

Kennedy
Consulting KCS Services, LLC

*P.O. Box 364
Irmo, SC 29063
Tel. 803.399.1133*

*403 Seaside Ct.
Lexington, SC 29072
Cell 803.960.2562*

craigkennedy.KCS@gmail.com

August 3, 2017

Ms. Crystal Rippy
SC Department of Health & Environmental Control
Industrial Wastewater Permitting Section
2600 Bull Street
Columbia, SC 29201

RE: *NOI NPDES General Permit for Discharges Assoc.
w/ Nonmetallic Mineral Mining Facilities
RDA, LLC - RDA Quarry
Williamsburg County*

Dear Ms Rippy:

On behalf of RDA, LLC, please find attached to this email the NOI and other documents to secure NPDES General Permit coverage for the RDA Quarry. The full listing of attached documents is shown below. The \$100 NOI fee is included.

NOI Package Documents

- 1) NPDES NOI for Mineral Mining - RDA Quarry;
- 2) RDAMine Map
- 3) RDA Quarry - USGS 7.5' Topographic Map for NPDES NOI
- 4) Erosion & Control Maps (3 map set)

If you should have any questions, please do not hesitate to contact me.

Sincerely,



Craig Kennedy, P.G.
Principal

Attachments

cc Clark Wooten

RECEIVED

AUG 03 2017

WATER FACILITIES
PERMITTING DIVISION



**Notice of Intent (NOI)
 NPDES General Permit for Discharges
 Associated with Nonmetallic Mineral Mining Facilities
 SCG730000**

Submission of this Notice of Intent constitutes notice that the party identified in this form intends to be authorized by a NPDES permit issued for Nonmetallic Mineral Mining discharges in a State location identified in this form. Becoming a permittee obligates such a discharge to comply with all terms and conditions of the permit. **ALL NECESSARY INFORMATION MUST BE INCLUDED WITH THIS FORM. AN ANNUAL OPERATING FEE OF \$100 IS REQUIRED FOR COVERAGE UNDER THIS PERMIT. See Instructions.**

I. Site/Operator Information

Name of the Mining or Pit Site: RDA Quarry
 Site Address: Not available
 Site City: Andrews State: SC Site County: Williamsburg Site ZIP (if available): 29510
 Tax map # (list all): 45-360-002; 45-335-995; 45-360-001
 Company/Operator Name: RDA, LLC Phone: 910-385-4675
 Company/Operator Physical Address (do not use PO Boxes): 1950 Easy Street
 City: Dunn State: NC ZIP: 28334 Operator Status: Federal State
 Public Private

II. Site Contact Information

Contact Name: Clark Wooten Phone: 910-385-4675
 Contact Title: Manager
 Mailing and Billing Address: PO Box 527
 City: Newton Grove State: NC ZIP: 28366 Email (optional): cwooten@buysod.com

III. Site and Discharge Information

A. Materials to be Mined: Limestone (if material is mined solely as fill dirt, write **fill dirt** in the blank, not "sand" or "clay")
 B. SIC or Activity Codes: Primary: 1422 2nd: _____ 3rd: _____ 4th: _____
 (The primary SIC codes for nonmetallic mining activities are in the 1400 series, for example fill dirt pits have the SIC code of 1499. Please list any other SIC codes that apply to this activity.)
 C. Total number of acres to be affected by the mining activity: 622.7
 D. Does the site currently have Nonmetallic Mineral Mining Discharge General Permit coverage?
 If **Yes** complete this permit number SCG73; otherwise mark No
 E. List any other NPDES or ND Permit numbers for the site: SC SC ND AUG 03 2017
 F. Is this site exempt from the Mining Act? Yes, Reason for exemption: _____ No, Mining Permit #: _____
 G. Will this site discharge mine dewatering (see instructions for definition)? Yes No
 Will this site discharge a process-generated wastewater (see instructions for definition)? Yes No
 Will this site discharge mine equipment wash water (see instructions for definition)? Yes No
 Will this site discharge suction dredge water (see instructions for definition)? Yes No
 H. Provide the latitude and longitude (to the nearest 15 seconds) of the site, and the name of the nearest receiving water body (ex: to unnamed tributary to Saluda River). If any answer in G. above is "yes", also list each outfall and the flow (in gallons per day).

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**WATER FACILITIES
 PERMITTING DIVISION**

Outfall Number or Storm Water	Flow (gallons per day)	Latitude			Longitude			Receiving Waters
		Deg	Min	Sec	Deg	Min	Sec	
001	2.2 MG/D	33	28	35	- 79	38	45	Murray Swamp to Black River

- I. Describe the discharge flow path from the point it exits the system to the point it enters the receiving water (attach a separate sheet if more space is needed). Please note, if applicable, that easements have been obtained for any conveyances of the discharge not on property of the permittee, which are not waters of the State.

Discharge from the site enters Murray Swamp at the 001 outfall. The path from Murray Swamp to Johnson's Swamp, Horse Pen Swamp to Black River. An easement is not necessary because the discharge will be directly into waters of the State.

- J. Locate the site and any discharges on a U.S. Geological Survey 7½ minute quad sheet. An 8½ x 11 copy of the portion of the map with the site and the discharge identified should be submitted with this NOI.

USGS Map Quadrant Name: Trio 7.5' USGS Topographic Map

- K. Provide a map of the site that shows the following:

- The property boundary and all areas that will be affected by mining activities (i.e. the pits or excavation areas, overburden areas, material stockpiles, etc.)
- Location of planned access and haul roads on the area to be affected.
- 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.
- A legend showing the name of applicant, name of the proposed mine, north arrow, county, scale, date of preparation and name and title of the person who prepared the site map.

- L. Describe all operations that contribute wastewater to the discharge and any treatment that is provided. Attach any existing data on the quality of the discharge.

The primary component of the discharge will consist overwhelmingly of groundwater pumped from the pit to facilitate mining. Stormwater runoff where feasible will be routed into the pit for containment and treatment. Treating groundwater to remove sediment will begin at the groundwater pump station. The groundwater treatment prior to discharge will through a 9.9 acre sediment retention and water storage pond.

The process plant will generate wastewater from the wash stone circuit. However, the wash water will be routed through a closed circuit series of clarification ponds to remove the limestone fines and recirculate the water to the process plant.

- M. Use the space below to bring to the Department's attention any additional information you feel should be considered in the permit decision. Attach an additional sheet if necessary.

See attached narrative, RDA Quarry Mine Dewatering and Sediment Control.

IV. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Print Name: CLARK WOOTEN Title: MANAGER

Signature: [Handwritten Signature] Date: 7-24-17

RDA Quarry Mine Dewatering and Sediment Control

The RDA Quarry will mine limestone to an approximate maximum depth of 60 feet with the average depth ranging from 50 to 55 feet. The mining process involves clearing the land of vegetation, stripping the overburden to expose the limestone and then drilling and blasting. To facilitate mining, groundwater will be lowered in the pit that subsequently will be discharged to waters of the State. To protect water quality of the receiving streams, RDA will use commonly used techniques that have provided satisfactory results at other mine sites.

For the RDA Quarry, an important sediment control strategy will be to limit the area of disturbance to what is necessary to conduct safe mining operations. The primary sediment control strategy to manage stormwater from disturbed land will be to route into the open pit. Silt fence/brush barrier, diversions, undisturbed buffer and revegetation will be used to control sediment from the berm's outside slope and other areas where it's not feasible to route stormwater into the pit. Routing stormwater into the pit will provide significant control in preventing sediment from leaving the mine area. As to be described in this narrative, the open pit will provide enhanced settling time to trap sediment and centralize the mine water discharges through one location for better sediment control (NPDES Outfall 001) that will require the mine water discharges to comply with NPDES numeric effluent limits.

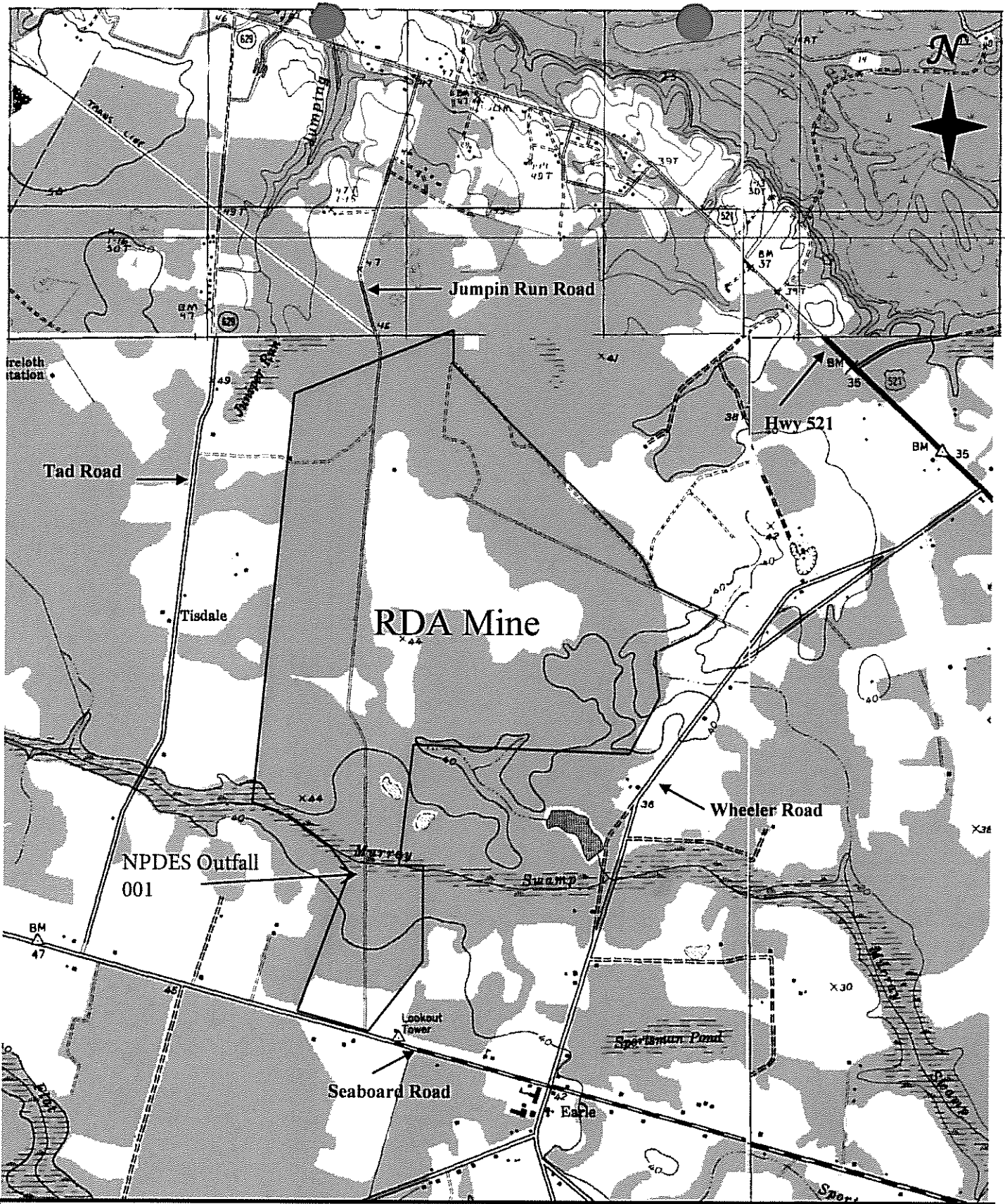
The groundwater table at RDA Quarry site is approximately 5 feet below ground surface (*Hydrogeologic Evaluation of the RDA, LLC Property, Williamsburg County, SC*). To facilitate mining, the groundwater levels within the open pit will be lowered (pit dewatering). The extent of pit dewatering is yet to be determine but the options will range from all groundwater removed from the pit (dry mining) verses no groundwater removed from the pit ("total" wet mining). The extent of pit dewatering will be an operational consideration depending on several factors that include, but not limited to, safety, economic and environmental considerations. However, regardless of the extent of pit dewatering RDA, LLC will limit the groundwater drawdown beyond the open pit boundary to no deeper than the top of the limestone at the permit boundary or from an adjacent landowner property boundary who grants a waiver to allow the groundwater drawdown below the top of the limestone on their property (*SC DHEC Application for Mine Operating Permit; Section V Safety, Question 1 in Groundwater Withdrawals subsection*).

Mining is scheduled to begin in Segment 5 (*RDA Mine Map*). The pump station will initially be located in Segment 5 to manage the groundwater levels. At the groundwater dewatering pump station, a sump will be created to provide a free standing pool of water. The sump with its free standing water pool also provides a sediment trap that will minimized or eliminated the dewatering pump's intake of sediment at the pump station. As mining advances, the free standing water pool will expand if the pit is not completely dewatered. The implication of the expanding free standing pool of water is ever increasing storage for stormwater and greater control over sediment within the open pit.

The groundwater and stormwater from the groundwater pump station will be directed to the sediment retention and water storage pond located adjacent to the process plant. The 9.9 acre pond will allow suspended sediment to settle before discharge. The water will exit the sediment basin by gravity and flow into Murray Swamp. Rip rap or other suitable devices will be use to reduce the velocity of the discharge into Murray Swamp.

The estimated maximum discharge rate from the RDA Quarry is 2.2 M gallons/day through the NPDES outfall. (This assumes a dry mine operation for all 45 acres of Segment 5.) Furthermore, it is anticipated that this maximum rate of discharge occurs during the first 5 - 7 years of mining. As the pit increases in

size, the rate of groundwater inflow typically increases. However, as the pit increases in size the expected increase in groundwater inflow is expected to be mitigated by the backfilling of overburden and beginnings of reclamation on mined out sections of the pit. The backfilled overburden can "seal" the limestone stratum along the pit highwalls and reduce the rate of groundwater inflow into the pit. Furthermore, as the mine continues to mature, larger mined out sections of the pit will become available for reclamation and subsequent flooding. Any water from the groundwater dewatering station directed to a mined out section of the open pit suitable to impound water will reduce the amount of groundwater to be discharged through the NPDES Outfall 001 and provide recharge to the groundwater system.



NPDES – USGS Topographic Map
 RDA, LLC -- RDA Quarry
 Williamsburg County, South Carolina

Date: Aug 1, 2017
 Proj. No.: kcs 16-88
 Prepared By: RCK

Prepared by
Kennedy Consulting Services, LLC
 403 Seaside Ct., Lexington, SC 29072 P.O. Box 364, Irmo SC 29063
 Tel. 803-399-1133

Scale 1"= 2,200'
 7.5' USGS Topo. Quad.
 Trio Quad