



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

4949A Cox Road, Glen Allen, Virginia 23060

(804) 527-5020 Fax (804) 527-5106

www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director

James J. Golden
Regional Director

August 3, 2018

Mr. Michael Lamb
Owner
GreenRock Materials, LLC
PO Box 810
Quinton, VA 23141

Location: Amelia County
Registration No.: 52747

Re: GreenRock Materials LLC-Portable 52747

Dear Mr. Lamb:

Attached is a permit to construct and operate a portable truck-mix concrete batch plant at 11000 Old River Drive, Amelia Courthouse, VA in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on August 1, 2018.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to construct and operate shall not relieve GreenRock Materials, LLC of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the Piedmont Regional Office at (804) 527-5020.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Kyle', with a horizontal line extending to the right.

James E. Kyle, P.E.
Air Permit Manager

JEK/EDS/52747-01 GreenRock Materials NSR.docx

Attachment: Permit

Cc: Manager/Inspector, Air Compliance



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STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

GreenRock Materials, LLC
PO Box 810
Quinton, VA 23141
Registration No.: 52747

is authorized to construct and operate

a portable truck-mix concrete batch plant

located at

GreenRock Materials, LLC
11000 Old River Drive
Amelia Courthouse, VA 23002
Amelia County

in accordance with the Conditions of this permit.

Approved on August 3, 2018.

A handwritten signature in blue ink, appearing to read "J. Kyle", written over a horizontal line.

James E. Kyle, P.E.
Air Permit Manager, Department of Environmental Quality

Permit consists of 7 pages.
Permit Conditions 1 to 22.

INTRODUCTION

This permit approval is based on the permit application dated June 27, 2018 and supplemental information received on July 24, 2018 and August 1, 2018. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-20 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

Equipment List – Equipment at this facility consists of:

Equipment to be constructed:

Reference No.	Equipment Description	Rated Capacity	Delegated Federal Requirements
1	Portable Truck Mix Concrete Batch Plant w/ integrated cement silo, cement weigh hopper, and truck loadout (Stephens Manufacturing Clydesdale-manufactured in 2018)	240 tons/hr	None

Equipment exempt from permitting:

Reference No.	Equipment Description	Rated Capacity	Exemption Citation
2	Portable Caterpillar Diesel Engine-Generator Set Model XQ125 (manufactured May 2018; Tier 4 Final standards)	124 kW/ 166 bhp	Nonroad engine
3	Boiler (No. 2 distillate fuel oil)	1.4 MMBtu/hr	9 VAC 5-80-1105 B.1.a(2)

Specifications included in the above tables are for informational purposes only and do not form enforceable terms or conditions of the permit.

PROCESS REQUIREMENTS

1. **Emissions Controls** - Particulate emissions shall be controlled as follows:

Emission source	Control
Cement Silo	Cartridge filters
Cement Weigh Hopper	Fabric filters
Truck Load-Out	a) A chute that extends into truck hopper to convey materials; b) Protection from winds using enclosure; and c) Cartridge filters

The controls listed in the table above shall be provided with adequate access for inspection and maintenance and shall be properly functioning when the process is in operation. The chute and enclosure shall be maintained in good condition without tears or holes.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

2. **Fugitive Dust and Fugitive Emission Controls** – Fugitive dust and fugitive emission controls shall include the following, or equivalent, as approved by DEQ:
 - a. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; paving of roadways, and maintenance of roadways in a clean condition.
 - b. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion.
 - c. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
 - d. Dust from material handling and load-outs, shall be controlled by wet suppression or equivalent. The wet suppression spray systems shall be operated at optimum design.
 - e. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-50-90 and 9 VAC 5-80-1180 and 9 VAC 5-50-260)

3. **Monitoring Devices** – Each cartridge filter (silos top and truck loadout) having an induced draft or forced draft fan shall be equipped with a device to continuously measure differential pressure across the cartridge filter. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filter is operating.
(9 VAC 5-80-1180)
4. **Monitoring Device Observation** – To ensure good performance, the process/control monitoring device used to continuously measure the differential pressure across the cartridge filter (silos top and truck loadout) shall be observed by the permittee with a frequency of not less than once per calendar week of operation. The permittee shall keep a log of the observations from the process/control monitoring device. The log shall include the name of the observer, the date and time of the observation, and the differential pressure reading.
(9 VAC 5-80-1180)
5. **Monitoring Visible Emissions** - All bin vent filters (cement weigh hopper fabric filters) and fugitive emission sources shall be observed visually once per day when in operation to determine if there are any visible emissions. The silo cartridge filter shall be observed visually during the uploading process for at least a brief time period during normal operations to determine if there are any visible emissions. The presence of visible emissions shall indicate the need for prompt corrective action. The permittee shall keep a log of the observations. The log shall include the name of the observer, the date and time of the observations, the presence of visible emissions or lack thereof, and the date and time of corrective actions taken whenever visible emissions were observed.
(9 VAC 5-80-1180)

OPERATING LIMITATIONS

6. **Production** - The production of concrete shall not exceed 50,000 cubic yards per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-1180)

EMISSION LIMITS

7. **Facility Wide Emission Limits** - Total emissions from the truck mixed concrete batch plant shall not exceed the limits specified below:

For each fabric filter having an induced draft or forced draft fan:

PM	0.01	gr/dscf
PM-10	0.01	gr/dscf
PM 2.5	0.01	gr/dscf

Total combined:

PM	0.8	tons/yr
PM-10	0.5	tons/yr
PM 2.5	0.5	tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1, 2, and 6.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

8. **Visible Emission Limit** - Visible emissions from each filter exhaust stack shall not exceed five percent (5%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

RECORDS

9. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:
- Annual production of concrete in cubic yards per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - Operation and control device monitoring records for each cartridge filter as required in Condition 4.
 - Visible emission records as required in Condition 5.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-1180 and 9 VAC 5-50-50)

NOTIFICATIONS

10. **Initial Notifications** - The permittee shall furnish written notification to the Piedmont Regional Office of:

- a. The actual date on which construction of the concrete batch plant commenced within 30 days after such date.
- b. The actual start-up date of the concrete batch plant within 15 days after such date.

(9 VAC 5-50-50 and 9 VAC 5-80-1180)

PORTABLE CONDITIONS

11. **Relocation of Portable Facilities** - The permittee is authorized to apply for relocation of the truck mixed concrete batch plant to other project sites within Virginia under the provisions of 9 VAC 5-80-1105 A.1.c. Such requests will be evaluated on a case-by-case basis.

(9 VAC 5-170-160 and 9 VAC 5-80-1105 A.1.c)

12. **Notification for Relocation of Portable Facilities** – At least fifteen days prior to each relocation, the following information shall be submitted to the reviewing DEQ-Regional Office (the Region to which the facility shall be relocated):

- a. The facility registration number.
- b. The date of the permit.
- c. Date of estimated relocation and start-up of the facility.
- d. The period of time the facility will be at the proposed site.
- e. The location and description of the proposed site, including a map showing the exact location and latitude and longitude coordinates.
- f. The location of the present site. If the present site is outside the Commonwealth of Virginia, include the latest location in Virginia.
- g. A description of the facility to be relocated. This should include any identification or equipment number that the owner uses to identify the facility.
- h. A description of the action at the proposed site. This includes the type of product and the total throughput at the proposed site.
- i. The process throughput which has occurred at the present site, if this site is located inside the Commonwealth of Virginia.
- j. The process throughput for the previous 12 consecutive months.

(9 VAC 5-170-160)

13. **Operation of Portable Facilities** – The portable truck mixed concrete batch plant may not operate at any single temporary site for a period in excess of 12 months without written approval from the DEQ. (9 VAC 5-170-160)

GENERAL CONDITIONS

14. **Permit Invalidity** – This permit to construct the new stationary source shall become invalid, unless an extension is granted by the DEQ, if:
- a. A program of continuous construction is not commenced within 18 months from the date of this permit.
 - b. A program of construction is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of the phased construction of a new stationary source.

(9 VAC 5-80-1210)

15. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:
- a. Knowingly makes material misstatements in the permit application or any amendments to it;
 - b. Fails to comply with the conditions of this permit;
 - c. Fails to comply with any emission standards applicable to a permitted emissions unit;
 - d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or
 - e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emissions limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9 VAC 5-80-1210 G)

16. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
- a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
 - c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
 - d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9 VAC 5-170-130 and 9 VAC 5-80-1180)

17. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
(9 VAC 5-50-20 E and 9 VAC 5-80-1180 D)

18. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)
19. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Piedmont Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Piedmont Regional Office.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)
20. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I and 9 VAC 5-80-1180)
21. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current minor NSR permit issued to the previous owner. The new owner shall notify the Piedmont Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)
22. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)