

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

S. Daniel Smith
Director



NORTH CAROLINA
Environmental Quality

November 21, 2019

Certified Mail

Return Receipt Requested

7016 2140 0000 0565 1741

Mr. Scott Martino
Carolina Sunrock LLC
200 Horizon Drive, Suite 100
Raleigh, North Carolina 27615

RE: Proposed Prospect Hill Quarry and Distribution Center
Caswell County
Roanoke River Basin

Dear Mr. Martino:

We have reviewed the application your company submitted for the referenced mine site. In order for this office to complete its review of the referenced project in accordance with GS 74-50 and 51 of the Mining Act of 1971, please provide the additional or revised information in accordance with the following comments:

1. Provide proof, such as copies of the signed return receipts from certified mail, that the following adjoining landowners have been properly notified: Bethel UMC, Phillip & Susan Allen, Scott Wilson-Houghtallen, Sara Cook, Richard & Jerry Cates, Georgia P Lewis, William & Donna Brown, William Morris & Rita Hudgins, Susan Hester and C S Painter Lands. If the notices have been returned as "unclaimed", provide a copy of the envelope with the postal service sticker.
2. Please find enclosed two pieces of correspondence from the Department of Cultural Resources regarding the proposed site. Please provide proof your company has contacted the Department regarding the archeological field investigation, including the location of the historical cemeteries. Any cemeteries found must be located on the mine map with appropriate buffers.
3. Please find enclosed comments from the North Carolina Wildlife Resources Commission regarding the proposed operation. Address all of the concerns outlined in the memorandum.



4. Provide proof that your company has obtained a valid wetland delineation approved by the US Army Corps of Engineers and the necessary permits from the Division of Water Resources to impact the large number of streams. Enclosed are comments from that agency.
5. See the comments provided by the Ground Water Management Branch. Because of inaccuracies in the pumping test procedures, re-perform the pumping test and obtain a more accurate zone of influence. Provide an acceptable monitoring plan consisting of a series of monitoring wells as mining progresses to protect the potable water supply wells in the area. See the recommendations in said comments. Include unfiltered testing of the wells for all of the metals on the sample result sheets submitted with the hydrogeological study. Include an adverse impact letter stating what steps your company will take if dewatering activities at the mine should happen to impact any existing water supply well.
6. Please detail (list) the types of NPDES permits for mining and all other proposed industrial activities for the subject site. Also include proof that your company is obtaining all necessary NPDES permits for storm water and pit water discharge, including an acceptable operations and maintenance plan to protect wetlands and water ways.
7. Provide proof that your company has obtained a valid Air Quality permit for the proposed operation.
8. Provide proof that the operation will not have an adverse effect on the Roxboro Lake as it is a publicly owned recreation area.
9. The North Carolina Geological Survey has stated the site is located within the Slate Belt and may have asbestos within the mined material. Explain how your company will protect those individuals near the site from being affected by the asbestos. In addition, provide proof that the release of radon will not be an issue.
10. See the email from the Winston Salem Regional Office regarding the erosion and sediment control plan submitted with your company's application. The erosion and sediment control issues noted in the email from the Winston Salem Regional Office staff must be completely addressed.

Please note, this office may request additional information, not included in this letter, as the mining application review progresses.

Please be advised that our review cannot be completed until all of the items listed above have been fully addressed.

Certified Mail
Mr. Martino
Page 3

In order to complete the processing of your application, please forward two (2) copies of the requested information to my attention at the following address:

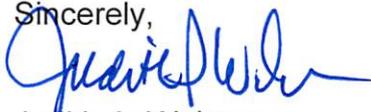
Division of Energy, Mineral Land Resources
Department of Environmental Quality
1612 Mail Service Center
Raleigh, NC 27699-1612

As required by 15A NCAC 5B.0013, you are hereby advised that you have 180 days from the date of your receipt of this letter to submit all of the requested information. If you are unable to meet this deadline and wish to request additional time, you must submit information, in writing, to the Director clearly indicating why the deadline cannot be met and request that an extension of time be granted. If an extension of time is not granted, a decision will be made to grant or deny the mining permit based upon the information currently in the Department's files at the end of the 180-day period.

Though the preceding statement cites the maximum time limit for your response, we encourage you to provide the additional information requested by this letter as soon as possible. Your prompt response will help us to complete the processing of your application sooner.

Please contact me at (919) 707-9220 if you have any questions.

Sincerely,



Judith A. Wehner
Assistant State Mining Specialist

Enclosures

cc: Ms. Tamera Eplin, PE



North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

October 7, 2019

MEMORANDUM

TO: Brenda Harris
Land Quality Section
Division of Land Resources, NCDENR

FROM: Ramona M. Bartos *RMB for Ramona M. Bartos*

SUBJECT: Application for Mining Permit, Carolina Sunrock, LLC, Prospect Hill Quarry, Caswell County, ER 19-2783

Thank you for giving us the opportunity to review and comment on the above project pursuant to Chapter 74, Article 7 of the North Carolina General Statutes.

The proposed area of disturbance is adjacent to a tract of land surveyed in 1977 for the City of Roxboro reservoir. That survey identified multiple archaeological sites. Two of those sites (31CS31 and 31CS50) are along the northeastern boundary of the project area. These Archaic period resources were not assessed for the National Register of Historic Places. Additionally, there are several historic properties along the western and southern boundary of the project.

There is a high probability that additional archaeological resources may be present within some portions of the 630-acre proposed area of disturbance. Prior to the initiation of any ground disturbing activities within the project area, we recommend a comprehensive archaeological survey of the project area be conducted by an experienced archaeologist. The purpose of this survey will be to identify and evaluate any archaeological sites that may be damaged or destroyed by the proposed undertaking. Potential effects on unknown resources must be assessed prior to the initiation of construction activities.

Our office now requests consultation with the Office of State Archaeology Review Archaeologist to discuss appropriate field methodologies prior to the archaeological field investigation, including review of the project area to determine high probability areas that will require survey and low probability areas that will not. A list of archaeological consultants who have conducted or expressed an interest in contract work in North Carolina is available at <https://files.nc.gov/dncr-arch/Consultants-List-2019-08-columns.pdf>. The archaeologists listed, or any other experienced archaeologist, may be contacted to conduct the recommended survey.

One paper and one digital copy of all resulting archaeological reports, as well as one digital copy of the North Carolina site form for each site recorded, should be forwarded to the Office of State Archaeology through this office for review and comment as soon as they are available and in advance of any construction or ground disturbance activities. Our report guidelines can be found at https://files.nc.gov/dncr-arch/OSA_Guidelines_Dec2017.pdf.

We have determined that the project as proposed will not have an effect on any historic structures.

While we note that this project review is only for a state permit, the potential for federal permits may require further consultation with us and compliance with Section 106 of the National Historic Preservation Act.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, please contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579. In all future communication concerning this project, please cite the above referenced tracking number.



Department of Natural and Cultural Resources
Division of Historical Resources

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of State Archaeology
John Mintz, State Archaeologist

November 13, 2019

Brenda M. Harris
Mining Program Secretary
North Carolina Department of Environmental Quality
512 North Salisbury Street
Raleigh, NC 27699

Re: Prospect Hill Quarry, Caswell County, ER 19-2783

We have been notified that one or more historic cemeteries are located in the subject project area. Cemeteries are protected under North Carolina General Statutes Chapter 14-148 and 14-149, and are afforded consideration under Chapter 65.

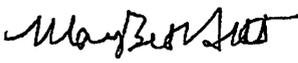
We therefore recommend that prior to the initiation of permitted ground disturbing activities, all cemeteries in the project area be delineated and documented by a professional archaeologist. In order to ensure that cemeteries in the parcel are treated in a manner consistent with state law, we also recommend that an avoidance plan be developed for each identified cemetery and an unanticipated discoveries plan be developed in case any burials are discovered in the process of mine operations.

Please note that our office now requests consultation with the Office of State Archaeology Review Archaeologist to discuss appropriate methodologies prior to field investigations. A list of archaeological consultants who have conducted or expressed an interest in contract work in North Carolina is available at <https://files.nc.gov/dncr-arch/Consultants-List-2019-08-columns.pdf>. The archaeologists listed, or any other experienced archaeologist, may be contacted to conduct the recommended work.

One paper and one digital copy of all resulting archaeological reports, as well as one digital copy of the North Carolina cemetery form for each cemetery recorded, should be forwarded to the Office of State Archaeology through the State Historic Preservation Office for review and comment as soon as they are available and in advance of any construction or ground disturbance activities.

Thank you for your cooperation and consideration. If you have questions concerning the above comments, please contact me at 919-814-6555 or john.mintz@ncdcr.gov. In all future communication concerning this project, please cite the above-referenced tracking number.

Sincerely,


for John Mintz

Central Office
4619 Mail Service Center
Raleigh, NC 27699-4619
919/814-6556; fax 919/715-2671
Location: 109 E. Jones Street
Raleigh, NC 27601

QSA Research Center
4619 Mail Service Center
Raleigh, NC 27699-4612
919/715-5599; fax 919/715-1186
Location: 215 W. Lane Street
Raleigh, NC 27601

Underwater Archaeology Branch
1528 Ft. Fisher Blvd South
Kure Beach, NC 28549
910/458-9012; fax 910/458-4093

QAR Conservation Laboratory
1157 VOA Site C Road
West Research Campus
East Carolina University
Greenville, NC 27834
252/741-6721

Western Office
Dept. of Cultural Resources
Western Office
176 Riceville Road
Asheville, NC 28805
828/271-6789; fax 828/271-6565



⊠ North Carolina Wildlife Resources Commission ⊠

Gordon Myers, Executive Director

MEMORANDUM

TO: Brenda M. Harris
Mining Program Secretary
Land Quality Section

FROM: Olivia Munzer, Western Piedmont Coordinator
Habitat Conservation *OM*

DATE: 27 September 2019

SUBJECT: New Mining Permit Application for Carolina Sunrock LLC, Prospect Hill Quarry and Distribution Center, Caswell County, North Carolina

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the subject permit application. Our comments are provided in accordance with provisions of the Mining Act of 1971 (as amended, 1982) (G.S. 74-46 through 74-68 15 NCAC 5).

Carolina Sunrock LLC applied for a new mining permit for the proposed Prospect Hill Quarry and Distribution Center located at 1238 Wrenn Road in Prospect Hill, Caswell County, North Carolina. The property is currently comprised of agricultural fields and forest, the majority of which was clear-cut for timber harvest in 2018. Of the 630-acre property, a total of 380 acres will be disturbed for mining activities.

Sugartree Creek and unnamed tributaries to South Hyco Creek and Sugartree Creek flow through the site. Sugartree Creek in the Roanoke River basin is classified as a High-Quality Water and Water Supply II stream by the NC Department of Water Resources (NCDWR). The permit indicates two small wetland areas will be impacted permanently by the site development and construction; however, Sheet 5 indicates streams will be permanently impacted by mining, particularly during Phase IV.

The NCWRC has known records of the state significantly rare Carolina ladle crayfish (*Cambarus davidi*) and an undescribed crayfish species near the site. The lack of records from the site does not imply or confirm the absence of federal or state-listed species. An on-site survey is the only means to determine if the proposed project may impact federal or state rare, threatened, or endangered species. Adjacent to the site, a Dry Oak-Hickory Forest Natural Community lies within the Russell Loop Dry Forest Natural Heritage Natural Area (NHNA). A natural community is a rare or high-quality natural community and a NHNA is a site with special biodiversity significance.

We hesitate to concur with the approval of this mining permit. We have concerns for the direct and

27 September 2019
Prospect Hill Mine Permit Application
Caswell County

indirect impacts to aquatic and terrestrial resources in and adjacent to the proposed project. We offer the following recommendations to minimize impacts to aquatic and terrestrial wildlife resources.

1. In addition to direct impacts, we have concerns on the indirect impact of the operation on the streams and wetlands. The Hydrogeological Study Report (page 18) indicates substantial water-table drawdowns were observed during testing and similar or greater impacts (in extent and magnitude) could be seen during quarry dewatering. Additionally, the aquifer may not recharge at the rate of dewatering, particularly during drought years and/or with sustained and prolonged dewatering. The return water withdrawn during operation will be discharged in the westernmost of the larger unnamed tributaries. We are concerned the portion of the streams and the wetlands within the site may dry up or be abnormally low, which would impact aquatic resources.
2. NCWRC has records of the Carolina ladle crayfish and an undescribed crayfish species in the watershed. Since the impact of dewatering will likely impact stream flow, we request surveys for crayfish at the site. For questions, please contact W. Thomas Russ, the Foothills Aquatic Wildlife Diversity Research Coordinator, at 828-659-3324 or Thomas.russ@ncwildlife.org.
3. The permit application indicates (page 14) that a 100-foot (ft) buffer will be provided along Sugartree Creek and the larger two unnamed tributaries, and intermittent and ephemeral streams and wetlands will have a 50-ft buffer. We are pleased to see the applicant will provide undisturbed buffer widths generally recommended by NCWRC. However, the applicant indicates on page 7 that "Phases I, II, and III within Pit A will be mined leaving a 50-undisturbed buffer along all streams and wetlands within the ultimate pit boundary of Pit A", which is inconsistent with the buffer widths on page 14. Furthermore, Sheet 5 indicates that Phase IV involves "expanding the Pit A through existing streams and wetlands to achieve the ultimate pit boundary of Pit A, installation of a creek crossing to access Pit B, and the stripping and mining of Pit B".
4. We have concerns that the overburden/pond fines disposal areas are adjacent to streams and only separated from the streams by a silt fence and undisturbed stream buffer. If the stream buffer is less than 100 ft, consider using a small berm or other type of structure to safeguard the stream from sediment in case the silt fences fail.
5. Due to the presence of dry oak-hickory forest natural communities in the area, we recommend the applicant plant hickories and oaks in addition to shortleaf pine and maple.
6. The applicant indicates on pages 14, 16, and 18 that they will reseed using native grasses and trees. However, the grasses and lespedeza listed on the seeding schedule (page 20) are all non-native and/or invasive species. Non-native plants should be removed from the seeding schedule and replaced with native alternatives. Consider an alternative mix of red clover, creeping red fescue, and a grain, such as oats, wheat, or rye. Specifically, this project would be ideal for planting native, wildflower seed mixes that will create pollinator habitat within the reclaimed areas. Please see the attached document for recommendations on native seed mixes for disturbed sites.
7. We recommend that water quality, and perhaps surface flow, are monitored downstream of the discharge point.
8. Ensure Erosion Control and Sedimentation Basins and associated structures (i.e., dissipater pads) are located outside the recommended stream buffers, which are a minimum 100-foot for perennial streams and a 50-foot for intermittent streams and wetlands.

Page 3

27 September 2019
Prospect Hill Mine Permit Application
Caswell County

Thank you for the opportunity to comment. Further information and free technical guidance from the NCWRC is available upon request. For questions or comments, please contact me at (919) 707-0364 or olivia.munzer@ncwildlife.org.

cc: Sue Homewood, NC Division of Water Resources (NCDWR)
David Bailey, U.S. Army Corps of Engineers
W. Thomas Russ, NCWRC

MINING PERMIT APPLICATION REVIEW FORM

for the

DIVISION OF WATER RESOURCES

THIS SECTION TO BE FILLED OUT BY DEMLR:

Project Name Propect Hill Quarry DEMLR Permit 17-02 County Caswell Applicant's Email: smartino@thesunrockgroup.com

PERMIT ACTION TYPE:

YES NO Date Commencing

Have land disturbing activities??
started? Date?

Latitud 36.300266 Longitude: -79.167534

Please return comments to (at DEMLR CO): Judy Wehner

Comments due by: 9/27/2019

SECTION BELOW TO BE FILLED OUT BY DWR:

Is the RO concerned that the operation, as proposed, would violate standards of water quality? Yes
 Comments: The GW modeling shows a significant lowering of the water table within the footprint of the mine and surrounding areas. The model analyzes the impacts of this lowering on local WSWs however it should also be used to analyze indirect hydraulic impacts on all surrounding wetlands and streams. In addition, 15A NCAC 02B .0214 has very stringent limitations on industrial wastewater and stormwater in WS-II waters. Also, Phase IV of this project indicates buffers will be impacted and .0214 states that no new development is allowed in the buffer. 15A NCAC 02B .0224 has very specific requirements for NPDS wastewater discharges that should be addressed in detail. These questions should be further researched with DEMLR Stormwater Unit and with DWR classifications and/or industrial wastewater unit to determine restrictions/limitations.

Watershed/Stream Name & Classification: Sugar Tree Creek, WS-II; HQW and South Hyco Creek, WS-II; B; HQW

DWR Compliance Status of Mine: NA

Does this mine (or previous owner) have DWR back fees to pay? _____ If yes, amount: _____

Is this mine an active permit in BIMS? _____

	<u>YES</u>	<u>NO</u>
401 Wetland Cert. required?	<input checked="" type="checkbox"/> (_____)	<input type="checkbox"/> (_____)
401 Wetland Cert. existing?	<input type="checkbox"/> (Permit #_____)	<input checked="" type="checkbox"/> (_____)
Does DWR RO have enough information to determine if a 401 certification is required?	<input checked="" type="checkbox"/> (Application indicates a Nationwide Permit for first Phases but an Individual Permit will be necessary for Phase IV. USACE may not allow applicant	<input type="checkbox"/> (_____)

	to separate project into phases	
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Is an O & M Plan needed?	<u>YES</u>	<u>NO</u>
Are wetlands disturbed at this site?	<input checked="" type="checkbox"/> (minor direct impacts for first few phases. Significant impacts for Phase IV. Also may be significant indirect impacts from hydraulic drawdown of watertable)	<input type="checkbox"/> (_____)
Does DWR RO suspect or know of nearby wetlands to the site?	<input checked="" type="checkbox"/> (_____)	<input type="checkbox"/> (_____)
Is a wetland delineation required prior to DWR issuing the permit?	<input checked="" type="checkbox"/> (JD- must have delineation map in application verified by USACE <input type="checkbox"/> (Consultant _____ <input type="checkbox"/> (Onsite? _____ <input type="checkbox"/> (Offsite? _____)	<input type="checkbox"/> (_____)
Stream Determination Needed?	<input checked="" type="checkbox"/> (see above)	<input type="checkbox"/> (_____)
Stream Determination Completed?	<input type="checkbox"/> (_____)	<input type="checkbox"/> (_____)
Does DWR RO need a statement that no wetlands/streams are disturbed for this project from applicant?	<input type="checkbox"/> (_____)	<input checked="" type="checkbox"/> (_____)
Buffer Determination Needed?	<input type="checkbox"/> (_____)	<input checked="" type="checkbox"/> (_____)
Buffer Determination Completed?	<input type="checkbox"/> (_____)	<input checked="" type="checkbox"/> (_____)
Recycle system permit existing?	<input type="checkbox"/> (Permit # _____)	<input checked="" type="checkbox"/> (_____)
New Recycle System permit required?*	<input type="checkbox"/> (_____)	<input checked="" type="checkbox"/> (_____)
Enough information to determine?		
Non-discharge permit existing?	<input type="checkbox"/> (Permit # _____)	<input type="checkbox"/> (_____)
Will wastewaters discharge to HQW waters with a 7Q10=0?	<input type="checkbox"/> (_____)	<input type="checkbox"/> (7Q10 Flow: _____ <input type="checkbox"/> (Unknown. Permittee must determine. _____)
Does DWR require DEMLR to hold the permit (e.g. so DWR can review it further or because DWR requires more information)?	<input type="checkbox"/> (Has Violation <input type="checkbox"/> (O&M Requirements <input checked="" type="checkbox"/> (HQW/7Q10 Concerns <input type="checkbox"/> (Pay back fees or renew DWR permit <input checked="" type="checkbox"/> (Other. Please describe the reason to	<input type="checkbox"/> (_____)

	hold the permit: <u>significant concerns about possible indirect impacts to streams and wetlands.</u> RO contact: _____ <input type="checkbox"/> (Hold Until: _____	
Mine must wait to dewater until an O&M plan is approved?	<input type="checkbox"/> (_____	<input type="checkbox"/> (_____

Reviewed by:

DWR RO Surface Water: SLH Regional Office: WSRO Date: 9/21

RO Aquifer Protection Section: _____ Regional Office: _____ Date: _____

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Secretary

LINDA CULPEPPER
Director



NORTH CAROLINA
Environmental Quality

September 25, 2019

RECEIVED

SEP 25 2019

LAND QUALITY
MINING PROGRAM

MEMORANDUM

TO: Ms. Judy Wehner
Land Quality Section

FROM: Michael Bauer *MB*
Ground Water Management Branch
Division of Water Resources

SUBJECT: Comments on the Mining Permit Application Request for:
Carolina Sunrock, LLC.
Carolina Sunrock Prospect Hill Quarry & Distribution Center
Caswell County

Please find attached a copy of the mining permit request for the above referenced project.

The Carolina Sunrock Prospect Hill Quarry & Distribution Center located in Caswell County might have an unduly adverse effect on ground water supplies since mine dewatering is proposed onsite. The hydrogeological study provided with the mine permit application indicates that the mine may pump between 1.75 million gallons of groundwater per day (mgd) and 3.42 mgd depending on pit depth. The hydrogeological study also indicates that the existing nine monitoring wells will be gauged to track/monitor the drawdown of the aquifer on a routine basis. However, a majority of those wells were placed near the center of the property and not outside the excavation boundary.

The Division recommends the following:

- Before dewatering activities begin, monitoring wells should be constructed outside of the excavation limits. These wells should be placed between the excavation and areas where existing water supply wells were located during the water supply well survey (mine application package figure 9). The Division recommends constructing three monitoring wells on the north side of the excavation near water supply wells 10 – 15, two on the northeast side of the excavation near water supply wells 17 – 21, one on the south side of the excavation near water supply well 25, and one on the southwest side of the excavation near water supply well 29.
- Monitoring wells should be gauged for water levels monthly starting at least two months prior to any dewatering activities at the mine.
- Since there are existing water supply wells in the area, the Division of Energy, Mineral, and Land Resources should obtain an adverse impact letter from Carolina Sunrock, LLC. stating what steps the company will take if dewatering activities at the mine should happen to impact any existing water supply wells.

The mine will need to register water withdrawals with the Division of Water Resources on an annual basis since the water withdrawals are over 100,000 gallons per day. The registration form may be obtained from the following link:

<https://www.ncwater.org/wwatr>

Facilities are required to register their water withdrawals in accordance with the North Carolina General Statute G.S. 143-215.22H. This statute requires any non-agricultural water user who withdraws 100,000 gallons or more in any one day of ground water or surface water to register and update withdrawals. This statute also requires transfers of 100,000 gallons or more in any one day of surface water from one river basin to another river basin to register and update their water transfers. Water withdrawal registrants must complete the annual water use reporting form by April 1 for the previous year.

If you have further questions regarding the water withdrawal registration please contact John Barr with the Division of Water Resources at (919) 707-9021 or email him at john.barr@ncdenr.gov.



Wehner, Judy

From: Eplin, Tamera
Sent: Tuesday, October 15, 2019 12:54 PM
To: Wehner, Judy
Cc: Lentz, Zachary
Subject: 17-02 Carolina Sunrock / Prospect Hill Quarry
Attachments: DOC101519-10152019115311.pdf; DOC101519-10152019115300.pdf

Hello Judy,

The DEQ and WSROS comments are attached. Thank you for additional time to review.

DAQ and WQROS comments are attached.

Significant comments on the plans:

1. The proposed mine is in an area of High Quality Waters, as discussed by Sue Homewood.
2. Access for at least one haul road is shown in a wetland and across the Limits of Disturbance. Will this road be used?
3. Contour elevations are necessary.
4. The applicant does not use traditional basin design, wherein water enters the basin on the upgradient side, goes through 3 baffles that divide the basin into fourths (from the basin floor), with a 2:1 to 6:1 length to width ratio. Add the outlets discharging directly into the buffers of creeks leading to the lake, and it is unlikely this mine will avoid impact to the creeks and buffers.
5. In some cases, the baffles are at the bottom of the interior slope of the basins, which is not approvable.
6. If they insist on a U shaped baffle, I'm curious how they intend to maintain them.
7. Silt fence should be placed a minimum of 10 feet below any fill slope to allow for access, maintenance, and sediment storage.
8. The disturbed area equals the drainage area for basin calculations. Does off-site drainage need to be taken into account?
9. Drainage areas should be very clearly shown on the erosion control plan.
10. Any drainage of any basin that close to a creek for any reason, such as to perform basin maintenance, would need to be through a silt bag.
11. They have significant area draining around and below sediment basins to a stone outlet. Stone outlets are not treatment measures, and only meant to prevent silt fence laydown in small areas already determined to have acceptable design for silt fencing (1/4 acre per 100 ft silt fencing, less for steeper slopes). Redesign is needed.
12. They have their LOD right on the buffer lines. This does not allow any vegetative buffer. All sediment loss is a buffer violation.
13. Demolition debris needs to go to a site regulated by the Division of Waste Management.

14. Diversions need to go to the end of the sediment basin opposite the skimmer intake. Generally speaking, the basins are not placed to maximize the flow path of the water, which is necessary to allow settling of sediment.
15. Will residents near the lake need to use the mine road for access?
16. Stone outlets are not approvable placements for skimmer outlet stabilization.
17. The C value for disturbed soil should be 0.6, not 0.3.
18. They proposed stone outlets, but didn't provide a detail.
19. They should utilize PAMS, with specifications.
20. Any diversions left in place longer than 30 days should have matting/stabilization upon installation.
21. They should provide measures around the stockpiles.
22. 404/401 certifications?? They should show areas of approved permanent and temporary impact, clearly labeled on the plans. For review of ESC, need a copy of the application and the approval, or a copy of the application and documented receipt.
23. They should clearly stake their LOD, describe within the sequence.
24. Are they using ESC measures to treat stormwater/process water from the proposed asphalt/concrete plant onsite?
25. Sheet 7b – they're proposing open pits going across streams???
26. They list a creek crossing in the sequence of events, but not the ESC plan.
27. They should provide a listing of status of all other applicable permits and list their significance within their construction sequence.
28. Dewatering excavations below the water table should not overwhelm the sediment basins when rainfall is expected.
29. When they resubmit, they need to demonstrate a clear translation between the mine maps and the ESC plan across the phases of the plan.
30. Until all items above are addressed, as well as any additional information you need, the applicant should hold off and resubmit as one comprehensive package. They should be advised that due to the nature of the initial submittal and comments provided, additional review with additional comments is likely.

Please let us know if we may be of additional assistance,

Tamera Eplin, PE, CPESC
Regional Engineer
Land Quality Section, Winston-Salem Regional Office
Division of Energy, Mineral and Land Resources
North Carolina Department of Environmental Quality

(336) 776-9800 office
tamera.eplin@ncdenr.gov

450 West Hanes Mill Road, Suite 300
Winston-Salem, NC 27105-7407