

# South Carolina Department of Natural Resources

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Alvin A. Taylor  
Director  
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*Submitted electronically*

May 1, 2018

Mr. Joe Koon  
SCDHEC  
BLWM/DMSWM  
2600 Bull Street  
Columbia, SC 29201-1708

REFERENCE: Mining Application # I-002171, RDA LLC  
RDA Mine, Williamsburg County

Dear Mr. Koon:

Personnel with the South Carolina Department of Natural Resources (SCDNR) reviewed the proposed RDA Mine in Williamsburg County and provided comments in letters dated October 20, 2017 and January 25, 2018. SCDNR also provided comments in an email on March 13, 2018. SCDNR offers the following additional comments and recommendations.

The proposed mine is located approximately 5 miles northwest of Andrews near the intersection of US 521 and Jumping Run Road. The applicant proposes to mine limestone from the 968-acre site. The permit application indicates that the average depth of mining will be approximately 55 feet from the ground surface with a maximum depth of 65 feet and a maximum pit floor elevation of 21 feet below mean sea level. The information provided indicates that there are 92.8 acres of jurisdictional wetlands and 25.47 acres of isolated wetlands on the tract. The applicant has subsequently received authorization under Nationwide Permit 44 from the U.S. Army Corps of Engineers to impact up to 0.394 acres of jurisdictional wetlands. The wetlands outside the proposed disturbance areas are planned for protection with a 50 foot upland buffer. The wetland buffers along Murray Swamp will be either 75 feet wide or to the 35 foot elevation contour, whichever is greater, except for adjacent to the sediment/water storage basin which will remain at 50 feet. A proposed reclamation plan has been submitted, indicating the site will be restored to lakes and grasslands after mining.

RDA, LLC (the applicant) has made the following commitments with regard to the proposed mining permit application. SCDNR recommends that these commitments be incorporated as permit conditions.

- An automatic shutoff valve will be installed in the proposed pit water conveyance system across Murray Swamp to interrupt the flow of water in the event of a break in the pipe. SCDNR further recommends that a protocol for inspection, maintenance, emergency spillage containment and repair and emergency contact information be developed and incorporated into the mine operating permit.

- The RDA Mine site will be surveyed for spotted turtles (*Clemmys guttata*), Carolina gopher frogs (*Rana [Lithobates] capito*), and Eastern tiger salamanders (*Ambystoma tigrinum*) as requested by SCDNR. Spotted turtles are a state-threatened species and are considered at-risk by the U.S. Fish and Wildlife Service (USFWS). Carolina gopher frogs are both a state-endangered and an at-risk species and Eastern tiger salamanders are a conservation species of concern included in the State Wildlife Action Plan (SWAP). SWAP species are those species of greatest conservation need not traditionally covered under any federal funded programs. Species are listed in the SWAP because they are rare or designated as at-risk due to knowledge deficiencies; species common in South Carolina, but listed rare or declining elsewhere; or species that serve as indicators of detrimental environmental conditions. SCDNR recommends that appropriate measures should be taken to minimize or avoid impacts to these species of concern and will coordinate with the applicant to develop a protocol for these surveys and any species-specific management plans that are required.

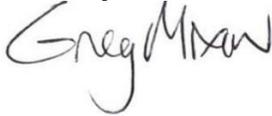
SCDNR does not have an objection to the issuance of the proposed mine operating permit provided that the following additional stipulations are incorporated as permit conditions.

- The applicant has provided preliminary water quality assessment data sampled upstream, on-site and downstream locations on Murray Swamp on October 26, 2017. SCDNR recommends that water quality monitoring data should continue to be collected at these same locations (Tad Road, Jumping Run Road and Wheeler Road). The following water quality data parameters should be collected monthly: dissolved oxygen, temperature, conductivity, pH, and turbidity.
- The applicant has indicated the use of vegetative filter areas on the proposed mine site. Many of these areas are located adjacent to wetlands and buffer areas. SCDNR recommends that these vegetative filter areas remain in natural vegetation to the greatest extent practicable. If these areas must be cleared or disturbed, SCDNR recommends they be replanted with native warm season grasses and/or other native forbs that would be beneficial for wildlife and pollinators for stabilization and cover. Native warm season grass species suggestions include: indiangrass (*Sorghastrum nutans*), big bluestem (*Andropogon gerardii*) and little bluestem (*Schizachyrium scoparium*). A list of beneficial pollinator plant species, such as milkweed (*Asclepias spp.*), may be found at [www.xerces.org/pollinators-southeast-region/](http://www.xerces.org/pollinators-southeast-region/) or at <http://www.pollinator.org/guides>. For planting details of quantities and timing, we recommend coordinating with the Natural Resources Conservation Service's Soil & Water Conservation Office or Clemson Extension for Williamsburg County.
- SCDNR also recommends the use of the above native warm season grasses and forbs for mining areas proposed to be reclaimed as grasslands.
- Land disturbance should be kept to a minimum and accomplished in phases, when possible. Disturbed areas should be exposed only for the period of time required to extract the resource and vegetation should be re-established promptly.
- Land clearing should not begin until sediment basins and other conservation practices have been established. Clearing should be limited to the areas to be immediately mined.
- The number of overburden piles should be kept to a minimum and runoff should be diverted into sediment basins until vegetation can be established. Overburden piles should not be placed in drainage-ways or floodways.
- The project must be in compliance with any applicable floodplain, stormwater, land disturbance, or riparian buffer ordinances.

Mining Application # I-002171,  
RDA LLC, RDA Mine  
May 1, 2018

Should you have any questions or need more information, please do not hesitate to contact me by email at [mixon@dnr.sc.gov](mailto:mixon@dnr.sc.gov) or by phone at 803.734.3282.

Sincerely,

A handwritten signature in black ink that reads "Greg Mixon". The signature is written in a cursive style with a large, stylized "G" and "M".

Greg Mixon  
Inland Environmental Coordinator

cc: Mark Caldwell – USFWS  
Tommy Fennel - USACE  
Chuck Hightower – SCDHEC/401  
Pace Wilbur – NMFS