subject to regulatory jurisdiction under Section 404 of the CWA or Sections 9 and 10 of the RHA.

Attached is a form describing the basis of jurisdiction for the delineated area(s). Note that some or all of these areas may be regulated by other state or local government entities and you should contact the South Carolina Department of Health and Environmental Control, Bureau of Water, or Department of Ocean and Coastal Resource Management, to determine the limits of their jurisdiction.

This AJD is valid for five (5) years from the date of this letter unless new information warrants revision before the expiration date. This AJD is an appealable action under the Corps administrative appeal procedures defined at 33 CFR Part 331. The administrative appeal options, process and appeals request form is attached for your convenience and use.
The delineation included herein has been conducted to identify the location and extent of the aquatic resource boundaries and/or the jurisdictional status of aquatic resources for purposes of the Clean Water Act for the particular site identified in this request. This delineation and/or jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

In all future correspondence, please refer to file number SAC-2020-01142. A copy of this letter is forwarded to State and/or Federal agencies for their information. If you have any questions, please contact me, at (843) 329-8033, or by email at Jeremy.M.Kinney@usace.army.mil.

Sincerely,

Jeremy M. Kinney
Project Manager

Attachments:
Approved Jurisdictional Determination Form
Notification of Appeal Options
Sassafras Timber Mining Permit
   Dorchester County, South Carolina

Copies Furnished:
Mr. Cory Dukes
Timberland Investment Resources, LLC
14120 Ballantyne Corp. Place, Suite 525
Charlotte, North Carolina 28277
dukes@tirllc.com

SCDHEC – Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201
WQCWetlands@dhec.sc.gov

SCDHEC - OCRM
1362 McMillan Avenue, Suite 400
North Charleston, South Carolina 29405
OCRMPermitting@dhec.sc.gov
I. ADMINISTRATIVE INFORMATION
Completion Date of Approved Jurisdictional Determination (AJD): May 19, 2021
ORM Number: SAC-2020-01142
Associated JDS: N/A
Review Area Location1:
State: SC    City: Summerville    County: Dorchester County
Center Coordinates of Review Area: Latitude 32.8962 Longitude -80.1917

II. FINDINGS
A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A.
☐ There are “navigable waters of the United States” within Rivers and Harbors Act jurisdiction within the review area (complete table in section II.B).
☐ There are “waters of the United States” within Clean Water Act jurisdiction within the review area (complete appropriate tables in section II.C).
☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)2

<table>
<thead>
<tr>
<th>§ 10 Name</th>
<th>§ 10 Size</th>
<th>§ 10 Criteria</th>
<th>Rationale for § 10 Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters)3

<table>
<thead>
<tr>
<th>(a)(1) Name</th>
<th>(a)(1) Size</th>
<th>(a)(1) Criteria</th>
<th>Rationale for (a)(1) Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Tributaries ((a)(2) waters):

<table>
<thead>
<tr>
<th>(a)(2) Name</th>
<th>(a)(2) Size</th>
<th>(a)(2) Criteria</th>
<th>Rationale for (a)(2) Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Adjacent wetlands ((a)(4) waters):

<table>
<thead>
<tr>
<th>(a)(4) Name</th>
<th>(a)(4) Size</th>
<th>(a)(4) Criteria</th>
<th>Rationale for (a)(4) Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

1 Map(s)/Figure(s) are attached to the AJD provided to the requestor.
2 If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
3 A stand-alone TNW determination is conducted independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where independent upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD form.
4 Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
5 Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.
D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12))4:

<table>
<thead>
<tr>
<th>Exclusion Name</th>
<th>Exclusion Size</th>
<th>Exclusion</th>
<th>Rationale for Exclusion Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excluded Borrow Pit 1</td>
<td>0.23 acre</td>
<td>(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6)</td>
<td>Excluded Borrow Pit 1 within the review area is wholly excavated from uplands, does not contribute flow to an (a)(1) – (a)(3) water, and does not meet the criteria of a jurisdictional feature as identified in paragraph (c)(6).</td>
</tr>
<tr>
<td>Excluded Borrow Pit 2</td>
<td>1.36 acres</td>
<td>(b)(8) Artificial lake/pond constructed or excavated in upland or a non-jurisdictional water, so long as the artificial lake or pond is not an impoundment of a jurisdictional water that meets (c)(6)</td>
<td>Excluded Borrow Pit 2 within the review area is wholly excavated from uplands, does not contribute flow to an (a)(1) – (a)(3) water, and does not meet the criteria of a jurisdictional feature as identified in paragraph (c)(6).</td>
</tr>
</tbody>
</table>

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

- [X] Information submitted by, or on behalf of, the applicant/consultant: “Sassafras Timber Mining Site NEI Project # 01-4482a Dorchester County, South Carolina” dated August 18, 2020. This information is sufficient for purposes of this AJD. Rationale: N/A.

- [X] Data sheets prepared by the Corps: N/A.

- [X] Photographs: Site Photographs, dated August 2020, submitted as part of the JD request.

- [X] Antecedent Precipitation Tool: N/A.


- [X] USFWS NWI maps: NWI Map, dated August 2020, submitted as part of the JD request.

- [X] USGS topographic maps: USGS Quad Map, dated August 2020, submitted as part of the JD request.

Other data sources used to aid in this determination:

<table>
<thead>
<tr>
<th>Data Source (select)</th>
<th>Name and/or date and other relevant information</th>
</tr>
</thead>
<tbody>
<tr>
<td>USGS Sources</td>
<td>N/A.</td>
</tr>
<tr>
<td>USDA Sources</td>
<td>N/A.</td>
</tr>
<tr>
<td>NOAA Sources</td>
<td>N/A.</td>
</tr>
<tr>
<td>USACE Sources</td>
<td>USACE-SAC Regulatory Viewer</td>
</tr>
<tr>
<td>State/Local/Tribal Sources</td>
<td>N/A.</td>
</tr>
<tr>
<td>Other Sources</td>
<td>N/A.</td>
</tr>
</tbody>
</table>

B. Typical year assessment(s): N/A.

1 Map(s)/Figure(s) are attached to the AJD provided to the requestor.

2 If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.

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4 Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps Districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.

5 Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.
C.  Additional comments to support AJD: The 133-acre review area includes two (b)(8) excluded waters that are not subject to Section 404 of the Clean Water Act.

1 Map(s)/Figure(s) are attached to the AJD provided to the requestor.
2 If the navigable water is not subject to the ebb and flow of the tide or included on the District’s list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
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5 Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.
## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

### Applicant: Cory Dukes, Timberland Investment Resources, LLC  
**File Number:** SAC-2020-01142  
**Date:** 5/19/2021

### Attached is:

<table>
<thead>
<tr>
<th>Option</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)</td>
<td>A</td>
</tr>
<tr>
<td>PROFFERED PERMIT (Standard Permit or Letter of permission)</td>
<td>B</td>
</tr>
<tr>
<td>PERMIT DENIAL</td>
<td>C</td>
</tr>
<tr>
<td>APPROVED JURISDICTIONAL DETERMINATION</td>
<td>D</td>
</tr>
<tr>
<td>PRELIMINARY JURISDICTIONAL DETERMINATION</td>
<td>E</td>
</tr>
</tbody>
</table>

### SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at [http://usace.army.mil/inet/functions/cw/cecwo/reg](http://usace.army.mil/inet/functions/cw/cecwo/reg) or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:**

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:**

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.

- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:**

You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:**

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.

- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the Division Engineer, South Atlantic Division, 60 Forsyth St, SW, Atlanta, GA 30308-8801. This form must be received by the Division Engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:**

You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is **not appealable**. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.
**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

---

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

<table>
<thead>
<tr>
<th>If you have questions regarding this decision and/or the appeal process you may contact</th>
<th>If you only have questions regarding the appeal process you may also contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corps biologist who signed the letter to which this notification is attached. The name and telephone number of this person is given at the end of the letter.</td>
<td>Mr. Philip A. Shannin Administrative Appeal Review Officer CESAD-PDS-O 60 Forsyth Street Southwest, Floor M9 Atlanta, Georgia 30303-8803</td>
</tr>
</tbody>
</table>

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

| Signature of appellant or agent. | Date: | Telephone number: |

---
Sassafras Timber Mining Permit
Dorchester County, South Carolina

Project #: 01-4482a Date: August 2020
Created by: LAB

Data Point Map

Upland Data Point
Lat: 32.8956
Long: -80.1885

Excluded Borrow Pit 1
0.23 Acres

Excluded Borrow Pit 2
1.36 Acres

Newkirk
ENVIRONMENTAL INC.
August 18, 2020

Ms. Courtney Stevens
US Army Corps of Engineers
Watershed Group 2 Manager
69A Hagood Avenue
Charleston, SC 29403-5107

RE: Sassafras Timber Mining Site
NEI Project # 01-4482a
Dorchester County, South Carolina

Dear Ms. Stevens,

Reference is made to a +/- 133 acre tract of land located on Delemar Highway in Dorchester County, South Carolina. The wetland determination of this area has been completed by Newkirk Environmental, Inc. using methods outlined in the US Army Corps of Engineers Wetland Delineation Manual, 1987 and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region, November 2010.

Enclosed are copies of an accurate location map, an aerial photograph, Soil Survey, data sheets representing typical site conditions, a map depicting the data point locations, USGS topographic survey, NWI maps, and photographs of the site. A survey plat is forthcoming. Please review this information to verify the accuracy of Newkirk Environmental, Inc.’s preliminary determination.

In addition, we located two borrow pits on site. Historical photos will show that the areas were excavated as far back as 1989.

Please do not hesitate to call if you have any questions regarding this project, if additional information is needed or to schedule a site visit.

Sincerely,

Luke Bozich, Field Biologist
Charleston, South Carolina

Enclosures
U.S. Army Corps of Engineers -- Charleston District - Regulatory Division
REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD) / Delineation
(For Jurisdictional Status and Identifying Wetlands and Other Aquatic Resources)

I. PROPERTY AND AGENT INFORMATION

A. Site Details/Location:

| Site Name: | Samsatia Timber Mining |
| City/Township/Parish: | Summerville |
| County: | Dorchester |
| Latitude/Longitude: | 32.9356, -90.91685 |
| Tax Map Sequence (TMS) #: | 17B 9-00-001 |
| Property Address(es): | Defined Herein |

Please attach a survey/plan map and vicinity map identifying location and review area for the JD/delineation. An accurate depiction of the review area must be provided (survey, tax map, or GPS coordinates). Tax maps may only be used if the site includes the entire tax map parcel.

B. Requestor of Jurisdictional Determination/Delineation (if there are multiple property owners, please attach additional pages)

Name: Gay Duke
Company Name (if applicable): Timberland Investment Resources, LLC
Address: 2150 McAlpine Corp. Place, Suite 625 Charlotte, NC 28277
Phone: 704-236-3228
Email: d. duke@birlic.com

Check one:

- I currently own this property
- I plan to purchase this property
- XX Other, please explain: St. Investment Forester

C. Agent/Environmental Consultant Acting on Behalf of the Requestor (if applicable):

Consultant/Agent Name: Luke Brodie
Company Name: Newick Environmental
Address: 1987 Clements Ferry Charleston SC
Phone: 843-872-4005
Email: luke@newickservco.com

II. REASON FOR REQUEST (check all that apply)

- I intend to construct/develop a project or perform activities on this site which would be designed to avoid all aquatic resources.
- I intend to construct/develop a project or perform activities on this site which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
- I intend to construct/develop a project or perform activities on this site which may require authorization from the Corps, and the Jurisdictional Determination would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
- I intend to construct/develop a project or perform activities on this site which may require authorization from the Corps; this request is accompanied by my permit application and the jurisdictional determination is to be used in the permitting process.
- I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is subject to the ebb and flow of the tide.
- A Corps jurisdictional determination is required in order to obtain my local/state authorization.
- I intend to contest jurisdiction over a particular aquatic resource and the request the Corps to confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
- X I believe that the site may be comprised entirely of dry land.
- XX Other: 

<table>
<thead>
<tr>
<th>Charleston Office:</th>
<th>US Army Corps of Engineers Regulatory Division 89A Hagood Avenue Charleston, SC 29403 (ph) 843-339-9044</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia Office:</td>
<td>US Army Corps of Engineers Regulatory Office 1835 Assembly Street, Room 605 B-1 Columbia, SC 29201 (ph) 803-259-2444</td>
</tr>
<tr>
<td>Conway Office:</td>
<td>US Army Corps of Engineers Regulatory Office 1949 Industrial Park Road, Room 140 Conway, SC 29526 (ph) 843-365-4239</td>
</tr>
</tbody>
</table>

*Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 330-332.*

*Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.*

*Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.*

January 2019
III. TYPE OF REQUEST:

___ Delineation Concurrence¹

X Approved² Jurisdictional Determination (AJD) Only

___ Preliminary³ Jurisdictional Determination (PJD) Only

___ Approved Jurisdictional Determination (AJD) with submittal of a Pre-Construction Notification or Department of the Army permit application

___ Preliminary Jurisdictional Determination (PJD) with submittal of a Pre-Construction Notification or Department of the Army permit application

Delineation of Wetlands and/or Other Aquatic Resources Only Conducted By Agent/Environmental Consultant with submittal of a Pre-Construction Notification or Department of the Army permit application (No jurisdicional determination requested)

___ I request that the Corps delineate the wetlands and/or other aquatic resources that may be present on my property with the attached Pre-Construction Notification or Department of the Army permit application

___ I request that the Corps delineate the wetlands and/or other aquatic resources that may be present on my property with a Delineation Only, an AJD or PJD

___ "No Permit Required" (NPR) Letter as I believe my proposed activity is not regulated⁴

___ Unclear as to which jurisdictional determination I would like to request and require additional information to inform my decision

¹ Delineation Concurrence (DC) – A DC provides concurrence that the delineated boundaries of wetlands on a property are a reasonable representation of the aquatic resources on-site. A DC does not address the jurisdictional status of the aquatic resources.

² Approved – An AJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, an AJD is used to indicate that this office has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status. AJDs are valid for 5 years.

³ Preliminary – A PJD is defined in Corps regulations at 33 CFR 331.2. As explained in further detail in RGL 16-01, a PJD is used to indicate that this office has identified the approximate location(s) and boundaries of wetlands and/or other aquatic resources on a site that are presumed to be subject to regulatory jurisdiction of the Corps of Engineers. Unlike an AJD, a PJD does not represent a definitive, official determination that there are, or that there are not, jurisdictional aquatic resources on a site, and does not have an expiration date.

⁴ "No Permit Required" (NPR) Letter: A NPR letter may be provided by the Corps to notify the requestor that an activity will not require a permit (authorization) from the Corps; this letter can only be used if the proposed activity is not a regulated activity, regardless of where the activity may occur. A NPR letter cannot be used to indicate the presence or absence of wetlands and/or other aquatic resources, nor can it be used to determine their jurisdictional status.

IV. LEGAL RIGHT OF ENTRY

By signing below, I am indicating that I have the authority, or am acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant U.S. Army Corps of Engineers personnel right of entry to legally access the property(ies) subject to this request for the purposes of conducting on-site investigations (e.g., digging and refilling shallow holes) and issuing a jurisdictional determination. I acknowledge that my signature is an affirmation that I possess the requisite property rights to request a jurisdictional determination on the properties subject to this request.

Mailing Address

Property Address / TMS #(s)

Email Address

Daytime Phone Number

*Signature:

Printed Name and Date

*Authorities: Rivers and Harbors Act, Section 10, 33 USC 493; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 163, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.

Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.

Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District’s website and on the Headquarters USACE website.

Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an jurisdictional determination cannot be evaluated nor can a jurisdictional determination be issued.

January 2020
Sassafras Timber Mining Permit
Dorchester County, South Carolina
Northern view of upland

Eastern view of upland

Sassafras Timber Mining Site
Dorchester County, South Carolina
WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Sassafras timber mining site  City/County: Dorchester  Sampling Date: 2020-08-18
Applicant/Owner: Newkirk ENV  State: South Carolina  Sampling Point: Upland
Investigator(s): Summerville  Section, Township, Range: 
Landform (hillslope, terrace, etc.): Upland, Flat  Local relief (concave, convex, none): 
Subregion (LRR or MLRA): T153A  Slope (%): 
Lat: 32.8956299  Long: -80.1885332  Datum: NAD 83
Soil Map Unit Name: ChA  NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☑️ No ☐☐ (If no, explain in Remarks.)
Are Vegetation _______, Soil _______, or Hydrology _______ significantly disturbed? Are "Normal Circumstances" present? Yes ☑️ No ☐☐
Are Vegetation _______, Soil _______, or Hydrology _______ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

<table>
<thead>
<tr>
<th>Hydrophytic Vegetation Present?</th>
<th>Yes ☑️ No ☐☐</th>
<th>Is the Sampled Area within a Wetland?</th>
<th>Yes ☑️ No ☐☐</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydric Soil Present?</td>
<td>Yes ☑️ No ☐☐</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wetland Hydrology Present?</td>
<td>Yes ☑️ No ☐☐</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remarks:
Wetland Criteria not met

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15) (LRR U)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of 1 required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C6)
- Geomorphic Position (D2)
- Shallow Aquifard (D3)
- FAC-Neutral Test (D5)
- Sphagnum moss (D8) (LRR T, U)

Field Observations:

<table>
<thead>
<tr>
<th>Surface Water Present?</th>
<th>Yes ☑️ No ☐☐</th>
<th>Depth (inches):</th>
<th>Water Table Present?</th>
<th>Yes ☑️ No ☐☐</th>
<th>Depth (inches):</th>
<th>Saturation Present?</th>
<th>Yes ☑️ No ☐☐</th>
<th>Depth (inches):</th>
<th>Wetland Hydrology Present?</th>
<th>Yes ☑️ No ☐☐</th>
</tr>
</thead>
</table>

Remarks:
Wetland criteria not met
### Vegetation (Four Strata) – Use Scientific Names of Plants

**Sampling Point:** Upland

#### Tree Stratum (Plot size: 30 ft r)

<table>
<thead>
<tr>
<th>Species</th>
<th>Absolute % Cover</th>
<th>Dominant Species?</th>
<th>Indicator Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinus taeda</td>
<td>20</td>
<td>✓</td>
<td>FAC</td>
</tr>
<tr>
<td>Liquidambar styraciflua</td>
<td>15</td>
<td>✓</td>
<td>FAC</td>
</tr>
<tr>
<td>Quercus nigra</td>
<td>10</td>
<td>✓</td>
<td>FAC</td>
</tr>
</tbody>
</table>

#### Sapling/Shrub Stratum (Plot size: 30 ft r)

- Total % Cover of Sapling/Shrub: 23
- 20% of total cover: 9

#### Herb Stratum (Plot size: 30 ft r)

<table>
<thead>
<tr>
<th>Species</th>
<th>Absolute % Cover</th>
<th>Dominant Species?</th>
<th>Indicator Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eupatorium capillifolium</td>
<td>10</td>
<td>✓</td>
<td>FACU</td>
</tr>
<tr>
<td>Pteridium aquilinum</td>
<td>10</td>
<td>✓</td>
<td>FACU</td>
</tr>
</tbody>
</table>

#### Woody Vine Stratum (Plot size: 30 ft r)

<table>
<thead>
<tr>
<th>Species</th>
<th>Absolute % Cover</th>
<th>Dominant Species?</th>
<th>Indicator Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitis rotundifolia</td>
<td>10</td>
<td>✓</td>
<td>FAC</td>
</tr>
</tbody>
</table>

#### Dominance Test Worksheet

- Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
- Total Number of Dominant Species Across All Strata: 6 (B)
- Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

#### Prevalence Index Worksheet

- Total % Cover of: 0
- Multiply by: 1

- OBL species: 0 x 1 = 0
- FACW species: 0 x 2 = 0
- FAC species: 55 x 3 = 165
- FACU species: 20 x 4 = 80
- UPL species: 0 x 5 = 0

- Column Totals: 75 (A) 245 (B)

- Prevalence Index: B/A = 3.3

#### Hydrophytic Vegetation Indicators

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0
- 1 - Problematic Hydrophytic Vegetation

#### Definitions of Four Vegetation Strata

- **Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
- **Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
- **Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
- **Woody Vine** – All woody vines greater than 3.28 ft in height.

#### Hydrophytic Vegetation Present?

- Yes ____, No __

**Remarks:** (If observed, list morphological adaptations below).
### SOIL

**Profile Description:** (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

<table>
<thead>
<tr>
<th>Depth (inches)</th>
<th>Color (moist)</th>
<th>%</th>
<th>Redox Features</th>
<th>Color (moist)</th>
<th>%</th>
<th>Type</th>
<th>Loc</th>
<th>Texture</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 10</td>
<td>10YR 5/3</td>
<td>10C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sand</td>
<td></td>
</tr>
<tr>
<td>10 - 20</td>
<td>10YR 5/6</td>
<td>10C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sand</td>
<td></td>
</tr>
</tbody>
</table>

1. **Type:** C=Concentration, D=Depletion, RM=Reduced Matrix, M5=Masked Sand Grains.
2. **Location:** PL=Pore Linings, M=Matrix.

**Hydric Soil Indicators:** (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Eppedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A1')
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR C, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)
- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochreric (F11) (MLRA 151)
- Iron-Manganese Mosaic (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochreric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Restrictive Layer (if observed):**

- Type:  
- Depth (inches):  

**Hydric Soil Present?**  
Yes  
No  

**Remarks:**