



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

S. DANIEL SMITH
Interim Director

December 21, 2018

Certified Mail
Return Receipt Requested
7015 0640 0007 9831 4689

Mr. Chad M. Threatt
Alamance Aggregates LLC
PO Box 552
Snow Camp, North Carolina 27349

RE: Proposed Alamance Quarry and Construction Materials Quarry
Alamance County
Cape Fear River Basin

Dear Mr. Threatt:

We have reviewed the application Alamance Aggregates LLC 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 County Manager, Progress Energy, Colonial Pipeline Company, Robert L Rumley and Ralph W Bland have been properly notified of the proposed mine. In addition, provide in your response information that clearly demonstrates that Colonial Pipeline Company and Duke Power have no issues with the proposed disturbance within their rights-of-ways.
2. Provide the estimated life of the mine in years.
3. Provide a detailed hydrogeologic study for the proposed operation. A report was referred to in the Monitoring Plan but was never submitted. Provide a copy of the information provided to Robert Christian Reinhardt, PG for the Groundwater Monitoring Plan. Provide a well survey for all wells within 1500 feet of the proposed permit boundary that details the well depth, well capacity, well recovery and well pump type. In addition, see the enclosed comments from the Ground Water Management Branch and include or respond to the recommendations.



4. Provide a thorough geologic investigation of the site that outlines any fractures, dykes, rock type, and radon presence etc.
5. Provide proof that a NPDES General or Individual Permit has been obtained.
6. Provide proof that your company has obtained the Air Quality Permit as stated in the application. Provide additional information to this office that clearly addresses the amount of free silica dust and radon that will be released as result of the proposed operation.
7. Provide proof that there is a valid approved wetland delineation for this site. Include proof that your company has obtained the necessary 401/404 approvals/certifications needed.
8. Provide overburden calculations and show that the overburden removed from the proposed Mining Area balances with the overburden storage area, berm construction and processing/stockpile area. Provide pre and post construction cross sections of the processing, stockpile and overburden areas. Include construction sequences and staged seeding.
9. Revise the blasting vibration study to include any effects blasting may have on the pipelines and power lines. Test blasting is an option prior to production blasting. See the attached comments provided by Colonial Pipeline Company and address the concerns in writing as a part of this response.
10. See the enclosed comments from the NC Wildlife Resources Commission and respond to the concerns outline in the memorandum. Please note that the Revegetation Plan submitted with the application is not adequate. Please include a revised Revegetation Plan as a part of this response.
11. See the enclosed comments from the Winston Salem Regional Office regarding the erosion and sediment control plan submitted with the application. Address all if these issues.
12. Provide cross sections of the final reclamation of the site. Include the final highwall barrier/fencing location and provide a final highwall barrier fence detail.

Please be advised that our review cannot be completed until all of the items listed above have been fully addressed. In addition, please note this office may request additional information, not included in this letter, as the mining application review progresses.

Certified Mail
Mr. Threatt
Page Three

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 and 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 processing 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: Mr. Matt Gantt, PE



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

LINDA CULPEPPER
Interim Director

November 15, 2018

RECEIVED
NOV 15 2018
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: Revised Comments on the Mining Permit Application Request for:
Alamance Aggregates, LLC.
Alamance Quarry & Construction Materials
Alamance County

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

The Alamance Quarry located in Alamance County does appear to have an unduly adverse effect on ground water supplies since 500,000 gallons per day of dewatering is proposed onsite. The ground water monitoring plan that was attached to the permit application should be followed as written with the following additions.

- The monitoring of monthly water levels should begin at least 2 months prior to any dewatering activities at the quarry so a baseline can be established.
- If the deepest monitoring wells do not extend to the maximum depth of the pit, deeper wells may need to be installed if the proposed monitoring wells should go dry.
- Due to concerns of the surrounding residents, DWR recommends that an adverse impact letter be provided by the mine operation stating how the mine would rectify the situation if they impact their neighbors' wells (see attached sheet for example of language that should be in the letter).

Also, 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:

http://www.ncwater.org/Permits_and_Registration/Water_Withdrawal_and_Transfer_Registration.

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.

Cc: Mr. Chad Threatt
Alamance Aggregates, LLC.
P.O. Box 552
Snow Camp, NC 27349



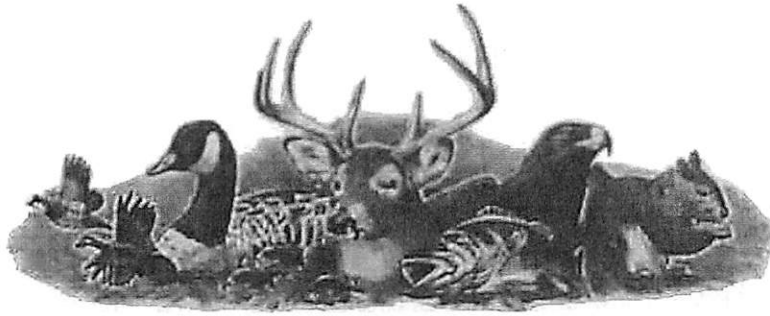
To Whom it may concern:

If the proposed mine named _____ adversely impacts any existing wells within the surrounding area due to dewatering activities, then _____ will stop dewatering immediately, notify DWR-Groundwater Management Branch (919-707-9008), and take action to correct loss of water by doing one of the following until the issue has been resolved:

- 1-lower the pump(s) and/or increase the drop pipe(s) in the existing well(s), or
- 2-replace the pump(s) with one that can draw from a deeper depth, or
- 3-replace the well(s) with either a deeper one, or a larger diameter one, whichever is applicable, or
- 4-pay the initial hook-up fee for county water if the owner desires.

Sincerely,

Mr./ Mrs. _____, (Title)




☒ 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 Division 

DATE: 19 October 2018

SUBJECT: New Mining Permit Application for Alamance Aggregates, LLC, Alamance Quarry & Construction Materials, Alamance 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).

Alamance Aggregates, LLC is requesting a new mining permit for the Alamance Quarry & Construction Materials mine located at 342 Clark Road in Snow Camp, Alamance County, North Carolina. The total permitted acreage is 321.81 with a total of 82.95 acres of disturbed area. Crushed stone will be washed at the processing plant using two settling ponds at the site, but there will be no discharge of this water or chemicals used for this process. Stormwater and groundwater will be retained onsite but will be discharged as necessary. A 50-foot buffer will be maintained along streams and wetlands on the site. The reclamation plan includes allowing the mining area to be left as a lake, the removal of settling ponds, and grading and re-vegetating according to the seeding schedule provided.

Unnamed tributaries to Reedy Branch and unnamed tributaries to Cane Creek flow through the site. Reedy Branch and Cane Creek in the Cape Fear River Basin are classified as is Water Supply V and Nutrient Sensitive Waters by the NC Division of Water Resources (NCDWR).

We have records of the federal species of concern and state special concern Carolina darter (*Etheostoma collis*) within the vicinity of the site; however, we have no records from 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 definitive means to determine if the proposed project would impact rare, threatened, or endangered species. Pine Hill Xeric Woodlands and Major Hill Monadnock Forest Natural Heritage Natural Area, and several NC Division of Mitigation Services Easements occur within the vicinity of the site.

19 October 2018
Alamance Quarry
New Mining Permit

Should the permit be modified, we offer the following recommendations to minimize impacts to aquatic and terrestrial wildlife resources.

1. We are pleased to see a 50-foot buffer around wetlands and intermittent streams. However, a minimum 100-foot undisturbed native, forested buffer should be maintained along perennial streams. Maintaining undisturbed, forested buffers along these areas will reduce impacts to aquatic and terrestrial wildlife resources, water quality, and aquatic habitat both within and downstream of the project area. In addition, these buffers will provide an adequate travel corridor for wildlife species. We request that sediment and erosion control structures be located outside of these buffers.
2. Due to the presence of sensitive species in the watershed, we prefer bottomless culverts are used for the project instead of circular culverts. If culverts must be used, the culvert should be designed to allow passage of aquatic organisms; maintain floodplain attenuation; and designed and installed to maintain dimension, pattern, and profile of the stream.
3. Since the purpose of storm-water-control is to protect streams and wetlands, no stormwater control measures or best management practices should be installed within any stream (perennial or intermittent) or wetland. We recommend that retention ponds be located at least 750 feet from small wetlands to minimize hydrologic disturbance and ecological function.
4. Due to the decline in bat populations, avoid tree clearing activities during the maternity roosting season for bats (May 15 – August 15). Additionally, if any underground mines or mine-like features occur onsite, please contact me or Katherine Caldwell at (828) 545-8328 prior to any disturbance.
5. **Non-native and/or invasive plants, such as lespedeza, should be removed from the seeding schedule.** Consider using seed mixtures (e.g., native warm season grasses) that are beneficial to wildlife for revegetation or reclamation activities. NCWRC recommends an alternative mix of red clover, creeping red fescue, and a grain, such as oats, wheat, or rye. Native plants are preferred and recommended for revegetation and reclamation activities. We are pleased to see the native trees and shrubs to be planted along the barrier. Please note that Yaupon holly (*Ilex vomitoria*) and Florida leucothoe (*Leucothoe populifolia*) are native to the Coastal Plain. Instead, we recommend winterberry (*Ilex verticillata*), fetterbush (*Lyonia* spp.), and/or winged sumac (*Rhus* spp.). Please contact NCWRC for a list of additional suitable native plants for reclamation or revegetation.
6. Sediment and erosion control measures should be installed prior to any land-disturbing activity. The use of **biodegradable and wildlife-friendly sediment and erosion control devices** is strongly recommended. Silt fencing, fiber rolls and/or other products should have loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines. Silt fencing that has been reinforced with plastic or metal mesh should be avoided as it impedes the movement of terrestrial wildlife species. Excessive silt and sediment loads can have detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs, and clogging of gills.
7. For relatively shallow sediment basin reclamation, we recommend these areas be reclaimed as wetlands where practicable.

Thank you for the opportunity to comment on this permit application. If we can be of further assistance, please contact our office at (919) 7070364 or olivia.munzer@ncwildlife.org.

ec: Chad Threatt, Alamance Quarry & Construction Materials

COMMENTS FOR ALAMANCE AGGREGATES, LLC

PLAN RECEIVED BY WSRO ON 9/28/2018

1. For clarity, the scale of the sediment control portion of the mine map must be shown on a 1"=60' scale.
2. The names of all streams, rivers, and lakes must be shown on the mine map.
3. Discharge points for the settling ponds must also be shown. Access for periodic clean-out must also be shown.
4. The initial and ultimate limits of clearing must be shown on the plan.
5. The size and locations of all proposed buildings (maintenance facilities, crushers, explosive storage areas) must be shown on the plan. All proposed stone stockpile areas must also be shown on the mine map.
6. The symbol (similar to the denotation of a rip-rap channel) within the mining limits must be identified on a project legend.
7. Design calculations are needed for the following devices: (1) All sediment skimmer basins (note: information provided on sheet C302 is not sufficient for purposes of this application); (2) settling ponds; (3) proposed permanent ditches [Note: all proposed permanent ditches must also be identified with a specific number for reference]; (4) the proposed pipe beneath the entrance road off Clark Road.
8. Adequate sediment control measures must be provided at the entrance to the project off of Clark Road during the clearing phases. Check dams in the proposed ditch are not considered adequate.
9. Adequate sediment control measures must be shown below the proposed 8' tall earthen berm located to the west of the proposed scale house. Note: sediment fence is not considered an adequate sediment control for this area.
10. Ditch lines shown north of the proposed scale house do not discharge into an acceptable sediment control device. The ditches bypass sediment skimmer basins #6 and #7, leading to the stream north of the basins noted.
11. Similar to item #10 above, proposed ditch lines are shown bypassing sediment skimmer basins #4 and #5.
12. The diameter and length of the proposed pipe shown under the access road into the mine must be shown on all C300 series of sheets.
13. The septic area and any leachate lines behind the scale house must be shown within the limits of disturbance.
14. On the west side of the mine there is a notation stating that "retain natural area for screening", however, equipment access must be retained for the installation of the perimeter security fencing. Disturbed areas must be noted for the installation of the perimeter security fencing.
15. Grading must be shown for the "proposed shop" noted on sheet C301.
16. Temporary diversion berms must be shown directing runoff from the proposed berm into sediment skimmer basins #8 and #10.
17. Adequate sediment control measures must be shown below the proposed berm on the west side of the mine. Note: Silt fence shown in this area is not an acceptable measure.
18. Grading is shown beneath skimmer sediment basin #13 before the basin is installed. The use of sediment fence below this proposed grading is not acceptable.

19. In addition, the proposed berm directing runoff to skimmer sediment basin #13 may not be constructed and maintained as shown on the mining plan.
20. The temporary diversion berm directing runoff toward skimmer sediment basin #4 is shown running in an uphill fashion across the 620 contour line.
21. Proposed contour lines shown adjacent to the mine area show vertical slopes of up to 10' against the mine area. Vertical slopes left in these areas are not acceptable.
22. The northern side of the mine area protrudes into the stream below the 620 contour interval. This is not acceptable as no buffer has been left in place.
23. No adequate sediment control measures have been proposed for the perimeter of the mine area. When the soil overburden material is removed, acceptable sediment control measures must be installed.
24. Acceptable temporary diversion berms must be shown on either side of sediment skimmer basin #12. The diversion berm on the east side of basin #12 does not extend to the edge of the proposed disturbed area. In addition, no diversion berm has been proposed for the west side of the basin.
25. Acceptable temporary diversion berms must be shown on either side of skimmer sediment basin #1. The diversions shown are currently located within the active mine limits and cannot be properly maintained during mining activities.
26. Acceptable temporary diversion berms must be shown directing runoff to sediment skimmer basin #2. The east diversion is shown directing runoff in an uphill fashion toward the basin, which is not acceptable. The east diversion is also shown directing runoff beneath the security fencing and back into the basin. This would be very difficult to maintain. The diversion on the south side of sediment basin #2 is not visible on sheet C301. The extent of the berm is not completely shown on sheet C302. Please clarify.
27. It does not appear that sediment skimmer basin #3 can be installed as shown on sheet C301. The excavation of the basin in this fashion would result in steep slopes on the sides and rear of the basin. The temporary diversion shown on the west side of the basin is shown within the disturbed limits rather than at the edge of the disturbed limits. In addition, the two diversion berms shown on the east side of the basin are shown within excavated areas around the north settling cell, which is not acceptable. The southeast diversion berm is shown directing runoff in an uphill fashion through the 594 contour. The northeast diversion berm is shown directing runoff in an uphill fashion over the 580 contour and toward sediment basin #3. Silt fence is not an acceptable sediment control for this area.
28. Skimmer sediment basin #11 is shown being installed within an area of active excavation, which is not acceptable. In addition, the temporary diversion berm on the west side of the basin is also located in an area of active excavation, which is also not acceptable. The diversion may not be shown in an active fill area and may not include a 90 degree turn toward the basin.
29. No acceptable sediment control measures have been shown below either of the two 8' berms located on the north and east sides of the mine. Temporary sediment fence shown in these areas is not acceptable. In addition, no clear path has been provided from the active work areas to the proposed berms. (i.e., a travel path has not been proposed through or around the "mining limits").

30. No adequate sediment control measures have been proposed to protect the lake shown on the east side of the mine. Silt fence shown in this area is not an acceptable measure.
31. In many areas, no sediment control protection measures have been shown in the vicinity of the 50' buffer zone of existing streams, lakes, and wetlands. Please review these areas carefully and propose acceptable measures in future revised submittals of this plan.
32. The locations of the skimmer outlet pipes must be shown for each proposed sediment skimmer basin shown on sheet C302. In addition, these pipe outlet locations must also be shown on sheet C301.
33. The sequence of mining must be shown on sheet C203. From the cross-section A-A that has been provided, it appears that mining will begin on the north side of the mine, but this has not been expressly stated. Haul roads and varying phases of mining activity must also be shown.
34. All 50-foot buffer areas must be noted as being "undisturbed".



Colonial Pipeline Company

Mark Piazza

Manager, Pipeline Compliance and R&D
Operations Services

Telephone: 678-762-2531
mpiazza@colpipe.com

By Electronic Mail

December 17, 2018

Ms. Judy Wehner
Assistant State Mining Specialist
Division of Energy, Mineral and Land Resources
Department of Environmental Quality
1612 Mail Service Center
Raleigh, NC 27699-1612

RE: Comments on Mining Permit Application
Alamance Aggregates LLC
Snow Camp, NC

Dear Ms. Wehner:

Colonial Pipeline Company (Colonial or the Company) is submitting this letter to provide comments on the Mining Permit Application that has been submitted to the North Carolina Department of Environmental Quality (NCDEQ) by Alamance Aggregates, LLC to operate a crushed stone mining operation near Clark Road in Snow Camp, Alamance County, North Carolina. These comments should be considered by the NCDEQ in its analysis of the factors related to development and operations at the proposed mine site.

Colonial operates an underground refined petroleum products pipeline that is located in the immediate vicinity of the proposed crushed stone mine site. The permit application indicates that blasting is a component of the operations at the proposed mine site. Depending on the distance from the blasting location to Colonial's pipeline and the significance of the blast charge, the blasting operation could represent a threat to the integrity of Colonial's pipeline. Colonial has an established Engineering Standard that it applies to assess the potential impacts from mining blasts in close proximity to the Company's assets, and whether a "blasting encroachment" condition exists. If a blasting encroachment exists, then monitoring and mitigation measures are put in place to ensure that there are no impacts to the pipeline. Placing operating limits in the permit that dictate the blast charges that would be allowed - so that there is no potential for a blasting encroachment condition to exist - would be an effective mitigation method. Absent certain specific permit terms and conditions being placed in the permit issued by NCDEQ, Colonial believes it is possible that operations at the mine could constitute a direct threat to public safety.



N.C.G.S. 74-51 of the Mining Act of 1971 gives the NCDEQ the authority to deny a new permit application or a modification to an existing permit if specific criteria are met. One of the criteria is that the proposed operation constitutes "...a direct and substantial physical hazard to public health and safety...". With no controls in place on the mining operations with regard to blasting charges, the mine operation could potentially represent a direct hazard to Colonial's pipeline based on blasting encroachment engineering analysis performed by Colonial. However, the statute also provides that the NCDEQ can grant a permit to an applicant if "...adverse effects are mitigated by the applicant as determined necessary by the Department...". While Colonial is not advocating that the permit be denied, the Company is requesting that the NCDEQ include certain specific permit terms and conditions that factor the safety of Colonial's existing pipeline by applying mitigative measures to control any potential adverse effects. Based on the blasting encroachment engineering analysis performed by Colonial, Colonial recommends that the permit include a minimum scaled distance value of 51 feet/pounds^{1/2} at the closest point to Colonial's pipeline as it relates to any blasting at the site. If this scaled distance value is included in the terms and conditions of the final operating permit, Colonial believes that blasts at the mine would not be considered "blasting encroachments" per Colonial's Engineering Standards, and would therefore have very limited to no potential impact to the integrity Colonial's pipeline.

Please contact me at 678 762 2531 with any questions regarding these comments.

Sincerely,

Mark Piazza
Manager, Pipeline Compliance and R&D

cc: Denise Langley, Colonial Pipeline Company
Chip Little, Colonial Pipeline Company
Brian Smith, Colonial Pipeline Company
Tom West, Colonial Pipeline Company