

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

October 31, 2018

Submitted electronically

Mr. Ed Haigler
SCDHEC-BLWM
2600 Bull Street
Columbia, SC 29201

RE: Mining Permit I-000802 Modification
Martin Marietta Materials, Inc.
Orangeburg Quarry

Dear Mr. Haigler:

Personnel with the South Carolina Department of Natural Resources (SCDNR) have reviewed the proposed mining permit modification and offer the following comments.

Proposed Action

The applicant, Martin Marietta Materials, requests to increase the permitted acreage by 1017 acres from 1103.9 acres to 2120.9 acres, and increase mine depth by 40 feet from 85 feet to 125 feet. The applicant also requests to extend the reclamation schedule from 2045 to 2112. The proposed reclamation will consist of conversion to lakes, woodlands and grasslands.

Agency Concerns and Comments

Adjacent Protected Lands

The Bannister Tract is located adjacent to the site immediately across Addidas Street (Road S-38-136) from the proposed pit expansion area. The Bannister Tract is a component of the approved Permittee-Responsible Mitigation for the Volvo Plant in Berkeley County. The proposed mitigation consists of wetland preservation and enhancement on the 1667 acre site. Upon completion of the mitigation activities, the Bannister Tract will be conveyed to SCDNR for long-term stewardship. SCDNR is concerned that Eightfoot Ditch drains from the proposed pit expansion area directly into the Bannister Tract.

Threatened and Endangered Species

According to SCDNR data, there is a record of the federally endangered red-cockaded woodpecker (RCW) (*Picoides borealis*) on the southern portion of the proposed pit expansion

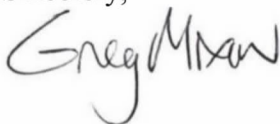
area near Addidas Street. Review of aerial photography indicates that there may be appropriate habitat for RCW in this and other portions of the pit expansion area. Appropriate consultation should occur with the U.S. Fish & Wildlife Service (USFWS) and all measures should be taken to avoid and minimize impacts to this species and its habitat. SCDNR understands that the USFWS has already recommended that an RCW survey be conducted on the proposed expansion tract. We request that a copy of the survey results (including the methodology) be provided for our records.

Additional Agency Recommendations

- SCDNR recommends that wet mining operations be implemented in the proposed pit expansion area. Groundwater elevations at the property lines should be maintained at or above the top of the upper strata of limestone.
- The maps provided with the permit application identify groundwater monitoring wells in previously mined areas and along the 2013 permit boundary around the active pit. SCDNR recommends that additional groundwater monitoring wells be placed along the perimeter of the proposed pit expansion area. In particular, these wells should be installed along Addidas Street adjacent to the Bannister Tract and near the outfall of Eightfoot Ditch. Water discharged from the quarry to a receiving stream must be in compliance with an NPDES permit.
- 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.
- SCDNR prefers and recommends the use of native warm season grasses and/or other native forbs that would be beneficial for wildlife and pollinators for stabilization and cover in disturbed areas. Native warm season grass species suggestions include: indiagrass (*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/ or at <http://www.pollinator.org/guides>. For planting details of quantities and timing, we recommend reaching out to the USDA NRCS Soil & Water Conservation Offices.

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

Sincerely,



Greg Mixon
Office of Environmental Programs

South Carolina Department of Natural Resources

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Robert H. Boyles, Jr.
Interim Director
Lorianne Riggan
Director, Office of
Environmental Programs

October 24, 2019

Mr. Ed Haigler
SCDHEC-BLWM
2600 Bull Street
Columbia, SC 29201

Electronic submission

RE: Mining Permit I-000802 Modification
Martin Marietta Materials, Inc.
Orangeburg Quarry

Dear Mr. Haigler:

The South Carolina Department of Natural Resources (SCDNR) previously provided comments regarding the proposed mining permit modification in a letter dated October 31, 2018. SCDNR has reviewed revised information regarding the proposed mining permit and offers the following additional comments.

The permit as originally proposed included a 250 foot buffer between the property lines and blasting operations. The first 100 feet from the property line was proposed as undisturbed vegetative buffer and the remaining 150 feet would include a 20 foot high earthen visual screening berm. This construction would have required the clear cutting of approximately 56 acres of established trees along portions of the property line.

The applicant has recently participated in discussions with SCDNR personnel and others and in a letter dated October 16, 2019 has proposed to revise the originally proposed use of the 250 foot buffer. This proposed revision would include not constructing the earthen berm and enhancing and managing the entire 250 buffer as habitat for red-cockaded woodpeckers (RCW). This same approach is proposed on the remaining 1,500 acres of the site resulting in approximately 336 acres of the property being permanently managed and enhanced as nesting habitat for RCW's.

SCDNR submits that the proposed changes to the use of the buffer would be beneficial to RCW habitat, help protect the existing RCW cluster, and enhance the proposed Safe Harbor agreement on the applicant's property.

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,

A handwritten signature in black ink that reads "Greg Mixon". The signature is written in a cursive, slightly slanted style.

Greg Mixon
Office of Environmental Programs

C: Richard W. Broughton – Martin Marietta
Caroline Causey – SCDNR