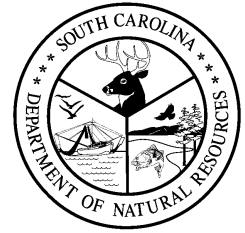


South Carolina Department of Natural Resources

1000 Assembly Street Suite 336
PO Box 167
Columbia, SC 29202



Alvin A. Taylor
Director
Lorianne Riggan
Director, Office of
Environmental Programs

January 25, 2018

Electronic Submission

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 project and provided comments dated October 20, 2017. SCDNR personnel have subsequently reviewed additional information provided by the applicant's agent included in a cover letter with attachments dated December 7, 2017. As such, SCDNR offers the following additional comments.

Project Description

The basic project description has not changed since our previous letter; however, the applicant has revised the permit application to include a proposed conveyor crossing constructed on a 440' by 15' service road across Murray Swamp. This new crossing would increase the proposed jurisdictional wetland impacts to 0.394 acre. The applicant has also proposed to increase the undisturbed buffers along portions of Murray Swamp from 50' to 75'.

Agency Concerns

Threatened and Endangered Species

According to SCDNR data, there are currently no records of threatened and endangered species on the project site; however, there are records of spotted turtles (*Clemmys guttata*) along U.S. Highway 521 approximately 5 miles from the site. Spotted turtles are a state-threatened species and are considered at-risk by the U.S. Fish and Wildlife Service (USFWS). Spotted turtles are a semi-aquatic species that inhabit a variety of wetland types that occur across the Coastal Plain of South Carolina including floodplain areas such as Murray Swamp. Carolina gopher frogs (*Lithobates capito*) are known to breed and live in isolated, temporary freshwater wetlands such as the lime sinks and flatwood ponds found on this site. Carolina gopher frogs are both a state-endangered and an at-risk species. Eastern tiger salamanders (*Ambystoma tigrinum tigrinum*) are also known to occur in isolated, temporary freshwater wetlands such as those found on site. 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

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species that serve as indicators of detrimental environmental conditions. More information on SWAP species is available at: <http://www.dnr.sc.gov/swap/species2015.html>. SCDNR recommends that appropriate measures should be taken to minimize or avoid impacts to the above species and their habitat. Please keep in mind that information in regards to the presence or absence of species is derived from existing databases, and SCDNR does not assume that it is complete. Areas not yet inventoried by SCDNR biologists may contain significant species or communities.

Proposed Conveyor Crossing

SCDNR has reviewed the information regarding the proposed conveyor crossing of Murray Swamp and has the following concerns. The information provided indicates that the proposed conveyor undercarriage will be constructed at an elevation to prevent inundation during a 100-year flood event; however, there is no information that indicates that the conveyor supports will be designed to withstand high flows and any debris carried by high flow events. SCDNR personnel have reviewed our files and other available information and are not aware of any mining conveyor crossings of similar floodplain wetland systems in South Carolina. SCDNR requests that the applicant provide specific examples and information regarding existing conveyor crossings of similar wetland systems in South Carolina or other southeastern states.

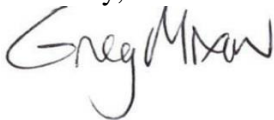
Conveyance of Pit Water across Murray Swamp

SCDNR recommends that pit water not be pumped across Murray Swamp during periods when TSS concentrations are high. The pump should be equipped with an automatic shutoff system and a plan should be developed to inspect and monitor the pipe on a routine basis to prevent spillage.

SCDNR recommends that the above concerns be addressed prior to the issuance of the proposed permit. SCDNR will provide a final permit recommendation and any additional comments upon receipt of the applicant's response.

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

Sincerely,



Greg Mixon
Inland Environmental Coordinator

cc: Mark Caldwell - USFWS