



Energy, Mineral &
Land Resources
ENVIRONMENTAL QUALITY

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

TRACY DAVIS
Director

December 1, 2017

John Bratton
Wake Stone Corporation
P O Box 190
Knightdale, NC 27545

RE: Mining Permit No. 92-10
Cary (Triangle) Quarry
Wake County

Dear John Bratton:

This letter is to advise you of recent amendments to the North Carolina Mining Act of 1971 which impact the permit term of your existing mining permit. Pursuant to the passage of House Bill 56, which became law on October 4, 2017 as SL 2017-209, all existing mining permits and any newly issued mining permits are to be issued for the life of site or for the duration of the lease term. The "life of site" means the period from the initial receipt of a permit for the operation until the mining operation terminates and the required reclamation is completed.

Considering the above, this letter hereby modifies your existing mining permit to remove all references to the prior expiration date to convert your permit to a life of site or lease permit effective immediately. No action is required on your part for this modification to be effective. Please attach this letter to your existing mining permit for future reference. The mine name and permit number on the permit document, and all existing operating and reclamation conditions contained therein, shall remain in full force and effect. Furthermore, all provisions of GS §74-51 and GS §74-52 still apply to all new, transferred and modified mining permits.

In addition to the life of site or lease mining permit provision, SL 2017-209 also enacted a new annual mining permit operating fee of \$400 per mining permit number. By statute, the initial payment of this annual \$400 fee must be submitted to this office by December 31, 2017 – see the attached Invoice to remit the initial annual fee payment by this deadline. Beginning in 2018, the \$400 annual operating fee must be submitted by July 1 of each year with the required Annual Reclamation Report as required by GS §74-55. Failure to submit the fee by the required deadline will result in a \$50/month late fee and could result in the denial of future permit actions and/or revocation of your mining permit.

Lastly, pursuant to GS §74-54, the cap on reclamation bonds has been raised from \$500,000 to \$1 million. Any adjustments needed in existing bonds will be initiated by this office or addressed during your next requested permit action unless you contact this office with a written request to have your bond reevaluated.

The issuance of a mining permit and/or any modification to it does not supersede local zoning regulations. The responsibility of compliance with any applicable zoning regulations remains with you.

Thank you for your cooperation in this matter. If you have any questions on the above, please contact Ms. Judy Wehner, Assistant State Mining Specialist, or me at (919) 707-9220.

Sincerely,

William "Toby" Vinson, Jr., PE, CPM
Interim Director, DEMLR



North Carolina Department of Environment and Natural Resources
Division of Land Resources
Land Quality Section

James D. Simons, PG, PE
Director and State Geologist

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

March 30, 2011

Mr. David Lee
Wake Stone Corporation
PO Box 190
Knightdale, North Carolina 27545

RE: Permit No. 92-10
Triangle Mine
Wake County
Neuse River Basin

Dear Mr. Lee:

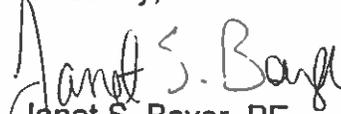
Your application for renewal of the above referenced mining permit has been approved. A copy of the renewed permit is enclosed. The new expiration date is March 30, 2021.

The conditions in the permit renewal were based primarily upon the initial application. Modifications were made as indicated by the renewal request and as required to insure compliance with The Mining Act of 1971. I would like to draw your particular attention to the following conditions where minor additions or changes were made: Operating Condition Nos. 3E, 4B, 7A, 11, and 12B and Reclamation Condition No. 5.

As a reminder, your permitted acreage at this site is 223 acres and the amount of land you are approved to disturb is 164.45 acres. A slight increase in the affected acreage at this site is because of more accurate mapping of the site.

Please review the renewed permit and contact Ms. Judy Wehner, Assistant State Mining Specialist, at (919) 733-4574 should you have any questions concerning this matter.

Sincerely,


Janet S. Boyer, PE
State Mining Specialist
Land Quality Section

JSB/jw
Enclosures

cc: Mr. John Holley, PE
Ms. Shannon Deaton-WRC, w/enclosures
Mr. William Gerringer-DOL, Mine and Quarry Bureau, w/o enclosures

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES

DIVISION OF LAND RESOURCES

LAND QUALITY SECTION

P E R M I T

for the operation of a mining activity

In accordance with the provisions of G.S. 74-46 through 68, "The Mining Act of 1971," Mining Permit Rule 15A NCAC 5 B, and other applicable laws, rules and regulations

Permission is hereby granted to:

Wake Stone Corporation

Triangle Quarry

Wake County - Permit No. 92-10

for the operation of a

Crushed Stone Quarry

which shall provide that the usefulness, productivity and scenic values of all lands and waters affected by this mining operation will receive the greatest practical degree of protection and restoration.

MINING PERMIT EXPIRATION DATE: March 30, 2021

In accordance with the application for this mining permit, which is hereby approved by the Department of Environment and Natural Resources hereinafter referred to as the Department, and in conformity with the approved Reclamation Plan attached to and incorporated as part of this permit, provisions must be made for the protection of the surrounding environment and for reclamation of the land and water affected by the permitted mining operation. This permit is expressly conditioned upon compliance with all the requirements of the approved Reclamation Plan. However, completed performance of the approved Reclamation Plan is a separable obligation, secured by the bond or other security on file with the Department, and may survive the expiration, revocation or suspension of this permit.

This permit is not transferable by the permittee with the following exception: If another operator succeeds to the interest of the permittee in the permitted mining operation, by virtue of a sale, lease, assignment or otherwise, the Department may release the permittee from the duties imposed upon him by the conditions of his permit and by the Mining Act with reference to the permitted operation, and transfer the permit to the successor operator, provided that both operators have complied with the requirements of the Mining Act and that the successor operator agrees to assume the duties of the permittee with reference to reclamation of the affected land and posts a suitable bond or other security.

In the event that the Department determines that the permittee or permittee's successor is not complying with the Reclamation Plan or other terms and conditions of this permit, or is failing to achieve the purposes and requirements of the Mining Act, the Department may give the operator written notice of its intent to modify, revoke or suspend the permit, or its intent to modify the Reclamation Plan as incorporated in the permit. The operator shall have right to a hearing at a designated time and place on any proposed modification, revocation or suspension by the Department. Alternatively and in addition to the above, the Department may institute other enforcement procedures authorized by law.

Definitions

Wherever used or referred to in this permit, unless the context clearly indicates otherwise, terms shall have the same meaning as supplied by the Mining Act, N.C.G.S. 74-49.

Modifications

April 1, 1991: This permit has been modified to include three pit expansions, the construction of a pit perimeter road, and the construction of the visual barrier berm along the 250 foot permanent buffer zone as indicated on the revised Site Plan and supplemental information dated February 14, 1991.

February 5, 1992: This permit has been modified to include and require compliance with the January 20, 1992 blast and rock slide investigative report prepared by Wake Stone Corporation in its entirety.

October 11, 1996: This permit has been modified to allow the shipping of material after 1:00 PM on Saturdays until such time as the Umstead State Park reopens or the repair of the Raleigh Outer Loop Project near RDU Airport is completed, whichever comes first.

November 24, 2010: This permit has been modified to increase the affected acreage at this site to 156.6 acres as indicated on the Site Plan Maps last revised November 22, 2010. The modification includes the construction of a stockpile area contiguous to the existing plant and stockpile yard and includes the installation and maintenance of all associated erosion and sediment control measures.

Expiration Date

This permit shall be effective from the date of its issuance until March 30, 2021.

Conditions

This Permit shall be subject to the provisions of the Mining Act, N.C.G.S. 74-46, et. seq., and to the following conditions and limitations:

OPERATING CONDITIONS:

1. Wastewater and Quarry Dewatering
 - A. Any wastewater processing or mine dewatering shall be in accordance with the permitting requirements and rules promulgated by the N.C. Environmental Management Commission.
 - B. Any storm water runoff from the affected areas at the site shall be in accordance with any applicable permit requirements and regulations promulgated by the Environmental Protection Agency and enforced by the N.C. Environmental Management Commission. It shall be the permittee's responsibility to contact the Division of Water Quality to secure any necessary storm water permits or other approval documents.

2. Air Quality and Dust Control
 - A. Any mining related process producing air contaminant emissions including fugitive dust shall be subject to the requirements and rules promulgated by the N.C. Environmental Management Commission and enforced by the Division of Air Quality.
 - B. The provisions of Air Quality Permit No. 4386 shall be followed.
 - C. The permanent access (plant entrance) road shall be paved from the scale house to SR 1790. During quarry operation, water trucks or other means that may be necessary shall be utilized to prevent dust from leaving the permitted area.
 - D. Dust suppression systems shall be used throughout the plant to control dust.
 - E. Drill hole dust shall be controlled by wetting or other means.

- F. Dust control at the crushers and screens shall be maintained by the use of water sprays.
- G. A water spray shall be provided for highway haul trucks.
- H. Washed stone shall be stockpiled within the part of the designated plant area which is closest to the park.

3. Buffer Zones

- A. Any mining activity affecting waters of the State, waters of the U. S., or wetlands shall be in accordance with the requirements and regulations promulgated and enforced by the N. C. Environmental Management Commission.
- B. Sufficient buffer shall be maintained between any affected land and any adjoining waterway or wetland to prevent sedimentation of that waterway or wetland from erosion of the affected land and to preserve the integrity of the natural watercourse or wetland.
- C. A minimum buffer zone of 250 feet shall be maintained between any mining activity and Crabtree Creek along the north side of the mine site.
- D. A minimum buffer zone of 100 feet shall be maintained between any mining activity and both the Umstead Park property and adjoining property along the east and south sides of the mine site, respectively.
- E. All buffer zones shown on the Site Plan Map dated February 4, 2011 shall be maintained to protect adjoining property. These buffer zones, with the exception of the installation of required sediment control measures and approved earthen berms, shall remain undisturbed.

4. Erosion and Sediment Control

- A. Adequate mechanical barriers including, but not limited to diversions, earthen dikes, check dams, sediment retarding structures, rip rap pits, or ditches shall be provided in the initial stages of any land disturbance and maintained to prevent sediment from discharging onto adjacent surface areas or into any lake, wetland or natural watercourse in proximity to the affected land.
- B. All mining activities, including the installation and maintenance of all erosion and sedimentation control measures, shall be conducted as indicated on the Site Plan Map dated February 4, 2011 and the supplemental information received by the Land Quality Section on February 7, 2011.

- C. An erosion and sediment control plan(s) shall be submitted to the Department for approval prior to any land disturbing activities not indicated on the revised erosion control plan or mine maps submitted with the approved application for a mining permit and any approved revisions to it. Such areas include, but are not limited to, expansion outside of the approved pit area, creek crossings, or expansion of overburden or waste disposal areas.

5. Groundwater Protection

Groundwater monitoring wells shall be installed and monitored as deemed appropriate by the Department.

6. Noise Abatement

All reasonable precautions shall be taken to minimize the impacts of operational noise upon Umstead Park. Said measures shall include, but not be limited to the following:

- A. Noise barriers between the park boundary and the crushers and screening towers to minimize noise levels at the park shall be provided from the onset of the operation. Noise barriers may be enclosures, walls, bins, structures, stockpiles or natural terrain. In the event there is disagreement over the required noise control measure, the final design and placement of noise barriers shall be determined by qualified noise and engineering consultants mutually agreed upon by both parties.
- B. The plant shall be located at the lowest feasible elevation.
- C. The plant shall be designed so that the primary crusher can be relocated in the pit at the earliest possible date.
- D. The chutes used in processing shall be rubberized.
- E. Compressors with noise abatement enclosures (currently called whispered compressors) shall be used with track drills to open the quarry. Once the quarry is opened, either hydraulic or down-in-the-hole drills shall be used to further reduce noise.
- F. Pit haul trucks shall be equipped to exhaust through the beds of the trucks to muffle engine noise.
- G. Conveyors rather than trucks shall be used for stockpiling material.

- H. The quarry and stone process operations shall be operated on Monday through Friday and shall not be operated on the following recognized holidays: New Years Day, Easter Monday, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day. A reasonable amount of hauling of processed stone from the stockpile areas is permitted until 1:00 PM on Saturdays but hauling shall not be done at any other time on weekends or on holidays without prior approval from the Department.

7. Processing Plant Location

- A. The processing and stockpiling facilities shall be located as indicated on the Site Plan Map dated February 4, 2011.
- B. The plant shall be located to place the processing and stockpiling activities at the lowest possible elevation to reduce visibility and noise impacts on Umstead State Park.
- C. The location of the pit shall be such that once the overburden is removed, the quarry excavating equipment (i.e., compressor and drill, shovels, and trucks) can be placed at an elevation lower than the surrounding natural ground in the initial phases of quarrying.

8. Graded Slopes and Fills

- A. The angle for graded slopes and fills shall be no greater than the angle which can be retained by vegetative cover or other adequate erosion control measure, structure, or device. In any event, exposed slopes or any excavated channels, the erosion of which may cause off-site damage because of siltation, shall be planted or otherwise provided with groundcover, devices or structures sufficient to restrain such erosion.
- B. Overburden cut slopes along the perimeter of the quarry opening shall be graded to a minimum 2 horizontal to 1 vertical or flatter and shall be stabilized within 60 days of completion. Furthermore, a minimum ten (10) foot wide horizontal safety bench shall be provided at the top of the rock and at the toe of any overburden slope.

9. Surface Drainage

The affected land shall be graded so as to prevent collection of pools of water that are, or likely to become, noxious or foul. Necessary structures such as drainage ditches or conduits shall be constructed or installed when required to prevent such conditions.

10. Blasting

The operator shall monitor each blast with a seismograph located at a distance no farther than the closest off site regularly occupied structure not owned or

leased by the operator. A seismographic record including peak particle velocity, air overpressure, and vibration frequency levels shall be kept for each blast (except as provided under Operating Condition Nos. 8B and 8D of this permit). The following blasting conditions shall be observed by the mine operator to prevent hazard to persons and adjacent property from surface blasting:

A. Ground Vibration With Monitoring:

In all blasting operations, the maximum peak particle velocity of any component of ground motion shall not exceed Figure 1 (below) at the immediate location of any regularly occupied building outside of the permitted area such as a dwelling house, church, school, or public, commercial or institutional building.

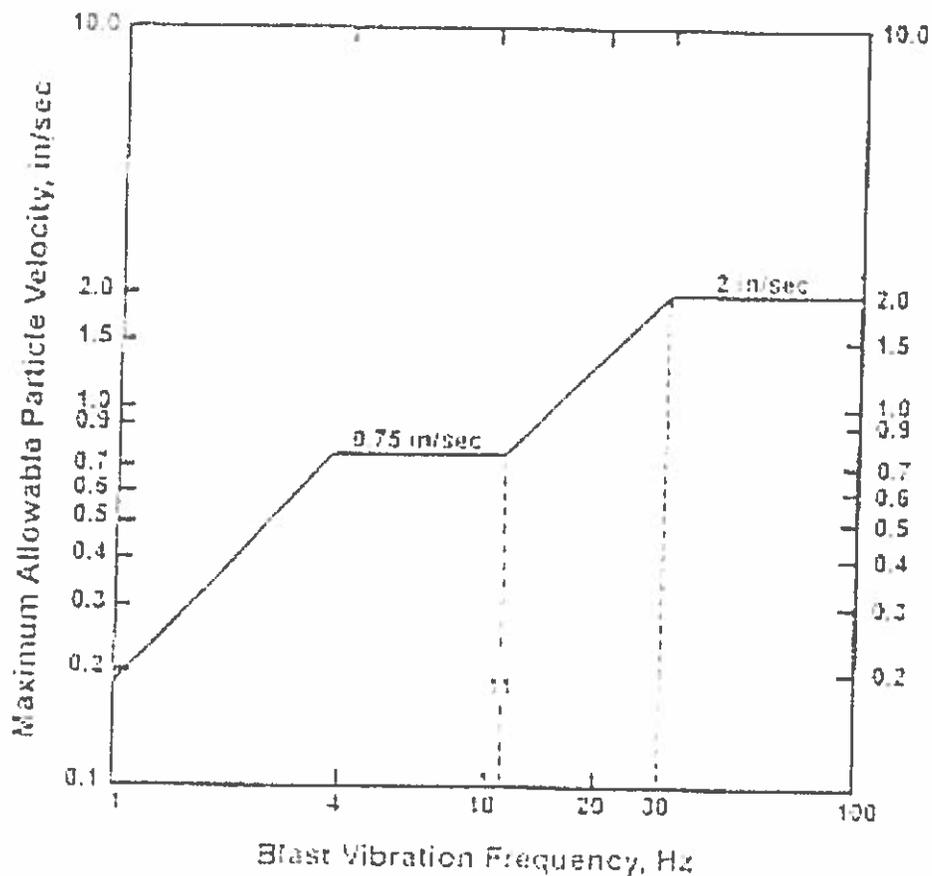


Figure 1. Alternative blasting level criteria
(Source modified from figure B-1, Bureau of Mines R13507)

B. Ground Vibration Without Monitoring:

In the event of seismograph malfunction or other condition which prevents monitoring, blasting shall be conducted in accordance with the following formulas:

$$W = (D/D_s)^2 \quad D_s = \frac{D}{W^{1/2}}$$

$$V = 160(D_s)^{-1.6}$$

- W = Maximum charge weight of explosives per delay period of 8.0 milliseconds or more (pounds).
 D = Distance from the blast site to the nearest inhabited building not owned or leased by the mine operator (feet).
 D_s = Scaled distance factor.
 V = Peak Particle Velocity (inches per second).

The peak particle velocity of any component shall not exceed 1.0 inch per second, for the purposes of this Section.

C. Air blast With Monitoring:

Air blast overpressure resulting from surface blasting shall not exceed 129 decibels linear (dBL) as measured at the immediate location of any regularly occupied building not owned or leased by the operator outside of the permitted area such as a dwelling house, church, school, or public, commercial or institutional building, unless an alternate level based on the sensitivity of the seismograph microphone as specified below is being used:

Lower Frequency Limit of Measuring System, in Hz	Max Level, in dBL
0.1 Hz or lower-flat response	134 peak
2.0 Hz or lower-flat response	133 peak
6.0 Hz or lower-flat response	129 peak

D. Air blast Without Monitoring:

In the event of seismograph malfunction or other condition which prevents monitoring, blasting shall be conducted in accordance with the following formulas:

$$U = 82 (D/W^{0.33})^{-1.2}$$

To convert U (psi) to P (dBL):

$$P = 20 \times \log (U/2.9 \times 10^{-9})$$

Confined Air blast/Overpressure (dBL)
for quarry situation:

$$A = P - 35$$

- U = Unconfined air overpressure (pounds per square inch).
- W = Maximum charge weight of explosives per delay period of 8.0 milliseconds or more (pounds).
- D = Distance from the blast site to the nearest inhabited building not owned or leased by the mine operator (feet).
- P = Unconfined air overpressure (decibels).
- A = Air blast or air overpressure for typical quarry situations (decibels).

The air blast/overpressure shall not exceed 129 decibels, for the purposes of this Section.

E. Record Keeping:

The operator shall maintain records on each individual blast describing: the total number of holes; pattern of holes and delay of intervals; depth and size of holes; type and total pounds of explosives; maximum pounds per delay interval; amount of stemming and burden for each hole; blast location; distance from blast to closest offsite regularly occupied structure; and weather conditions at the time of the blast. Records shall be maintained at the permittee's mine office and copies shall be provided to the Department upon request.

F. Excessive Ground Vibration/Air blast Reporting:

If ground vibration or Air blast limits are exceeded, the operator will immediately report the event with causes and corrective actions to the Department. Use of explosives at the blast site that produced the excessive reading shall cease until corrective actions approved by the Department are taken. However, blasting may occur in other approved areas within the permitted boundary. Authorization to blast at the blast site may be granted at the time of the verbal reporting of the high ground vibration or high air blast reading if the circumstances justify verbal approval. Failure to report will constitute a permit violation.

G. Flyrock Prevention:

The operator shall take all reasonable precautions to ensure that flyrock is not thrown beyond areas where the access is temporarily or permanently guarded by the operator. Failure to take corrective measures to prevent flyrock and repeated instances of flyrock shall be considered a violation of the Mining Permit.

H. Flyrock Reporting:

Should flyrock occur beyond the permitted and guarded areas, the operator shall immediately report the incident to the Department. Further use of explosives on the mine site shall be suspended until the following actions have been taken:

1. A thorough investigation as to the cause(s) of the incident shall be conducted.
2. A report detailing the investigation shall be provided to the Department within 10 days of the incident. The report shall, at a minimum, document the cause(s) of the incident along with technical and management actions that will be taken to prevent further incidents. The report shall meet with the approval of the Department before blasting may resume at the mine site.

I. Studies:

The operator shall provide to the Department a copy of the findings of any seismic studies conducted at the mine site in response to an exceedence of a level allowed by these blasting conditions. The operator shall make every reasonable effort to incorporate the studies' recommendations into the production blasting program.

J. Notice:

The operator shall, when requested by the Department, give 24-hour advance notice to the Land Quality Section Regional Office prior to any blast during a period for which notice is requested.

- K. Regarding blasting activities conducted to lower the haul road along the western boundary of the "Pit Expansion Initiated During 1989" area and Crabtree Creek, all of the corrective actions/steps outlined in the blast and rock slide investigation report prepared by Wake Stone Corporation dated January 20, 1992 shall be followed. In addition, any areas disturbed as a result of the previous rock slide and its subsequent removal shall be restored to its natural, pre-disturbed state or an alternative acceptable to the Department.

11. High Wall Barrier

A physical barrier consisting of large boulders placed end-to-end, fencing or other acceptable barrier materials shall be maintained at all times along the perimeter of any highwall to prevent inadvertent public access. In addition, a minimum 10 foot wide horizontal safety bench shall be provided at the junction between the top of rock and the toe of any overburden cut slope.

12. Visual Screening

- A. Existing vegetation shall be maintained between the mine and public thoroughfares to screen the operation from the public. Additional screening methods, such as constructing earthen berms, shall be employed as deemed appropriate by the Department.
- B. Vegetated earthen berms shall be located and constructed as shown on the Site Plan Map dated February 4, 2011. In addition to grasses, long leaf and/or Virginia pines or other acceptable evergreen species shall be planted as deemed appropriate by the Department to improve visual and noise buffering.
- C. Other berms may be required as mining progresses to reduce the noise and visual impact upon Umstead State Park.

13 13 Plan Modification

The operator shall notify the Department in writing of the desire to delete, modify or otherwise change any part of the mining, reclamation, or erosion/sediment control plan contained in the approved application for a mining permit and any approved revisions to it. Approval to implement such changes must be obtained from the Department prior to on-site implementation of the revisions.

14 12. Refuse Disposal

- A. No on-site disposal of refuse or other solid waste that is generated outside of the mining permit area shall be allowed within the boundaries of the mining permit area unless authorization to conduct said disposal has first been obtained from both the Division of Waste Management and the Land Quality Section, Department of Environment and Natural Resources. The method of disposal shall be consistent with the approved reclamation plan.
- B. Mining refuse as defined by G.S. 74-49 (14) of The Mining Act of 1971 generated on-site and directly associated with the mining activity may be disposed of in a designated refuse area. All other waste products must be disposed of in a disposal facility approved by the Division of Waste Management. No petroleum products, acids, solvents or their storage containers or any other material that may be considered hazardous shall be disposed of within the permitted area.
- C. For the purposes of this permit, the Division of Land Resources considers the following materials to be "mining refuse" (in addition to those specifically listed under G.S. 74-49 (14) of the N.C. Mining Act of 1971):
 1. on-site generated land clearing debris
 2. conveyor belts

3. wire cables
4. v-belts
5. steel reinforced air hoses
6. drill steel

D. If mining refuse is to be permanently disposed within the mining permit boundary, the following information must be provided to and approved by the Division of Land Resources prior to commencement of such disposal:

1. the approximate boundaries and size of the refuse disposal area;
2. a list of refuse items to be disposed;
3. verification that a minimum of 4 feet of cover will be provided over the refuse;
4. verification that the refuse will be disposed at least 4 feet above the seasonally high water table; and
5. verification that a permanent vegetative groundcover will be established

15
16
17
18

Annual Reclamation Report

An Annual Reclamation Report shall be submitted on a form supplied by the Department by February 1 of each year until reclamation is completed and approved.

Bonding

The security, which was posted pursuant to N.C.G.S. 74-54 in the form of a \$500,000.00 blanket bond, is sufficient to cover the operation as indicated in the approved application. This security must remain in force for this permit to be valid. The total affected land shall not exceed the bonded acreage.

Archaeological Resources

Authorized representatives of the Division of Archives and History shall be granted access to the site to determine the presence of significant archaeological resources.

APPROVED RECLAMATION PLAN

The Mining Permit incorporates this Reclamation Plan, the performance of which is a condition on the continuing validity of that Mining Permit. Additionally, the Reclamation Plan is a separable obligation of the permittee, which continues beyond the terms of the Mining Permit.

The approved plan provides:

Minimum Standards As Provided By G.S. 74-53

1. The final slopes in all excavations in soil, sand, gravel and other unconsolidated materials shall be at such an angle as to minimize the possibility of slides and be consistent with the future use of the land.
2. Provisions for safety to persons and to adjoining property must be provided in all excavations in rock.
3. All overburden and spoil shall be left in a configuration which is in accordance with accepted conservation practices and which is suitable for the proposed subsequent use of the land.
4. No small pools of water shall be allowed to collect or remain on the mined area that are, or are likely to become noxious, odious or foul.
5. The revegetation plan shall conform to accepted and recommended agronomic and reforestation practices as established by the North Carolina Agricultural Experiment Station and the North Carolina Forest Service.
6. Permittee shall conduct reclamation activities pursuant to the Reclamation Plan herein incorporated. These activities shall be conducted according to the time schedule included in the plan, which shall to the extent feasible provide reclamation simultaneous with mining operations and in any event, provide reclamation at the earliest practicable time after completion or termination of mining on any segment of the permit area and shall be completed within two years after completion or termination of mining.

RECLAMATION CONDITIONS:

1. Provided further, and subject to the Reclamation Schedule, the planned reclamation shall be to allow the quarry excavation to fill with water, provide a permanent barricade (fence) along the top of any high wall, and grade and revegetate any areas in unconsolidated material.
2. The specifications for surface gradient restoration to a surface suitable for the planned future use are as follows:

- A. All areas of unconsolidated material such as overburden or waste piles shall be graded to a 2 horizontal to 1 vertical or flatter slope and terraced as necessary to insure slope stability.
- B. Any settling ponds and sediment control basins shall be backfilled, graded, and stabilized or cleaned out and made into acceptable lake areas.
- C. The processing, stockpile, and other disturbed areas neighboring the mine excavation shall be leveled and smoothed.
- D. Compacted surfaces shall be disced, subsoiled or otherwise prepared before revegetation.
- E. No contaminants shall be permanently disposed of at the mine site. On-site disposal of waste shall be in accordance with Operating Conditions Nos. 12.A. through D.
- F. The affected land shall be graded to prevent the collection of noxious or foul water.
- G. Any diverted or re-established drainage channels shall be restored to a stable condition.

3. Revegetation Plan:

Disturbed areas shall be permanently revegetated according to the following provisions:

Site Preparation: The land surfaces shall be graded and/or shaped as necessary to create grades applicable to the subsequent use of the site, but in no case will any slope greater than 26 degrees in unconsolidated material be left. Loose rock, woody material and other obstructions that would interfere with the establishment of vegetation planned for the site shall be removed and either buried or properly disposed of off-site in accordance with Operating Condition Nos. 12A through D above. Surface runoff shall be controlled by terraces or diversions to allow discharge through protected outlets.

Lime and Fertilizer: Lime and fertilizer shall be applied in accordance with soil test result or at a rate of 2,000 lbs/acre of lime and 1000 lbs/acre of 10-20-20 fertilizer.

Seedbed Preparation: Lime and fertilizer shall be mixed with the soil to a depth of three to four inches where conventional equipment can be used. On slopes steeper than about 2:1, soils shall be grooved or scarified along the contour to provide for retention of seeds and nutrients on the slope until germination and growth is started. On steep slopes not accessible to seeding equipment, seed, nutrients and mulch, shall be applied by hand.

Revegetation: Typical seed mixtures to be utilized include fescue-rye, fescue-rye-lespedeza, and fescue-lespedeza, where the lespedeza used may be Korean or Kobe or Sericea. All rye species to be utilized shall be rye grain rather than rye grass. In fall or spring plantings, seeding mixtures shall utilize 100 lbs. Fescue and 50 lbs. Rye per acre to be planted. Late spring plantings in certain areas may contain up to 40 lbs. Kobe/Korean per acre where desirable to supplement natural deer browse. Sericea lespedeza shall be utilized at a rate of 20 to 40 lbs. per acre in combination with Fescue when planting excessively droughty soils or steep slopes. When using lespedeza species in fall plantings, non-scarified seed shall be utilized. Scarified seed shall be utilized in spring plantings. Newly seeded areas shall be mulched with unchopped small grain straw applied at a rate of 1.5 to 2 tons per acre, or until approximately 75% of the soil is hidden.

Loblolly pines (or other acceptable evergreen species) and red cedar seedlings shall be planted at selected sites to provide visual screens and revegetation. Evergreen seedling plantings shall be done on a staggered 4 feet by 4 feet pattern.

Maintenance: Plant placement and other maintenance that may be required to establish vegetative cover appropriate to the reclamation plan for this site shall be carried out until vegetation is properly established.

Whenever possible, disturbed areas should be vegetated with native warm season grasses such as switch grass, Indian grass, bluestem and gamma grass.

In addition, the permittee shall consult with a professional wildlife biologist with the N.C. Wildlife Resources Commission to enhance post-project wildlife habitat at the site.

4. Reclamation Plan:

Reclamation shall be conducted simultaneously with mining to the extent feasible. In any event, reclamation shall be initiated as soon as feasible after completion or termination of mining of any mine segment under permit. Final reclamation, including revegetation, shall be completed within two years of completion or termination of mining.

5. Donation to State

This provision is pursuant to Wake Stone Corporation's offer to donate the quarry site to the State as part of its reclamation plan.

The term "quarry site" shall include the entire pit as it exists after quarrying has been completed, a strip extending at least 50 feet back from the top of the slope of the pit on all sides, and a reasonable area to connect the pit and surrounding strip to the Park, constituting a total area of at least 75 acres.

The method by which the quarry site may be donated to the State is as follows: Wake Stone Corporation will grant to the State an option which, if exercised by the State, will require that Wake Stone Corporation convey a fee simple title to the quarry site to the State. The State shall have no obligations to exercise its option to accept a conveyance of the quarry site. The option may include such other terms as are mutually acceptable to the State and Wake Stone Corporation.

During the option period, Wake Stone Corporation shall have the right to encumber all of its remaining property from time to time by mortgage, deed of trust or other security agreement then in common use for the purpose of securing one or more bona fide obligations of Wake Stone Corporation, such as the payment of money or the providing of any goods or services. The option to the State shall be subordinate to each such encumbrance in the same manner and to the same extent as if such option has been recorded after the restoration of each such encumbrance.

The right of the State to exercise its option shall be subject to:

Wake Stone Corporation not being prohibited by the US Government, State of North Carolina, Wake County, any municipality having jurisdiction, or by any other court from removing from Wake Stone Corporation's property all quarryable stone which is outside of the buffer zones referred to in Operating Condition No.3 of this permit. The requirements by the State that Wake Stone Corporation comply with laws and rules and regulations generally applicable to stone quarrying shall not be deemed a prohibition of quarrying for the purpose of the option agreement.

The conveyance of the quarry site, if approved by the State, shall be by deed containing the usual covenants of warranty and conveying the quarry site free and clear of all encumbrances except those existing at the time of Wake Stone Corporation's purchase, ad valorem taxes at the time of conveyance (which shall be prorated), and such drainage and utility easements as shall have been installed in connection with the development of the property.

The terms and conditions of the option shall be as follows:

- A. When all quarryable stone has been removed from all of the land and belonging to or under the control of Wake Stone Corporation during the period of its quarrying operations and which lies between Umstead State Park and Interstate Highway 40, it shall be the duty of Wake Stone Corporation to notify the State of this fact. Upon receipt of such notice, the State shall have six months within which it may elect to have Wake Stone Corporation convey the quarry site to the State. If the State elects to have Wake Stone Corporation convey the quarry site to the State, it shall notify Wake Stone Corporation of such election within said six month period. All notices shall be by certified mail and return receipt requested. If the State fails to make election within said six month period or shall elect not to accept a conveyance of the quarry site, the option shall be thereupon

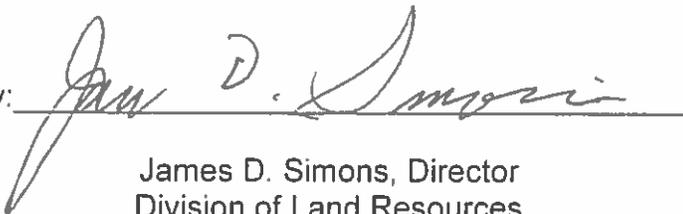
terminate and Wake Stone Corporation shall have no further obligation to convey the quarry site to the State.

Order

- B. If all quarryable stone is not removed, the right of the State to acquire the quarry site shall accure at the end of 50 years from the date quarrying commences or 10 years after quarrying operations have ceased without having been resumed, whichever is ~~sooner~~, and notices shall be exchanged at that time in the same manner and with the same time limitations as set forth in Paragraph A above.
- C. Until the option has expired, Wake Stone Corporation shall not encumber by mortgage or deed of trust of any of the area designated "BUFFER AREA" on Wake Stone Corporation's Site Plan dated February 4, 2011, except for purchase money security interests.

The terms and conditions relating to the donation are placed herein to prescribe generally the boundaries of the Wake Stone Corporation offer. The acceptance by the State is subject to approval by the Department of Administration and the council of State and the ascertaining that the offer is in accord with the laws of the State and lawfully adopted rules and regulations. Further, the Department's analysis of the conditions of the land to be transferred will be in accordance with the criteria identified in the "Principles' Governing the Establishment of Extension and Development of State Parks, State Recreation Areas and State Natural Areas."

This permit, issued May 13, 1981, modified April 15, 1986, renewed and modified April 1, 1991, modified February 5, 1992 and October 11, 1996, renewed April 20, 2001 and modified November 24, 2010, is hereby renewed this 30th day of March, 2011 pursuant to G.S. 74-52.

By: 

James D. Simons, Director
Division of Land Resources
By Authority of the Secretary
Of the Department of Environment and Natural Resources

Wehner, Judy

From: Landry, Natalie
Sent: Thursday, March 10, 2011 11:27 AM
To: Wehner, Judy; Holley, John
Cc: Smith, Danny; Jones, Jennifer
Subject: RE: Triangle Quarry, Wake Stone Corp 92-10 Renewal
Attachments: 92-10 DLR_Triangle Quarry - Water Quality Review Sheet 2010.doc

Attached is DWQs review of the Triangle Quarry Mine Permit Renewal application. Feel free to contact me if you have any questions. Thanks.

Natalie

Natalie Landry
DENR - Surface Water Protection
3800 Barrett Drive
Raleigh, NC 27609
(919) 791-4258

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Smith, Danny
Sent: Monday, March 07, 2011 10:01 AM
To: Landry, Natalie
Subject: FW: Triangle Quarry, Wake Stone Corp 92-10 Renewal

Fyi
ds

My email has changed to danny.smith@ncdenr.gov

***E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.*

From: Wehner, Judy
Sent: Monday, February 07, 2011 11:56 AM
To: Smith, Danny
Subject: Triangle Quarry, Wake Stone Corp 92-10 Renewal

Here's the review sheet for the renewal of Triangle Quarry. It was just modified recently.

Judy Wehner
Assistant State Mining Specialist
1612 Mail Service Center
Raleigh, North Carolina 27699-1612
(919) 733-4574

(919) 715-8801 fax

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

MINING PERMIT APPLICATION REVIEW FORM

for the

DIVISION OF WATER QUALITY

THIS SECTION TO BE FILLED OUT BY DLR:

Project Name: Triangle Quarry DLR Permit #: 92-10 County: Wake Address: davidlee@wakestonecorp.com

	<u>YES</u>	<u>NO</u>	<u>Date Commencing</u>
Is this mine a new mine?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>1981</u>
Have land disturbing activities started? Date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>1981</u>

Latitude: 35-50-57 Longitude: 80-45-57

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

Comments due by: 3/4/11

SECTION BELOW TO BE FILLED OUT BY DWQ:

Is the RO concerned that the operation, as proposed, would violate standards of water quality? No
 Comments: Mining Permit renewal with no new land disturbance proposed

Watershed/Stream Name & Classification: Crabtree Creek

DWQ Compliance Status of Mine: compliant

	<u>YES</u>	<u>NO</u>
NPDES permit required?	<input checked="" type="checkbox"/> _____	<input type="checkbox"/> _____
NPDES permit existing?	<input checked="" type="checkbox"/> (Permit # <u>NCG020001</u>)	<input type="checkbox"/> _____
If an NPDES permit is not required, is DWQ still concerned about wetland degradation by dewatering?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Should permittee contact DWQ RO immediately? (e.g. to schedule a site visit if mine has already begun digging or is dewatering without DWQ permit)	<input type="checkbox"/> RO Contact Name: _____ Contact Reason: _____	<input checked="" type="checkbox"/> _____
401 Wetland Cert. required?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
401 Wetland Cert. existing?	<input checked="" type="checkbox"/> Permit # _____	<input type="checkbox"/> _____
Does DWQ RO currently have enough information to determine if a 401 certification is required?	<input type="checkbox"/> _____	<input type="checkbox"/> _____

	<u>YES</u>	<u>NO</u>
Are wetlands disturbed at this site?	<input type="checkbox"/> _____	<input checked="" type="checkbox"/> _____
Does DWQ RO suspect or know of nearby wetlands to the site?	<input checked="" type="checkbox"/> _____	<input checked="" type="checkbox"/> _____
Is a wetland delineation required prior to DWQ issuing the permit?	<input type="checkbox"/> By: <input type="checkbox"/> JD or <input type="checkbox"/> Consultant <input type="checkbox"/> Onsite? Or <input type="checkbox"/> Offsite?	<input checked="" type="checkbox"/> _____
Stream Determination Needed?	<input type="checkbox"/> _____	<input checked="" type="checkbox"/> _____
Stream Determination Completed?	<input type="checkbox"/> _____	<input checked="" type="checkbox"/> _____
Does DWQ 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 type="checkbox"/> _____
New Recycle System permit required?*	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Enough information to determine?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
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: _____
	Unknown (permittee determine): <input type="checkbox"/> _____	
Does DWQ require DLR to hold the permit (e.g. so DWQ can review it further or because DWQ requires more information)?	<input type="checkbox"/> Has Violation <input type="checkbox"/> O&M Requirements <input type="checkbox"/> HQW/7Q10 Concerns <input type="checkbox"/> Other. Reason: _____ RO contact: _____ <input type="checkbox"/> Hold Until: _____	<input checked="" type="checkbox"/> _____
Mine must wait to dewater until an O&M plan is approved?	<input type="checkbox"/> _____	<input checked="" type="checkbox"/> _____

**The NPDES SW and WW permit NCG020000 covers closed-loop recycle systems, designed to exclude all stormwater run-off from the system and operate at or below two-feet of freeboard. These systems may be permitted by a Non-discharge Recycle System Permit from the Aquifer Protection Section (APS). OR may instead be permitted under NCG020000 to eliminate an additional permit. Recycle systems that do not meet those criteria are considered discharging systems, and are subject to the NCG020000 discharge permit.*

***To obtain 7Q10 flows, permittees must contact the DWQ Stormwater Permitting Unit. If DWQ does not have a flow estimate for a specific stream, permittees will be asked to obtain one. Permittees should contact J. Curtis Weaver at the USGS: 919-571-4043, for more information on obtaining a 7Q10 flow. USGS will not determine a 7Q10 flow for tidally influenced water bodies.*

Reviewed by:

DWQ RO Surface Water: N. Landry Regional Office: Raleigh Date: 03/10/2011

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

SPU DWQ Central Office Reviewer (if applicable): _____

Wehner, Judy

From: David Lee [davidlee@wakestonecorp.com]
Sent: Monday, March 07, 2011 3:21 PM
To: Judy Wehner; Wehner, Judy
Subject: Language
Attachments: Mining Commission Final Decision.pdf; Language for Donation to State.doc

Judy-

Thanks for the opportunity to review the Triangle Quarry permit with you this morning by phone. I have spent some more time reviewing the permit since you and I last spoke by phone and believe the section on "Donation to State" would benefit from some revision. The original permit for Triangle was issued before I joined Wake Stone so I'm not as familiar with offer to "donate to the State" as I probably should be. However, I've located the Mining Commission's FINAL DECISION document of April 3, 1981 (copy attached) and compared the "donation to the state" language there (pages 3-6) with what is in the current version of the permit (pages 18-19). The "donation to the state" language in the permit seems confusing to me - discussion of "option" before its even made know what the "option" is all about. I think it would be beneficial to incorporate the Commission's language more nearly verbatim.

I've taken the liberty of drafting suggested language you might consider in place of existing section 5. beginning on page 17 of the permit. Feel free to run it by Tracy and/or Jim and see what they think.

Let me know if you have any questions or need any additional information. I'm not trying to write my own permit, just trying to be helpful.

Thanks!

[Mining Commission Final Decision.pdf](#) [Language for Donation to State.doc](#)

-David

David F. Lee
Geologist/Environmental Supervisor
Wake Stone Corporation
PO Box 190
Knightdale, North Carolina 27545
Office: 919-266-1100, ext. 134
Cell: 919-369-3449
Home: 919-553-4666

BEFORE THE MINING COMMISSION

In the Matter of Denial of
Permit Application of
Wake Stone Corporation

FINAL DECISION

In accordance with this Commission's initial Findings of Fact, Conclusions, and Decision of January 27, 1981, as amended and corrected, and with the March 12, 1981 Agreement of Wake Stone Corporation and the Division of Land Resources, Department of Natural Resources and Community Development, concerning the Conditions enumerated below as 1, 2, 4, and 5; and upon consideration of the supplementary arguments of the parties concerning Condition 3, *infra*, the Mining Commission hereby orders that the Division of Land Resources grant to Wake Stone Corporation the permit applied for with the following conditions:

Condition No. 1 - Minimize noise, dust, and other possible adverse effects.

Noise

1. Noise barriers between crushers and screening towers to minimize noise levels at the park shall be provided from the outset of the operation. Noise barriers may be enclosures, walls, bins, structures, stockpiles, or natural terrain. In the event there is disagreement over the required noise control measures, the final design and emplacement of noise barriers shall be determined by qualified noise and engineering consultants mutually agreed upon by both parties.
2. The plant shall be located at a lower elevation as indicated on the required site plan.
3. The plant shall be designed so that the primary crusher can be relocated in the pit at the earliest possible date.
4. The chutes used in processing shall be rubberized.

5. Compressors with noise abatement enclosures (currently called whispered compressors) shall be used with track drills to open the quarry. Once the quarry is opened, either hydraulic or down-in-the-hole drills shall be used to further reduce noise.
6. Only such blasting techniques as minimize noise shall be employed.
7. Pit haul trucks shall be equipped to exhaust through the beds of the trucks to muffle engine noise.
8. Conveyors rather than trucks shall be used for stockpiling material.
9. The quarry shall be operated only on Monday through Friday and shall not be operated on State-recognized holidays.

Dust

1. The access road to the quarry, from the scale house to SR 1790, shall be paved. Wake Stone Corporation agrees to cooperate with the Department of Transportation in paving SR 1790 from the entrance to the quarry to the intersection with SR 1654.
2. The provisions of the air quality permit No. 4386 shall be followed.
3. A water wagon with sprays shall be used for wetting roads to prevent dust.
4. Sprays shall be used throughout the plant at transfer points to control dust.
5. Drill hole dust shall be controlled by wetting or other means.
6. Dust control shall be maintained by the use of water sprays.
7. A water spray shall be provided for highway haul trucks.
8. Washed stone shall be stockpiled within the part of the designated plant area which is closest to the park.

Condition No. 2 - Optimize processing and stockpiling facilities to minimize possible effects on the park.

1. The processing and stockpiling facilities shall be relocated as indicated on the Wake Stone revised site plan submitted February 18, 1981. The purpose of this relocation shall be to screen the park from the sight and sound of the operation, reduce erosion, and shield the operation from public view along Interstate 40.
2. The relocation shall place the processing and stockpiling facilities at a lower elevation to reduce visibility and noise.
3. The stockpiles shall be located close to the quarry entrance roads.
4. The plant and stockpile area shall be close to the intersection of SR-1790 and SR 1654.
5. The initial site disturbance from both quarry excavation and plant site development shall be confined to one drainage system, which is now already protected by ponds which will serve as sediment basins. The purpose of this relocation is to aid erosion and sediment control.
6. The new location of the pit shall be such that, once the overburden is removed, the quarry excavating equipment - i.e. compressor and drill, shovels, and trucks - can be placed below the surrounding land at the initial phases of quarrying.

Condition No. 3 - Buffer Zone Plan

1. The extent of the completely undisturbed buffer zone to be maintained between the park boundary during the 10 year permit shall be as indicated on the revised plan and modified by Exceptions 2, 3, and 4 listed on Page 2 of Wake Stone Corporation's memorandum of March 10, 1981, except all of the area north of the ten-year buffer line shall be left as a natural buffer

zone and not be developed or altered for commercial purposes.

Condition No. 4 - Construction of Berms

1. A vegetated earthen berm shall be constructed between the Wake Stone Corporation plant and the western boundary of the park as shown on Wake Stone Corporation's revised site plan.
2. Berm dimensions shall be no less than indicated on Wake Stone Corporation's revised site plan and may be higher and longer than shown, except the berm shall not encroach on the permanent buffer zone.
3. The side slopes of the berm shall be graded to a stable grade of 2 horizontal to 1 vertical grade or flatter and revegetated on the sides and top with grasses and evergreen trees. The toe of the berm shall not encroach on the park property boundary and shall be at least 50 feet from the boundary.
4. Other berms may be required as mining progresses to reduce the noise and visual impact upon the quarry.

Condition No. 5 - Donation of Quarry to the State

Pursuant to Wake Stone Corporation's offer to donate the quarry site to the State as part of its reclamation plan, the terms and conditions of the offer and acceptance shall be set forth in the reclamation plan as follows.

The term, "quarry site", shall include the entire pit as it exists after quarrying has been completed, a strip extending at least 50 feet back from the top of the slope of the pit on all sides (see the reclamation plan for the requirements applying to the slope), and a reasonable area to connect the pit and surrounding strip to Umstead Park, constituting a total area of at least 75 acres.

The method by which the quarry site will be donated to the State is as follows: Upon acquisition of the land by Wake Stone (by the exercise of its options to purchase), Wake Stone will grant to the State an option which, if exercised by the State, will require that Wake Stone convey a fee simple title to the quarry site to the State. The State shall have no obligation to exercise its option to accept a conveyance of the quarry site.

The terms and conditions of the option shall be as follows:

1. When all quarryable stone has been removed from all of the land belonging to or under the control of Wake Stone Corporation during the period of its quarrying operations and which lies between Umstead Park and Interstate Highway 40, it shall be the duty of Wake Stone to notify the State of this fact. Upon receipt of such notice, the State shall have six months within which it may elect to have Wake Stone convey the quarry site to the State. If the State elects to have Wake Stone convey the quarry site to the State, it shall notify Wake Stone of such election within said six month period. All notices shall be by certified mail with return receipt requested. If the State fails to make an election within said six month period or shall elect not to accept a conveyance of the quarry site, the option shall thereupon terminate and Wake Stone shall have no further obligation to convey the quarry site to the State.

2. If all quarryable stone is not removed, the right of the State to acquire the quarry site shall accrue at the end of 50 years from the date quarrying commences or 10 years after quarrying operations have ceased without having been resumed, whichever is later, and notices shall be exchanged at that time in the same manner and with the same time limitations as set forth in paragraph 1 above.

3. Until the option has expired Wake Stone will not encumber by mortgage or deed of trust any of the area designated "BUFFER AREA" on Wake Stone's site plan dated February 17, 1981, revised March 10, 1981, except for purchase money security interests.

4. During the option period, Wake Stone shall have the right to encumber all of its remaining property from time to time by mortgage, deed of trust or other security agreement then in common use for the purpose of securing one or more bona fide obligations of Wake Stone, such as the payment of money or the providing of any goods or services. The option to the State shall be subordinate to each such encumbrance in the same manner and to the same extent as if such option had been recorded after the recordation of each such encumbrance.

5. The right of the State to exercise its option shall be subject to:

(a) Wake Stone not being prohibited by the U.S. Government, State of North Carolina, Wake County, any municipality having jurisdiction, or by any court from removing from Wake Stone's property all quarryable stone which is outside of the BUFFER AREA referred to in paragraph 3 above. The requirement by the State that Wake Stone comply with laws and rules and regulations generally applicable to stone quarries shall not be deemed a prohibition of quarrying for the purpose of the option agreement.

(b) The operation of a quarry on Wake Stone's property for a minimum period of five years.

6. The conveyance of the quarry site shall be by deed containing the usual covenants of warranty and conveying the quarry site free and clear of all encumbrances except those existing at the time of Wake Stone's purchase, ad valorem taxes at the time of conveyance (which shall be prorated), and such drainage and utility easements as shall have been installed in connection with the development of the property.

7. The option may include such other terms as are mutually acceptable to the State and Wake Stone.

Donation to State

Pursuant to Wake Stone Corporation's offer to donate the quarry site to the State as part of its final reclamation plan, Wake Stone Corporation will grant to the State an option which, if exercised by the State, will require that Wake Stone Corporation convey to the State a fee simple title to the quarry site. The State shall have no obligation to exercise its option to accept a conveyance of the quarry site.

The term "quarry site" shall include the entire pit as it exists after quarrying has been completed, a strip extending at least 50 feet back from the top of the slope of the pit on all sides, and a reasonable area to connect the pit and surrounding strip to the Park, constituting a total area of at least 75 acres.

The terms and conditions of the option shall be as follows:

1. When all quarryable stone has been removed from all of the land belonging to or under the control of Wake Stone Corporation during the period of its quarrying operations and which lies between Umstead Park and Interstate Highway 40, it shall be the duty of Wake Stone to notify the State of this fact. Upon receipt of such notice, the State shall have six months within which it may elect to have Wake Stone convey the quarry site to the State. If the state elects to have Wake Stone convey the quarry site to the State, it shall notify Wake Stone of such election within said six-month period. All notices shall be by certified mail with return receipt requested. If the State fails to make an election within said six-month period or shall elect not to accept a conveyance of the quarry site, the option shall thereupon terminate and Wake Stone shall have no further obligation to convey the quarry site to the State.
2. If all quarryable stone is not removed, the right of the State to acquire the quarry site shall accrue at the end of 50 years from the date quarrying commences or 10 years after quarrying operations have ceased without having been resumed, whichever is later, and notices shall be exchanged at that time in the same manner and with the same time limitations as set forth in paragraph 1 above.
3. Until the option has expired Wake Stone will not encumber by mortgage or deed of trust any of the area designated "BUFFER AREA" on Wake Stone's site plan dated February 17, 1981, revised March 10, 1981, except for purchase money security interests.
4. During the option period, Wake Stone shall have the right to encumber all of its remaining property from time to time by mortgage, deed of trust or other security agreement then in common use for the purpose of securing one or more bona fide obligations of Wake Stone, such as the payment of money or the providing of any goods or services. The option to the State shall be subordinate to each such encumbrance in the same manner and to the same extent as if such option had been recorded after the recordation of each such encumbrance.
5. The right of the State to exercise its option shall be subject to:

- (a) Wake Stone not being prohibited by the U.S. Government, State of North Carolina, Wake County, any municipality having jurisdiction, or by any court from removing from Wake Stone's property all quarryable stone which is outside of the BUFFER AREA referred to in paragraph 3 above. The requirement by the State that Wake Stone comply with laws and rules and regulations generally applicable to stone quarries shall not be deemed a prohibition of quarrying for the purpose of the option agreement.
- (b) The operation of a quarry on Wake Stone's property for a minimum period of five years.

6. The conveyance of the quarry site shall be by deed containing the usual covenants of warranty and conveying the quarry site free and clear of all encumbrances except those existing at the time of Wake Stone's purchaser, ad-valorem taxes at the time of conveyance (which shall be prorated), and such drainage and utility easement as shall have been installed in connection with the development of the property.

7. The option may include such other terms as are mutually acceptable to the State and Wake Stone.

The terms and conditions relating to the donation are placed herein to prescribe generally the boundaries of the Wake Stone Corporation offer. The acceptance by the State is subject to approval by the Department of Administration and the council of State and the ascertaining that the offer is in accord with the laws of the State and lawfully adopted rules and regulations. Further, the Department's analysis of the conditions of the land to be transferred will be in accordance with the criteria identified in the "Principles Governing the Establishment of Extension and Development of State Parks, State Recreation Areas and State Natural Areas".

Wehner, Judy

From: Holley, John
Sent: Monday, March 07, 2011 10:12 AM
To: Wehner, Judy
Subject: RE: Triangle Quarry Renewal (92-10), Suspense Date 3-4-11

I checked with DAQ (David Miller), and DWQ (Danny Smith/Natalie Landry); neither appear to have any outstanding issues with the site, and permitting should not be problematic. DWQ indicated that they would have comments to us today. DAQ has no comments; no problems with current permit and operation.

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

Please note my email address has changed to John.Holley@ncdenr.gov

From: Wehner, Judy
Sent: Monday, March 07, 2011 8:50 AM
To: Holley, John
Subject: RE: Triangle Quarry Renewal (92-10), Suspense Date 3-4-11

Thanks!

From: Holley, John
Sent: Saturday, March 05, 2011 9:07 PM
To: Wehner, Judy
Cc: Boyer, Janet; Davis, Tracy
Subject: Triangle Quarry Renewal (92-10), Suspense Date 3-4-11

I completed a review of the subject application late yesterday, and offer the following comments:

The operation appears unchanged from the current set-up, including the area between the office and the existing berm we recently modified. The existing permit conditions adequately cover all affected areas. I have not found any reports indicating problems regarding DWQ or DAQ issues, and have not heard from them regarding any comments. I will check on Monday to see if they have any concerns. If none are applicable, I can support renewal of the permit for this site. If there are any questions, please advise.

3/7/11

Westover
permit with
David Lee to remove
outdated conditions.
JW

3E
7B
7A
12B
Re 5

Wehner, Judy

From: Holley, John
Sent: Saturday, March 05, 2011 9:07 PM
To: Wehner, Judy
Cc: Boyer, Janet; Davis, Tracy
Subject: Triangle Quarry Renewal (92-10), Suspense Date 3-4-11

I completed a review of the subject application late yesterday, and offer the following comments:

The operation appears unchanged from the current set-up, including the area between the office and the existing berm we recently modified. The existing permit conditions adequately cover all affected areas. I have not found any reports indicating problems regarding DWQ or DAQ issues, and have not heard from them regarding any comments. I will check on Monday to see if they have any concerns. If none are applicable, I can support renewal of the permit for this site. If there are any questions, please advise.



☒ North Carolina Wildlife Resources Commission ☒

Gordon Myers, Executive Director



MEMORANDUM

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

FROM: Shari L. Bryant, Piedmont Region Coordinator
Habitat Conservation Program *Shari L. Bryant*

DATE: 28 February 2011

SUBJECT: Mining Permit Renewal for Wake Stone Corporation, Triangle Quarry, – Permit No. 92-10, Wake County, North Carolina

Biologists with the North Carolina Wildlife Resources Commission have reviewed the subject permit renewal and we are familiar with the habitat values of the area. Our comments are provided in accordance with provisions of the Mining Act of 1971 (as amended, 1982)(G.S. 74-76 through 74-68 15 NCAC 5).

Wake Stone Corporation is requesting a renewal of its permit to mine overburden, saprolite, and granitic-type stone bedrock. The total permitted area is 223 acres. The applicant indicates accumulated groundwater and runoff is pumped to a reservoir for make-up water in the process water closed loop. When not needed as make-up water it is discharged to an unnamed tributary to Crabtree Creek. A 100-foot undisturbed vegetated buffer is maintained along Crabtree Creek, and no land disturbing activities are currently underway or planned within 50 feet of any on site natural watercourse or wetland. Reclamation includes allowing the pit to fill with water and removing plant structures and stockpiles. The site will be re-vegetated according to future land use plans.

Crabtree Creek in the Neuse River basin flows along the western boundary of the mine site. There are records for the federal species of concern and state endangered Atlantic pigtoe (*Fusconaia masoni*), the federal species of concern and state significantly rare pinewoods shiner (*Lythrurus matutinus*), the state threatened triangle floater (*Alasmidonta undulata*) and creeper (*Strophitus undulatus*), the state special concern notched rainbow (*Villosa constricta*), and the state significantly rare Carolina ladle crayfish (*Cambarus davidi*) in Crabtree Creek. Also, there is a Significant Natural Heritage Area – William B. Umstead State Park – adjacent to and downstream of the site.

28 February 2011
Triangle Quarry
Permit No. 92-10

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

1. Maintain a minimum 100-foot undisturbed native, forested buffer along perennial streams, and a minimum 50-foot buffer along intermittent streams and wetlands. 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. Whereas, a grassed buffer, particularly fescue, is a vegetated buffer but will not provide the necessary and highly valuable functions as discussed for forested buffers. We request that sediment and erosion control structures be located outside of these buffers.
2. Water discharges from the project site should be proportional to the size of the receiving stream so that the hydrology of the stream is not altered, and all discharges should comply with NPDES permit requirements. In particular, turbidity of the discharge should be maintained at or below the permit requirement. High water discharge rates and turbidity can negatively impact aquatic resources within and downstream of the project area. Excessive silt and sediment loads can have numerous detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs, and clogging of gills of aquatic species.
3. We encourage the applicant to consider using seed mixtures that are beneficial to wildlife such as native, warm season grasses in their reclamation plan. An exact seeding mixture would need to take into account soil types, moisture, pH, and degree of slope of areas to be stabilized. In addition, 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 renewal. If we can provide further assistance, please contact our office at (336) 449-7625.

cc: David F. Lee, Wake Stone Corporation
Mark Bowers, USFWS



North Carolina Department of Environment and Natural Resources
Division of Water Resources

Beverly Eaves Perdue
Governor

Thomas A. Reeder
Director

Dee Freeman
Secretary

February 15, 2011

MEMORANDUM

TO: Judy Wehner
Land Quality Section

FROM: Paul Williams *PW*
Ground Water Management Section
Division of Water Resources

SUBJECT: Comments on the Mining Permit Renewal Request for:
Wake Stone Corporation
Wake Stone Corporation Triangle Quarry
Wake County



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

The Wake Stone Corporation Triangle Quarry located in Wake County does not appear to have an unduly adverse effect on ground water supplies and is already registered (facility ID # 0202-0004) with Water Resources.

Facilities not in the fifteen county Central Coastal Plain Capacity Use Area 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 please contact the Division of Water Resources at (919) 733-4064 or send correspondence to 1611 Mail Service Center, Raleigh NC 27699-1611.



North Carolina Department of Environment and Natural Resources
Division of Land Resources
Land Quality Section

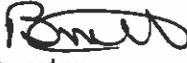
James D. Simons, P.G., P.E.
Director and State Geologist

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

February 7, 2011

MEMORANDUM

TO: Mr. Nat Wilson
Habitat Hydrogeology Group
Division of Water Resources

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

SUBJECT: Mining Permit Renewal for Wake Stone Corp.
Triangle Quarry
Wake County

Mine Dewatering Proposed

No Mine Dewatering Proposed

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

Please review this information and advise as to the probability of this operation having unduly adverse effect on potable groundwater supplies (G.S. 74-51 (2)). Please respond by **March 4, 2011** so that we may complete our review of this request within our statutory time limits.

As is the case in our review of all mining permit applications, renewals and modifications, this office will carefully review all proposed erosion and sediment control measures to ensure that they are sufficient to restrain erosion and off-site sedimentation. However, any comments your agency can provide regarding effects on potable groundwater supplies would be greatly appreciated. If your staff wishes to perform a site inspection, it is recommended that they contact the person submitting this request to set up a convenient date and time. Also, please send a copy of your comments to the person noted in the application. **RETURN ALL APPLICATION MATERIALS AND MAPS WITH YOUR REVIEW COMMENTS TO THIS OFFICE.**

Your continued cooperation is greatly appreciated. Please contact Ms. Judy Wehner at (919) 733-4574 if you have any questions.

/bmh

Attachments

cc: Mr. John Holley

RECEIVED

FEB 7 2011

DIVISION OF WATER RESOURCES

MINING CHECKLIST FOR ROUTING

Applicant's Name: W. K. Stone Corp

Project Name: Triangle Quarry

Applic./Permit No.: 92-10

County: Wake

Date Received: 2/7/11

Reviewer: [Signature]

River Basin Name: Roanoke

- New Renewal Modification (inside permit boundaries)
- Modification (outside permit boundaries) Transfer Release
- Partial Release Additional Information Fee Needed: \$ _____ Fee Received: \$ 1000.00

Please route entire application package to:

Pallesh Regional Office (2 complete copies; attach the "LQS Regional Office Mining Application Review Checklist" to one copy and attach both the DWQ and DAQ "Mining Application Review Form" to the other copy; send both copies to the Regional Engineer)

yes

- Division of Water Resources Date: Routed 2/7/11 Rec'd _____
 - NC Wildlife Resources Commission Date: Routed ✓ Rec'd _____
 - US Fish & Wildlife Service Date: Routed _____ Rec'd _____
- (Only new applications and modification requests that add land to the permit)

Please route first 3 pages of the application and any location maps to:

- Division of Parks & Recreation Date: Routed _____ Rec'd _____
 - NC Geological Survey Section Date: Routed _____ Rec'd _____
 - Division of Marine Fisheries Date: Routed _____ Rec'd _____
 - Division of Soil & Water Conservation (plus LEA) Date: Routed _____ Rec'd _____
- (Only new applications and modification requests that add land to the permit)

- Division of Archives & History Date: Routed _____ Rec'd _____
(Only new applications)
- Other: _____ Date: Routed _____ Rec'd _____

****Suspense Date for Comments:** 3/4/11 (no later than 25 days from receipt)

Please note the following:

_____ *For your review*

_____ *+ bill*

_____ *Brenda, please make a folder pack*

_____ *check on*



North Carolina Department of Environment and Natural Resources
Division of Land Resources
Land Quality Section

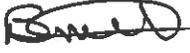
James D. Simons, P.G., P.E.
Director and State Geologist

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

February 7, 2011

MEMORANDUM

TO: Ms. Shari Bryant
Habitat Conservation Program Coordinator
Wildlife Resources Commission

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

SUBJECT: Mining Permit Renewal for Wake Stone Corp.
Triangle Quarry
Wake County

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

Please review this information and advise as to the probability of this operation having unduly adverse effect on wildlife and freshwater, estuarine, or marine fisheries (G.S. 74-51 (2)). Please respond by **March 4, 2011** so that we may complete our review of this request within our statutory time limits.

As is the case in our review of all mining permit applications, renewals and modifications, this office will carefully review all proposed erosion and sediment control measures to ensure that they are sufficient to restrain erosion and off-site sedimentation. However, any comments your agency can provide regarding effects on wildlife and freshwater, estuarine, or marine fisheries would be greatly appreciated. If your staff wishes to perform a site inspection, it is recommended that they contact the person submitting this request to set up a convenient date and time. Also, please send a copy of your comments to the person noted in the application. **RETURN ALL APPLICATION MATERIALS AND MAPS WITH YOUR REVIEW COMMENTS TO THIS OFFICE.**

Your continued cooperation is greatly appreciated. Please contact Ms. Judy Wehner at (919) 733-4574 if you have any questions.

/bmh

Attachments

cc: Mr. John Holley



North Carolina Department of Environment and Natural Resources
Division of Land Resources
Land Quality Section

James D. Simons, P.G., P.E.
Director and State Geologist

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

February 7, 2011

MEMORANDUM

TO: Mr. Nat Wilson
Habitat Hydrogeology Group
Division of Water Resources

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

SUBJECT: Mining Permit Renewal for Wake Stone Corp.
Triangle Quarry
Wake County

Mine Dewatering Proposed

No Mine Dewatering Proposed

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

Please review this information and advise as to the probability of this operation having unduly adverse effect on potable groundwater supplies (G.S. 74-51 (2)). Please respond by **March 4, 2011** so that we may complete our review of this request within our statutory time limits.

As is the case in our review of all mining permit applications, renewals and modifications, this office will carefully review all proposed erosion and sediment control measures to ensure that they are sufficient to restrain erosion and off-site sedimentation. However, any comments your agency can provide regarding effects on potable groundwater supplies would be greatly appreciated. If your staff wishes to perform a site inspection, it is recommended that they contact the person submitting this request to set up a convenient date and time. Also, please send a copy of your comments to the person noted in the application. **RETURN ALL APPLICATION MATERIALS AND MAPS WITH YOUR REVIEW COMMENTS TO THIS OFFICE.**

Your continued cooperation is greatly appreciated. Please contact Ms. Judy Wehner at (919) 733-4574 if you have any questions.

/bmh

Attachments

cc: Mr. John Holley

WAKE STONE CORPORATION
P. O. BOX 190
KNIGHTDALE, NC 27545

35142
66-21/530
BRANCH 03919

DATE February 4, 2011

PAY
TO THE
ORDER OF

NC DENR

\$ 1,000.00

One thousand and ⁰⁰/₁₀₀

DOLLARS



Security
Features
Outline on
Back



WACHOVIA
Wachovia Bank, N.A.
wachovia.com

WAKE STONE CORPORATION

FOR RENEWAL MINE PERMIT 92-10



[Handwritten signatures and stamps]

Wake Stone Corporation

Original -
Central office
copy

Quarry Phone Numbers:
919/266-9266-Knightdale
919/677-0050-Triangle
919/775-7349-Moncure
252/985-4411-Nash County
843/756-3400-N. Myrtle Beach

Locations:
U.S. 64 East, Raleigh, N.C.
I-40 at Harrison Ave., Cary, N.C.
U.S. 1 at Deep River, Moncure, N.C.
SR 1527 at I-95, Gold Rock, N.C.
3990 Hwy. 9 Bus. East, Loris, S.C.

Business Office Address:
P.O. Box 190
Knightdale, N.C. 27545
919/266-1100
Fax 919/266-1149
www.wakestonecorp.com

February 7, 2011

By Hand Delivery

Janet Boyer, P.G, State Mining Specialist
N. C. DENR - Land Quality Section
512 North Salisbury Street
Raleigh, North Carolina 27611-7687



**Subject: Wake Stone Corporation Triangle Quarry
Mining Permit No. 92-10
Application for Ten-Year Renewal**

Dear Ms. Boyer:

Enclosed are five copies of Mining Permit Application material requesting renewal of Mining Permit No. 92-10 for the Triangle Quarry. The enclosed completed Mining Permit Application booklet, revised Site Plan Map, and Conceptualized Reclamation Plan Map document the currently existing site conditions. No new land disturbing activities are planned at this time.

The Triangle Quarry has been successfully operated during past ten-year permit terms without invoking any of the seven permit denial criteria dictated by the North Carolina Mining Act, and in compliance with applicable mining, water discharge, and air quality regulations. State and Federal permitting and required monitoring under the NPDES/Stormwater and Air Quality programs ensure that continued operation of the quarry will not have adverse effects on wildlife or fisheries, or violate any air or water quality standard. Existing natural vegetation buffers and vegetated earthen berms screen the operation from public view. These buffers and vegetated berms provide adequate buffering for neighboring businesses, vehicular traffic along Interstate 40, and visitors to Umstead Park. Designated buffers, stabilized overburden cut slopes, safe blasting practices, and in-place high wall barriers ensure the prevention of physical hazard to any neighboring structures or properties.

Ms. Janet Boyer, P.G., State Mining Specialist
February 7, 2011
Page 2

Wake Stone Corporation has operated the Triangle Quarry since 1982 without violation of any of the State or Federal regulations governing mining. Through implementation of well designed mining plans and sediment and erosion control plans we have prevented the deposition of any sediment in adjoining waterways. Undisturbed vegetated buffers along Crabtree Creek and the Umstead State Park boundary provide adequate buffering to prevent sediment deposition in the creek, while providing visual and sound buffering of the operation.

As indicated on the updated Site Plan Map the amount of land currently covered under this permit is 223.0 acres, with 164.45 acres having been affected by current and prior mining related activities. No new or additional land disturbance activities are planned at this time. Pursuant to the Application Fee Schedule we are enclosing our check in the amount of \$1,000.00 for the permit renewal application-processing fee. If you have any question concerning this renewal request please call me at 266-1100. I would be happy to meet with you or Division of Land Resources staff at your convenience to discuss this Mining Permit renewal request.

Sincerely,
Wake Stone Corporation

A handwritten signature in blue ink, appearing to read "David Lee", written in a cursive style.

David F. Lee
Geologist/Environmental Supervisor

dfl/
Enclosures

Wehner, Judy

From: Wehner, Judy
Sent: Monday, February 07, 2011 11:56 AM
To: Holley, John; Wehner, Judy
Subject: FW: Triangle Quarry, Wake Stone Corp 92-10 Renewal
Attachments: 92-10 DLR - Water Quality Review Sheet 2010.doc

From: Wehner, Judy
Sent: Monday, February 07, 2011 11:50 AM
To: Smith, Danny
Subject: Triangle Quarry, Wake Stone Corp 92-10 Renewal

Here's the review sheet for the renewal of Triangle Quarry. It was just modified recently.

Judy Wehner
Assistant State Mining Specialist
1612 Mail Service Center
Raleigh, North Carolina 27699-1612
(919) 733-4574
(919) 715-8801 fax

E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.

MINING PERMIT APPLICATION REVIEW FORM

for the

DIVISION OF WATER QUALITY

THIS SECTION TO BE FILLED OUT BY DLR:

Project Name: Triangle Quarry DLR Permit #: 92-10 County: Wake Address: davidlee@wakestonecorp.com

	<u>YES</u>	<u>NO</u>	<u>Date Commencing</u>
Is this mine a new mine?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>1981</u>
Have land disturbing activities started? Date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>1981</u>

Latitude: 35-50-57 Longitude: 80-45-57

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

Comments due by: 3/4/11

SECTION BELOW TO BE FILLED OUT BY DWQ:

Is the RO concerned that the operation, as proposed, would violate standards of water quality? _____

Comments: _____

Watershed/Stream Name & Classification: _____

DWQ Compliance Status of Mine: _____

	<u>YES</u>	<u>NO</u>
NPDES permit required?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
NPDES permit existing?	<input type="checkbox"/> (Permit # _____)	<input type="checkbox"/> _____
If an NPDES permit is not required, is DWQ still concerned about wetland degradation by dewatering?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Should permittee contact DWQ RO immediately? (e.g. to schedule a site visit if mine has already begun digging or is dewatering without DWQ permit)	<input type="checkbox"/> RO Contact Name: _____ Contact Reason: _____	<input type="checkbox"/> _____
401 Wetland Cert. required?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
401 Wetland Cert. existing?	<input type="checkbox"/> Permit # _____	<input type="checkbox"/> _____
Does DWQ RO currently have enough information to determine if a 401 certification is required?	<input type="checkbox"/> _____	<input type="checkbox"/> _____

	<u>YES</u>	<u>NO</u>
Are wetlands disturbed at this site?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Does DWQ RO suspect or know of nearby wetlands to the site?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Is a wetland delineation required prior to DWQ issuing the permit?	<input type="checkbox"/> By: <input type="checkbox"/> JD or <input type="checkbox"/> Consultant <input type="checkbox"/> Onsite? Or <input type="checkbox"/> Offsite?	<input type="checkbox"/> _____
Stream Determination Needed?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Stream Determination Completed?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Does DWQ RO need a statement that no wetlands/streams are disturbed for this project from applicant?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Buffer Determination Needed?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Buffer Determination Completed?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Recycle system permit existing?*	<input type="checkbox"/> Permit # _____	<input type="checkbox"/> _____
New Recycle System permit required?*	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Enough information to determine?	<input type="checkbox"/> _____	<input type="checkbox"/> _____
Non-discharge permit existing?*	<input type="checkbox"/> Permit # _____	<input type="checkbox"/> _____
Will wastewaters discharge to HQW waters with a 7Q10=0? **	<input type="checkbox"/> _____ Unknown (permittee determine): <input type="checkbox"/> _____	<input type="checkbox"/> 7Q10 Flow: _____
Does DWQ require DLR to hold the permit (e.g. so DWQ can review it further or because DWQ requires more information)?	<input type="checkbox"/> Has Violation <input type="checkbox"/> O&M Requirements <input type="checkbox"/> HQW/7Q10 Concerns <input type="checkbox"/> Other. Reason: _____ RO contact: _____ <input type="checkbox"/> Hold Until: _____	<input type="checkbox"/> _____
Mine must wait to dewater until an O&M plan is approved?	<input type="checkbox"/> _____	<input type="checkbox"/> _____

**The NPDES SW and WW permit NCG020000 covers closed-loop recycle systems, designed to exclude all stormwater run-off from the system and operate at or below two-feet of freeboard. These systems may be permitted by a Non-discharge Recycle System Permit from the Aquifer Protection Section (APS), OR may instead be permitted under NCG020000 to eliminate an additional permit. Recycle systems that do not meet those criteria are considered discharging systems, and are subject to the NCG020000 discharge permit.*

***To obtain 7Q10 flows, permittees must contact the DWQ Stormwater Permitting Unit. If DWQ does not have a flow estimate for a specific stream, permittees will be asked to obtain one. Permittees should contact J. Curtis Weaver at the USGS: 919-571-4043, for more information on obtaining a 7Q10 flow. USGS will not determine a 7Q10 flow for tidally influenced water bodies.*

Reviewed by:

DWQ RO Surface Water: _____ Regional Office: _____ Date: _____

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

SPU DWQ Central Office Reviewer (if applicable): _____

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
LAND QUALITY SECTION
APPLICATION FOR A MINING PERMIT
(PLEASE PRINT OR TYPE)

Original -
Central
Office copy

1. Name of Mine Wake Stone Corporation Triangle Quarry County Wake
River Basin Neuse
Latitude (dd.mm.ss) 35dd.50mm.57ss North Longitude (dd.mm.ss) 78dd.45mm.57ss West
2. Name of Applicant* Wake Stone Corporation
3. Permanent address for receipt of official mail** PO Box 190
Knightdale, North Carolina 27545
Telephone (919) 266-1100
4. Mine Office Address 222 Star Lane
Cary, North Carolina 27513 Telephone (919) 677-0050
5. Mine Manager Paul Pierce, Superintendent

We hereby certify that all details contained in this Permit Application are true and correct to the best of our knowledge. We fully understand that any willful misrepresentation of facts will be cause for permit revocation.

***Signature Theodore D. Bratton Date 2/4/2011

Print Name Theodore D. Bratton

Title Chief Executive Officer

* This will be the name that the mining permit will be issued to and the name that must be indicated on the reclamation bond (security) that corresponds to this site.

** The Land Quality Section must be notified of any changes in the permanent address or telephone number.

*** Signature of company officer required.

G.S. 74-51 provides that the Department shall grant or deny an application for a permit within 60 days of receipt of a complete application or, if a public hearing is held, within 30 days following the hearing and the filing of any supplemental information required by the Department. **All questions must be addressed and all required maps provided before this application can be considered complete. Attach additional sheets as needed.**

RECEIVED

FEB 07 2011

APPLICATION FOR A MINING PERMIT

NOTE: All of the following questions must be thoroughly answered with regards to your mining operation for the intended life of the mine. All responses must be clearly conveyed on a corresponding, detailed mine map.

A. GENERAL CHARACTERISTICS OF THE MINE

Answer all of the following that apply:

1. a. If this is an application for a **NEW** permit, indicate the total acreage at the site to be covered by the permit (this is the acreage that the "new permit" fee will be based upon): _____

Of this acreage, how much is owned and how much is leased? Acres owned: _____ Acres leased: _____ Property owner if leased: _____

- b. If this is an application for **RENEWAL** of a mining permit, indicate the mining permit number and the total (overall) acreage covered by the existing permit:

Mining Permit No.: 92-10 Total permitted acreage (this is the acreage that the "renewal" fee will be based upon): 223

- c. If this is an application for a **MODIFICATION** to a mining permit, indicate the mining permit number and the total (overall) acreage covered by the existing permit: Mining Permit No.: _____ Total permitted acreage: _____

Does the modification involve acreage within the previously approved permitted boundary?

Yes ___ No ___. If yes, indicate the acreage to be covered by this modification (this is the acreage that the "major modification" fee will be based upon): _____

Does the modification involve acreage outside the previously approved permitted boundary?

Yes ___ No ___. If yes, indicate the additional acreage to be covered by this modification: _____ (NOTE: you must complete all of Section F. of this application form entitled Notification of Adjoining Landowners).

Of this acreage to be added to the permit, will any portion of this acreage be affected (disturbed, ground cover removed) by the mining operation? Yes ___ No ___ (if no, a "minor modification" fee of \$50.00 is required, despite the "undisturbed" acreage to be added). If yes, indicate the acreage to be affected within the acreage to be added to the permit (the total acreage to be added to the permit is the acreage that the "major modification" fee will be based upon): _____

- d. If this is an application for **TRANSFER** of a mining permit, indicate the mining permit number and the total (overall) acreage covered by the existing permit: Mining Permit No.: _____ Total permitted acreage: _____

SEE THE FEE SCHEDULE AT THE END OF THIS FORM FOR THE PROPER FEE AMOUNT TO BE PAID FOR THE REQUESTED PERMIT ACTION(S) AND CORRESPONDING ACREAGE NOTED ABOVE

2. Name of all materials mined: overburden, saprolite, granitic-type stone bedrock
3. Mining method: Hydraulic Dredge ___ Front-end Loader & Truck X Shovel & Truck X
Dragline & Truck ___ Self-loading Scraper ___ Other (explain) _____
4. a. Expected maximum depth of mine (feet) -200'MSL
Depth is relative to what benchmark? (e.g., natural ground level, mean sea level, road elevation, etc.) Mean Sea Level
- b. Expected average depth of mine (feet) -200'MSL
5. Has any area(s) at this site been mined in the past? Yes X No ___
If yes, when and by whom was this activity conducted? Since 1982 by Wake Stone Corporation
6. Number of years for which the permit is requested (10 years maximum): 10

B. MAPS

1. Clearly mark and label the location of your mining operation on six (6) copies of a 7.5 minute quadrangle and a county highway map. These maps, in addition to six (6) copies of all mine maps and reclamation maps, must be submitted with each permit application.

7.5 minute quadrangles may be obtained from:

N.C. Geological Survey
NCDENR
1612 Mail Service Center
Raleigh, North Carolina 27699-1612
(919) 715-9718

County highway maps may be obtained from:

Location Department
State Highway Commission
Raleigh, North Carolina 27602
(919) 733-7600

2. Mine maps must be accurate and appropriately scaled drawings, aerial photographs or enlarged topographic maps of the entire mine site. **All aspects of the mine site must be clearly labeled on the maps along with their corresponding (approximate) acreage. As a reminder, mining permits can only be issued for up to 10 years; thus, all mine and reclamation maps must only denote those activities that are intended to be conducted during the life of the mining permit. All maps must be of a scale sufficient (see minimum requirements listed below) to clearly illustrate the following, at a minimum:**
- a. Property lines of the tract or tracts of land on which the proposed mining activity is to be located including easements and rights-of-way.
 - b. Existing or proposed permit boundaries.
 - c. Initial and ultimate limits of clearing and grading.
 - d. Outline and width of all buffer zones (both undisturbed and unexcavated).
 - e. Outline and acreage of all pits/excavations.
 - f. Outline and acreage of all stockpile areas.
 - g. Outline and acreage of all temporary and/or permanent overburden disposal areas.
 - h. Location and acreage of all processing plants (processing plants may be described as to location and distance from mine if sufficiently far removed).
 - i. Locations and names of all streams, rivers and lakes.
 - j. Outline and acreage of all settling and/or processing wastewater ponds.
 - k. Location and acreage of all planned and existing access roads and on-site haul roads.
 - l. Location of planned and existing on-site buildings.
 - m. Location and dimensions of all proposed sediment and erosion control measures.
 - n. Location of 100-year floodplain limits and wetland boundaries.
 - o. Names of owners of record, both public and private, of all tracts of land that are adjoining the mining permit boundary; if an adjoining tract is owned or leased by the applicant or is owned by the lessor of the mine tract, names of owners of record of tracts adjoining these tracts, that are within 1,000 feet of the mining permit boundary, must be provided on the mine map.
 - p. Names of owners of record, both public and private, of all tracts of land that are adjoining the mining permit boundary which lie directly across and are contiguous to any highway; creek, stream, river, or other watercourse; railroad track; or utility or other public right-of-way; if an adjoining tract is owned or leased by the applicant or is owned by the lessor of the mine tract, names of owners of record of tracts adjoining these tracts, that are within 1,000 feet of the mining permit boundary, must be provided on the mine map(s). NOTE: "Highway" means a road that has four lanes of travel or less and is not designated as an Interstate Highway.
 - q. Map legend:
 1. Name of applicant
 2. Name of mine
 3. North arrow
 4. County
 5. Scale
 6. Symbols used and corresponding names
 7. Date prepared and revised
 8. Name and title of person preparing map

Map scales should meet the following guidelines:

PERMITTED ACREAGE	MAP SCALE
0-99 Acres	1 inch = 50 feet
100-499 Acres	1 inch = 100 feet
500+ Acres	1 inch = 200 feet

(NOTE: Smaller scaled maps may be acceptable if they clearly illustrate the above items)

A table/chart must be provided on the mine map that clearly lists the approximate acreage of tailings/sediment ponds, stockpiles, waste piles, processing area/haul roads, mine excavation and any other major aspect of the mining operation that is proposed to be affected/disturbed during the life of the mining permit. A table/chart similar to the following will be acceptable:

CATEGORY (as of 10/27/2010)	AFFECTED ACREAGE
Tailings/Sediment Ponds, Stockpiles, processing areas, Haul roads	57.0 acres
Waste piles	17.2 acres (vegetated berms)
Mine Excavation	90.25
Total	164.45*

**Note: This total reported "affected area" differs from that indicated in the November 2010 Modification. With this ten-year renewal application, WSC has made a concerted effort to as accurately as possible identify all areas previously and/or currently "affected" by mining activities at the Triangle Quarry.*

NOTE: IN ADDITION TO THE ABOVE, THE MAPS MUST ALSO INCLUDE ANY SITE-SPECIFIC INFORMATION THAT IS PROVIDED IN THE ANSWERS TO THE FOLLOWING QUESTIONS IN THIS APPLICATION FORM (PLEASE NOTE THE ITALICIZED QUESTIONS/STATEMENTS THROUGHOUT THE FORM). THIS APPLICATION WILL NOT BE CONSIDERED COMPLETE WITHOUT ALL RELEVANT ITEMS BEING ADEQUATELY ADDRESSED ON THE MINE MAPS.

APPLICATION FOR A MINING PERMIT

C. PROTECTION OF NATURAL RESOURCES

1. Describe in detail the sequence of events for the development and operation of the mine and *reference the sequence to the mine map(s)*. Attach additional sheets as needed.

Triangle Quarry is a currently active crushed stone quarry operation. This application is for 10-year renewal of the existing mining permit. As illustrated on the accompanying site plan map, no expansions or modifications are planned for the on-going activities. The permit was last modified on November 24, 2010 to incorporate a stockpile area expansion. Construction of that stockpile area has been completed as illustrated on the site plan map.

2. Describe specific erosion control measures to be installed prior to land disturbing activities and during mining to prevent offsite sedimentation (*include specific plans for sediment and erosion control for mine excavation(s), waste piles, access/mine roads and process areas*), and give a detailed sequence of installation and schedule for maintenance of the measures. *Locate and label all sediment and erosion control measures on the mine map(s) and provide typical cross-sections/construction details of each measure.* Engineering designs and calculations shall be required when needed to justify the adequacy of any proposed measures.

Currently existing erosion control measures are indicated on the Site Plan map. Sediment Basin 2010-1 associated with the recently expanded stockpile area has been installed per the November 2010 modification.

3. a. Will the operation involve washing the material mined, recycling process water, or other waste water handling? Yes X No _____. If yes, briefly describe all such processes including any chemicals to be used.

A three-deck rinse screen is utilized for production of washed stone. Process wash water is retained in a closed-loop recycle system consisting of a reservoir and three settling ponds, pumps and piping equipment. Wash plant overflow returns to the closed loop system for settling of fines. A hydro-cyclone fines recovery system is utilized to increase recovery of mineral fines contained in the process water overflow. Mineral fines recovered by the hydro-cyclone and associated high frequency screen or excavated from the settling ponds are dried on site and blended with over burden material/processed fill and removed from the site by grading contractors as borrow/fill material.

APPLICATION FOR A MINING PERMIT

- b. Will the operation involve discharging fresh or wastewater from the mine or plant as a point discharge to the waters of the State? Yes X No _____. If yes, briefly describe the nature of the discharge and locate all proposed discharge points (along with their method of stabilization) on your mine map(s).

Accumulated groundwater and runoff water is collected in a sump in the pit and pumped to the reservoir when needed as make-up water in the process water closed loop. When not needed as make-up water, this accumulated water is discharged under NPDES/Stormwater General Permit No. NCG020001 to an un-named tributary to Crabtree Creek.

- c. Will any part of the proposed mine excavation(s) extend below the water table? Yes X No _____. If yes, do you intend to dewater the excavation(s)? Yes X No _____. If yes, what impact, if any, will mine dewatering have on neighboring wells? Estimated withdrawal rate in gallons per day: 120,000. Locate all existing wells on the mine map(s) that lie within 500 feet of the proposed excavation area. Provide data to support any conclusions or statements made, including any monitoring well data, well construction data and current water withdrawal rates. Indicate whether the proposed mine locale is served by a public water system or private wells.

No non-company owned wells are known to exist within 500 feet of the mine excavation area. Company owned wells are located and delineated on the Site Plan Map. The surrounding area is served by Cary's public water system.

- d. If you answered yes to any of the above questions, provide evidence that you have applied for or obtained the appropriate water quality permit(s) (i.e., non-discharge, NPDES, Stormwater, etc.) from the Division of Water Quality, Water Quality Section. In addition, the applicant is required to register water use with the Division of Water Resources if the operation withdraws more than 100,000 gallons per day and needs a capacity use permit from the Division of Water Resources if the operation lies in a capacity use area and withdraws more than 100,000 gallons per day.

A copy of the cover sheet of NPDES/Stormwater General Permit No. NCG020001 is inserted after this page as evidence of NPDES Permit coverage.

4. a. Will the operation involve crushing or any other air contaminant emissions? Yes X No _____. If yes, indicate evidence that you have applied for or obtained an air quality permit issued by the Division of Air Quality or local governing body.

A copy of the cover sheet of NC DAQ Air Quality Permit No. 4386R12 is inserted after this page as evidence of DAQ permit coverage.

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER QUALITY

GENERAL PERMIT NO. NCG020000
CERTIFICATE OF COVERAGE No. NCG020001

STORMWATER, MINE DEWATERING WATER AND/OR PROCESS WASTEWATER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provision of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended,

Wake Stone Corp

is hereby authorized to operate approved wastewater treatment system(s) and discharge stormwater and/or wastewater, as approved in the original permit/application or subsequent permit modification, from a facility located at:

Triangle Quarry
222 Star Ln
Cary
Wake County

to receiving waters designated as Crabtree Creek, a class C;NSW waterbody in the Neuse River Basin in accordance with the effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, IV, V, and VI of General Permit No. NCG020000 as attached.

This certificate of coverage shall become effective February 11, 2010.

This Certificate of Coverage shall remain in effect for the duration of the General Permit.

Signed this 11th day of February, 2010.

Bradley Bennett

for Coleen H. Sullins, Director
Division of Water Quality
By Authority of the Environmental Management Commission

STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND
NATURAL RESOURCES
DIVISION OF WATER QUALITY

GENERAL PERMIT NO. NCG020000

TO DISCHARGE STORMWATER, MINE DEWATERING, AND PROCESS WASTEWATER UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provision of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission and the Federal Water Pollution Control Act, as amended, this permit is hereby issued to all owners or operators, hereafter permittees, which are covered by this permit as evidenced by receipt of a Certificate of Coverage by the Environmental Management Commission to allow the discharge of stormwater, mine dewatering wastewater, and process wastewater to the surface waters of North Carolina or to a separate storm sewer system conveying discharges to surface waters, from active and inactive mining sites, in accordance with the terms and conditions set forth herein.

Coverage under this General Permit is applicable to:

- ◆ Stormwater point source discharges associated with mining and quarrying of non-metallic minerals (except fuels), mine excavation, processing, and vehicle maintenance;
- ◆ Mine dewatering wastewater discharges;
- ◆ Wastewater discharges from sand and/or gravel operations;
- ◆ Operation of non-discharging closed-loop recycle systems (and infrequent overflows);
- ◆ Process wastewater discharges from non-closed-loop recycle systems.

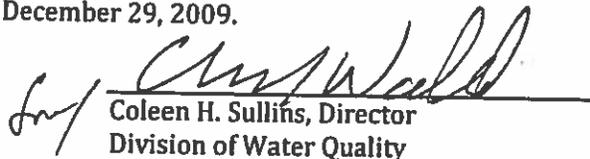
The following activities and associated discharges are excluded from coverage under this permit:

- ◆ Borrow Pits covered by the DOT statewide stormwater permit,
- ◆ Peat Mining,
- ◆ Coal Mining,
- ◆ Metal Mining,
- ◆ Oil and Gas Extraction Operations, and
- ◆ Combined Mining/Asphalt Operations (where asphalt operation is not covered by a separate permit).

The General Permit shall become effective on January 1, 2010.

The General Permit shall expire at midnight on December 31, 2014.

Signed this day December 29, 2009.



Coleen H. Sullins, Director
Division of Water Quality

By the Authority of the Environmental Management Commission

received 11/24/08
DPC



North Carolina Department of Environment and Natural Resources
DIVISION OF AIR QUALITY

Michael F. Easley, Governor

William G. Ross Jr., Secretary
B. Keith Overcash, P.E., Director

November 17, 2008

Mr. Theodore Bratton
President
Wake Stone Corporation - Triangle Quarry
P.O. Box 190
Knightdale, NC 27545

Subject: Air Permit No. 04386R14
Wake Stone Corporation - Triangle Quarry
Cary, Wake County, North Carolina
Fee Class: Small
Site Number: 05/92/00409

Dear Mr. Bratton:

In accordance with your completed application received November 7, 2008, we are forwarding herewith Permit No. 04386R14 to Wake Stone Corporation - Triangle Quarry, Cary, Wake County, North Carolina for the construction and operation of air emissions sources or air cleaning devices and appurtenances. Please note the records retention requirements are contained in General Condition 2 of the General Conditions and Limitations.

If any parts, requirements, or limitations contained in this permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. Such a request will stay the effectiveness of the entire permit. This hearing request must be in the form of a written petition, conforming to G.S. 150B-23 of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Unless a request for a hearing is made pursuant to G.S. 150B-23, this air permit shall be final and binding.

You may request modification of your air permit through informal means pursuant to G.S. 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that the permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under G.S. 150B-23.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF AIR QUALITY

AIR PERMIT NO. 04386R14

Issue Date: November 17, 2008

Effective Date: November 17, 2008

Expiration Date: October 31, 2013

Replaces Permit: 04386R13

To construct and operate air emission source(s) and/or air cleaning device(s), and for the discharge of the associated air contaminants into the atmosphere in accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina (NCGS) as amended, and other applicable Laws, Rules and Regulations,

Wake Stone Corporation - Triangle Quarry
222 Star Lane
Cary, Wake County, North Carolina
Fee Class: Small
Site Number: 05/92/00409

(the Permittee) is hereby authorized to construct and operate the air emissions sources and/or air cleaning devices and appurtenances described below:

Emission Source ID	Emission Source Description	Control System ID	Control System Description
Non-Metallic Mineral Processing Plant, 1620 ton per hour primary crushing capacity, utilizing water suppression with no other control device, including:			
ES-Crushers (NSPS)	crushing operations	N/A	N/A
ES-Conveyors (NSPS)	conveyor operations	N/A	N/A
ES-Screens (NSPS)	screening operations	N/A	N/A
Generator			
ES-2	diesel-fired generator (530 horsepower (350 kilowatt))	N/A	N/A

in accordance with the completed application 9200409.08A received November 7, 2008 including any plans, specifications, previous applications, and other supporting data, all of which are filed with the Department of Environment and Natural Resources, Division of Air Quality (DAQ) and are incorporated as part of this permit.

This permit is subject to the following specified conditions and limitations including any **TESTING, REPORTING, OR MONITORING REQUIREMENTS:**

APPLICATION FOR A MINING PERMIT

- b. How will dust from stockpiles, haul roads, etc., be controlled?

Fugitive dust from stockpiles and haul roads is controlled through the use of a water truck.

5. a. A buffer will be required between any mining activity and any mining permit boundary or right-of-way. It may be an unexcavated buffer (no excavation, but roadways, berms and erosion & sedimentation control measures may be installed within it), an undisturbed buffer (no disturbance within the buffer whatsoever), or a combination of the two, depending upon the site conditions. Note that all buffers must be located within the mining permit boundaries.

How wide a buffer will be maintained between any mining activity and any mining permit boundary or right-of-way at this site? A minimum buffer of 25 feet is recommended, although a wider buffer may be needed depending on site conditions. *Show all buffer locations and widths on the mine map(s).*

West side along Crabtree Creek: 100' undisturbed vegetated buffer.

North side along Crabtree Creek and Umstead State Park: 250' Unexcavated buffer.

East side along Umstead State Park: 100' unexcavated buffer containing vegetated earthen berm.

All buffers are noted on Site Plan Map.

- b. A minimum 50 foot wide undisturbed buffer will be required between any land disturbing activities within the mining permit boundaries and any natural watercourses and wetlands unless smaller undisturbed buffers can be justified. Depending on site conditions, a buffer wider than 50 feet may be needed.

How wide an undisturbed buffer will be maintained between any land disturbing activities within the mining permit boundaries and any natural watercourses and wetlands at this site? *Show all buffer locations and widths on the mine map(s).*

No land disturbing activities are currently underway or planned within 50' of any on-site natural watercourse or wetland.

APPLICATION FOR A MINING PERMIT

6. a. Describe methods to prevent landslide or slope instability adjacent to adjoining permit boundaries during mining. Minimum 2 horizontal to 1 vertical slopes or flatter for clayey material and minimum 3 horizontal to 1 vertical slopes or flatter for sandy material are generally required, unless technical justification can be provided to allow steeper slopes.

Graded overburden cut slopes are maintained at a maximum gradient of 2H:1V and stabilized with vegetation.

- b. *Provide a cross-section on the mine map(s) for all fill slopes (berms, waste piles, overburden disposal areas, etc.), clearly indicating the intended side slope gradient, installation of any benches and/or slope drains (with supporting design information) if needed, and the method of final stabilization.*

See Site Plan Map.

- c. In excavation(s) of unconsolidated (non-rock) materials, specify the angle of all cut slopes including specifications for benching and sloping. *Cross-sections for all cut slopes must be provided on the mine map(s).*

Graded overburden cut slopes are, and will continue to be established at a maximum gradient of 2H:1V.

- d. In hard rock excavations, specify proposed bench widths and heights in feet. *Provide cross-sections of the mine excavation clearly noting the angles of the cut slopes, widths of all safety benches and mine benches, and the expected maximum depth of the excavation.*

Continuing excavations in bedrock will utilize 40' bench heights. Bench width will vary according to ongoing mine development plans.

7. Describe other methods to be taken during mining to prevent physical hazard to any neighboring dwelling house, public road, public, commercial or industrial building from any mine excavation. *Locate all such structures on the mine map if they are within 300 feet of any proposed excavation.*

No such structures exist within 300 feet of any existing or proposed excavation. Strict adherence to permit conditions and currently accepted blasting practices prevent blasting related physical hazard to any neighboring house, road, or building.

APPLICATION FOR A MINING PERMIT

8. Describe what kind of barricade will be used to prevent inadvertent public access along any high wall area and when it will be implemented. Vegetated earthen berms, appropriate fencing and adequate boulder barriers may be acceptable high wall barricades. *A construction detail/cross-section and location of each type of barricade to be used must be indicated on the mine map(s).*

A perimeter barricade wall constructed from 5000-pound blocks of recycled concrete is being constructed around the mine perimeter (see photo inserts on site plan map). Fencing is currently in place along southern property boundary (R/W I-40). Warning/Posted signs are in place along all property boundaries.

9. Are acid producing minerals or soils present? Yes _____ No X _____. How will acid water pollution from the excavation, stockpiles and waste areas be controlled?
No acid producing minerals are known to exist in other than trace amounts.

10. a. Describe specific plans (including a schedule of implementation) for screening the operation from public view such as maintaining or planting trees, bushes or other vegetation, building berms or other measures. *Show the location of all visual screening on the mine map(s) and provide cross-sections through all proposed berms or proposed spacing, sizes and species for tree plantings.*

Triangle Quarry has been in operation since 1982. The site is screened on all sides by vegetated earthen berms or expansive vegetated buffers as illustrated on the Site Plan Map.

- b. Could the operation have a significantly adverse effect on the purposes of a publicly owned park, forest or recreation area? If so, how will such effects (i.e., noise, visibility, etc.) be mitigated?

Triangle Quarry has operated for the past 20 years without posing significantly adverse impacts to publicly owned Umstead Park, which is adjacent to the site.

11. Will explosives be used? Yes X No _____. If yes, specify the types of explosive(s) and describe what precaution(s) will be used to prevent physical hazard to persons or neighboring property from flying rocks or excessive air blasts or ground vibrations. Depending on the mine's location to nearby structures, more detailed technical information may be required on the blasting program (such as a third-party blasting study). *Locate the nearest offsite occupied structure(s) to the proposed excavation(s) on the mine map and indicate its approximate distance to the proposed excavation.*

Blasting is conducted weekly at the Triangle Quarry utilizing latest industry methods, products, and technology. All blasts are monitored by seismograph, and all blasts comply with air blast and ground vibration limits dictated by the Mining Permit. Blasting utilizes site mixed bulk ammonium nitrate emulsions, cast boosters, and electronic detonators. No explosive agents are stored onsite.

12. Will fuel tanks, solvents, or other chemical reagents be stored on-site? Yes X No . If yes, describe these materials, how they will be stored and method of containment in case of spill. Indicate the location(s) of all storage facilities on the mine map(s).

Fuels and lubricants are stored under roof within a concrete retaining wall at the fuel/lube station, or in the equipment maintenance shop illustrated on the Site Plan Map.

D. RECLAMATION PLAN

1. Describe your intended plan for the final reclamation and subsequent use of all affected lands and indicate the sequence and general methods to be used in reclaiming this land. This must include the method of reclamation of settling ponds and/or sediment control basins and the method of restoration or establishment of any permanent drainage channels to a condition minimizing erosion, siltation and other pollution. *This information must be illustrated on a reclamation map and must correspond directly with the information provided on the mine map(s). In addition, design information, including typical cross-sections, of any permanent channels to be constructed as part of the reclamation plan and the location(s) of all permanent channels must be indicated on the reclamation map.*

Once depleted of reserves the pit will be allowed to fill with groundwater/runoff waters to create a lake with water surface elevation at approximately +270' MSL. All plant components will be disassembled and removed from the site. All stockpiles will be removed and the plant and stockpile areas graded to provide positive drainage. Bare land surfaces will be provided with vegetative cover according to future land use plans, which are undetermined at this time. Process water settling ponds and obsolete sediment basins will be backfilled and stabilized with vegetation.

2. Is an excavated or impounded body of water to be left as a part of the reclamation? Yes X No . *If yes, illustrate the location of the body(s) of water on the reclamation map and provide a scaled cross-section(s) through the proposed body(s) of water. The minimum water depth must be at least 4 feet, measured from the normal low water table elevation, unless information is provided to indicate that a more shallow water body will be productive and beneficial at this site. Will the body(s) of water be stocked with fish? Yes No . If yes, specify species.*

It is undecided at this time if the post reclamation lake will be stocked with fish.

3. Describe provisions for safety to persons and to adjoining property in all completed excavations in rock including what kind of permanent barricade will be left. Acceptable permanent barricades are appropriate fencing, large boulders placed end-to-end, etc. *Construction details and locations of all permanent barricades must be shown on the reclamation map.*

In areas where construction of the previously mentioned concrete barrier wall is inappropriate, acceptable fencing such as woven wire right-of-way type fencing with barbed wire top strand or chain-link fencing will be installed as determined to be necessary upon final reclamation.

4. Indicate the method(s) of reclamation of overburden, refuse, spoil banks or other such on-site mine waste areas, including specifications for benching and sloping. *Final cross-sections and locations for such areas must be provided on the reclamation map.*

Reclamation of overburden cut slopes and earthen berms constructed of overburden are has been completed concurrent with on going mining activities. Overburden cut slopes, berm, and fill slopes are established at 2H : 1V gradients and stabilized with various grasses and legumes, and planted with loblolly pines.

5. a. Describe reclamation of processing facilities, stockpile areas, and on-site roadways.

All plant equipment will be disassembled and removed from the site. Stockpiles will be depleted and all sales yard areas re-graded to provide positive drainage, and stabilized with vegetation in accordance with future land development plans to be determined upon final reclamation.

- b. Will any on-site roadways be left as part of the reclamation? Yes X No _____. *If yes, identify such roadways on the reclamation map and provide details on permanent ditch line stabilization.*

The main site entrance road and a perimeter roadway around the completed pit area will remain on-site for general access and maintenance. Permanent ditches will be stabilized with riprap or vegetation as dictated by site conditions existing upon completion of operations.

6. Describe the method of control of contaminants and disposal of scrap metal, junk machinery, cables, or other such waste products of mining. (Note definition of refuse in The Mining Act of 1971). **No off-site generated waste shall be disposed of on the mine site without prior written approval from the NC Department of Environment and Natural Resources, Land Quality Section and either the Division of Waste Management (DWM) or local governing body. If a disposal permit has been issued by DWM for the site, a copy of said permit must be attached to this application. All temporary and permanent refuse disposal areas must be clearly delineated on the mine map(s) and reclamation map, along with a list of items to be disposed in said areas.**

All such scrap will be disposed of off-site in proper recycling and disposal facilities.

7. Describe your plan for re-vegetation or other surface treatment of the affected areas. This plan must include recommendations for year-round seeding, including the time of seeding and the amount and type of seed, fertilizer, lime and mulch per acre. The recommendations must include general seeding instructions for permanent re-vegetation and, if necessary, temporary re-vegetation. Re-vegetation utilizing only tree plantings is not acceptable. Recommendations can be sought from:

- a. Authorized representatives of the local Soil and Water Conservation District;
- b. Authorized representatives of the Division of Forest Resources, Department of Environment and Natural Resources;
- c. Authorized county representatives of the North Carolina Cooperative Extension Service, specialists and research faculty with the Colleges of Agriculture and Life Sciences and Forest Resources at North Carolina State University;
- d. North Carolina licensed landscape architects;
- e. Private consulting foresters referred by the Division of Forest Resources, Department of Environment and Natural Resources;
- f. N.C. Erosion and Sedimentation Control Planning and Design Manual;
- g. N.C. Surface Mining Manual: A Guide for Permitting, Operation and Reclamation;
- h. Others as may be approved by the Department.

LIME - RATE OF APPLICATION (tons/acre):

FERTILIZER - ANALYSIS AND RATE OF APPLICATION (pounds/acre):

SEED - TYPE(S) AND RATE(S) OF APPLICATION INCLUDING YEAR-ROUND SEEDING SCHEDULE (pounds/acre): [NOTE: Include Legumes]

Seed Types:

Seeding Dates:

Seeding Rates:

MULCH - TYPE AND RATE OF APPLICATION (pounds/acre) AND METHOD OF ANCHORING:

OTHER VEGETATIVE COVERS - TYPE(S) AND RATE(S) OF APPLICATION INCLUDING SEEDING SCHEDULE (pounds/acre, trees/acre, spacing of trees/shrubs, etc):

Revegetation and/or reforestation plan approved by:

Signature _____ Date _____

Print Name _____

Title _____

Agency _____

DETERMINATION OF AFFECTED ACREAGE AND BOND

The following bond calculation worksheet is to be used to establish an appropriate bond (based upon a range of \$500 to \$5,000 per affected acre) for each permitted mine site based upon the acreage approved by the Department to be affected during the life of the mining permit. Please insert the approximate acreage, for each aspect of the mining operation, that you intend to affect during the life of this mining permit (in addition, please insert the appropriate reclamation cost/acre for each category from the Schedule of Reclamation Costs provided with this application form) OR you can defer to the Department to calculate your bond for you based upon your maps and standard reclamation costs:

CATEGORY	ACREAGE	AFFECTED COST/ACRE*		RECLAMATION COST	RECLAMATION COST
Tailings/Sediment Ponds:	_____ Ac.	X		\$ _____ /Ac.	= \$ _____
Stockpiles:	_____ Ac.	X		\$ _____ /Ac.	= \$ _____
Wastepiles:	_____ Ac.	X		\$ _____ /Ac.	= \$ _____
Processing Area/Haul Roads:	_____ Ac.	X		\$ _____ /Ac.	= \$ _____
Mine Excavation:	_____ Ac.	X		\$ _____ /Ac.	= \$ _____
Other:	_____ Ac.	X		\$ _____ /Ac.	= \$ _____
TOTAL AFFECTED AC.:		_____ Ac.		(TOTAL PERMITTED AC.: _____ Ac.)	

Temporary & Permanent Sedimentation & Erosion Control Measures:

Divide the **TOTAL AFFECTED AC.** above into the following two categories: a) affected acres that drain into proposed/existing excavation and/or b) affected acres that will be graded for positive drainage where measures will be needed to prevent offsite sedimentation and sedimentation to onsite watercourses and wetlands.

- a) Internal Drainage _____ Ac.
- b) Positive Drainage _____ Ac. X \$1,500.00 = \$ _____

SUBTOTAL COST: \$

Inflation Factor:

0.02 X SUBTOTAL COST: \$ _____ X Permit Life (1 to 10 years): _____

INFLATION COST: \$ _____

**Triangle Quarry is covered under Wake Stone Corporation's Blanket Bond
Copy of Blanket Bond Attached.**

APPLICATION FOR A MINING PERMIT

G. LAND ENTRY AGREEMENT

We hereby grant to the Department or its appointed representatives the right of entry and travel upon our lands or operation during regular business hours for the purpose of making necessary field inspections or investigations as may be reasonably required in the administration of the Mining Act of 1971.

We further grant to the Department or its appointed representatives the right to make whatever entries on the land as may be reasonably necessary and to take whatever actions as may be reasonably necessary in order to carry out reclamation which the operator has failed to complete in the event a bond forfeiture is ordered pursuant to G.S. 74-59.

LANDOWNER:

APPLICANT:

Signature: Theodore D. Bratton

Signature: * Theodore D. Bratton

Print Name: Theodore D. Bratton

Print Name: Theodore D. Bratton

Address: PO Box 190

Title: Chief Executive Officer

Knightdale, North Carolina 27545

Company: Wake Stone Corporation

Telephone: (919) 266-1100

Mine Name: Triangle Quarry

*Signature must be the same as the individual who signed Page 1 of this application.

Six (6) copies of the completed application, six (6) copies of all location maps, mine maps and reclamation maps, and the appropriate processing fee (see next page for fee schedule) in the form a check or money order payable to the North Carolina Department of Environment and Natural Resources must be sent to the Land Quality Section Central Office at the address listed on the front cover of this application form.

Inquiries regarding the status of the review of this application should be directed to the Mining Program staff at (919) 733-4574.