



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

PIEDMONT REGIONAL OFFICE

4949-A 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

June 27, 2019

Mr. Bobby Hollis
Authorized Representative
Scout Development LLC
1 Hacker Way
Menlo Park, CA 94025

Location: Henrico County
Registration No: 52629

Dear Mr. Hollis:

Attached is a permit to construct and operate emergency diesel engine generator sets (gen-sets) at Scout Development LLC (Scout), in accordance with the provisions of the Virginia Regulations for the Control and Abatement of Air Pollution at the proposed Scout Development LLC facility located in White Oak Technology Park, Sandston, Virginia. This permit supersedes your permit dated July 3, 2018.

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 June 26, 2019.

The permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all permit conditions carefully.

This permit approval shall not relieve Scout Development LLC of the responsibility to comply with all other local, state, and federal permit regulations.

The proposed emergency diesel engine gen-sets may be subject to the requirements of 40 CFR Part 60, New Source Performance Standards (NSPS) Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (MACT) Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. In summary, the units may be required to comply with certain federal emission standards and operating limitations. The DEQ advises you to review the referenced MACT and NSPS to ensure compliance with applicable emission and operational limitations. As the owner/operator you are also responsible for any monitoring, notification, reporting and recordkeeping requirements of the MACT and NSPS. Notifications shall only be sent to EPA, Region III.

To review any federal rules referenced in the above paragraph or in the attached permit, the US Government Publishing Office maintains the text of these rules at www.ecfr.gov, Title 40, Part 60 and 63.

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, Virginia 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 regional office at (804) 527-5020.

Sincerely,



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

JEK/hll/52629NSR_06272019_Final.docx

Attachments: Permit

Ec: Manager/Inspector, Air Compliance (electronic file submission)
Mrs. Kaitlyn Bencosme (electronic file submission)
Mr. Ali Farnoud (electronic file submission)



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David K. Paylor
Director

James J. Golden
Regional Director

STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

This permit supersedes your permit dated July 3, 2018.

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

Scout Development LLC
1 Hacker Way
Menlo Park, CA 94025
Registration No. 52629

is authorized to construct and operate

emergency diesel engine generator sets (gen-sets)

located at:

White Oak Technology Park, Henrico County, Sandston, Virginia

in accordance with the Conditions of this permit.

Approved on June 27, 2019.


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

Permit consists of 13 pages.
Permit Conditions 1 to 26.
Source Testing Report Format.

INTRODUCTION

This permit approval is based on the permit application dated May 19, 2017, received on May 22, 2017, amendment sheets dated August 4, 2017 and supplemental information dated August 9, 2017, September 21, 2017 and October 5, 2017 and the permit application dated December 1, 2017, received on December 6, 2017 and supplemental information dated December 7, 2017 and December 13, 2017 and the permit application dated June 22, 2018 and the permit application dated April 10, 2019, received on April 11, 2019 and supplemental information dated April 24, 2019 and June 26, 2019. 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.

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 the following:

Equipment to be constructed:				
Reference No.	Equipment Description	Rated Capacity	Federal Delegated Requirements	Original Permit Date
EG01 -EG54	Fifty-four (54) Cummins QSK95-G11 emergency diesel engine gen-sets	4,352 bhp 3,000 ekW (each unit)	None	October 12, 2017
EG57 -EG92	Thirty-six (36) Cummins QSK95-G11 emergency diesel engine gen-sets with SCR controls		None	June 27, 2019
EG55 -EG56	Two (2) Cummins or equal QST30- G5 NR2 emergency diesel engine gen-sets	1,482 bhp 1,000 ekW (each unit)	None	December 20, 2017

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

PROCESS REQUIREMENTS

1. **Emission Controls** – Emissions from the emergency diesel engine gen-sets (EG01 – EG92) shall be controlled by the following:
 - a. Nitrogen oxides (NO_x) emissions from each emergency diesel engine gen-set (EG01 – EG56) shall be controlled by electronic fuel injection and turbocharged engines. The permittee shall maintain documentation that demonstrates the control devices have been installed on each emergency diesel engine gen-set (EG01 – EG56).
 - b. Nitrogen oxides (NO_x) emissions from each emergency diesel engine gen-set (EG57 – EG92) with SCR shall be controlled by add on SCR, electronic fuel injection and turbocharged engines. The permittee shall maintain documentation that demonstrates the control devices have been installed on each emergency diesel engine gen-set (EG57 – EG92) and SCR to each engine in the grouping. In addition, the permittee may only change those settings that are permitted by the manufacturer and do not degrade the air emissions from the emergency diesel engine gen-sets (EG57 – EG92)
 - c. Carbon monoxide (CO) emissions, particulate matter (PM₁₀) emissions, particulate matter (PM_{2.5}) emissions, volatile organic compounds (VOCs) emissions and visible emissions from the emergency diesel engine gen-sets shall be controlled by the use of good operating practices and performing maintenance in accordance with the manufacturer recommendations. In addition, the permittee may only change those settings that are permitted by the manufacturer and do not degrade the air emissions from the emergency diesel engine gen-sets (EG01 – EG92).
- (9 VAC 5-80-1180 and 9 VAC 5-50-260)
2. **Monitoring Device** - The emergency generators (EG01 – EG92) shall be monitored by the following devices:
 - a. Each emergency diesel engine gen-set shall be equipped with a non-resettable hour meter to record the operating hours and a device to measure and record the fuel throughput. The permittee shall maintain a log of the recordings from emergency diesel engine gen-set's monitoring devices for each day the engine gen-set is operated.
 - b. Each monitoring device shall be installed, maintained, calibrated (as appropriate), and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The details of the monitoring device calibrations are to be arranged with the Director, Piedmont Regional Office.

Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the engine gen-sets are operating.

(9 VAC 5-80-1180 D, 9 VAC 5-50-20 C, and 9 VAC 5-50-260)

OPERATING LIMITATIONS

3. **Emergency Power Generation** – The emergency diesel engine gen-sets (EG01 – EG92) shall only be operated in the following modes:
- a. In situations that arises from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:
 - i. A failure of the electrical grid;
 - ii. On-site disaster or equipment failure; or
 - iii. Public service emergencies such as flood, fire, natural disaster, or severe weather conditions.
 - b. For participation in an ISO-declared emergency, where an ISO emergency is:
 - i. An abnormal system condition requiring manual or automatic action to maintain system frequency, to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property;
 - ii. Capacity deficiency or capacity excess conditions;
 - iii. A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel;
 - iv. Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state; or
 - v. An abnormal event external to the ISO service territory that may require ISO action.
 - c. For periodic maintenance (including medium voltage switch maintenance), testing, and operational training.

Total emissions for any annual period, calculated as the sum of all emissions from operations under the scenarios above, shall not exceed the limits stated in Condition 4.
(9 VAC 5-80-1180)

4. **Operating Hours** – Each individual emergency diesel engine gen-set (EG01 – EG92) shall not operate more than 100 hours per year for maintenance checks and readiness testing and no more than 500 hours per year for all purposes (as provided in Condition 3) combined. The annual limits for hours of operation shall be 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)

5. **Fuel Specification** – The approved fuel for the emergency diesel engine gen-sets (EG01 – EG92) is ultra-low sulfur diesel fuel oil, and shall meet the specifications below:

ULTRA LOW SULFUR DIESEL FUEL OIL:

- a. Does not exceed the American Society for Testing and Materials (ASTM) specification, D975, for grade ultra-low sulfur 2-D or grade 2-D S15, or,
- b. Has a maximum sulfur content not to exceed 0.0015% by weight (15 ppm), and either a minimum cetane number of 40 or maximum aromatic content of 35 volume percent.

Exceedance of these specifications may be considered credible evidence of an exceedance of emission limits. A change in the fuel type or the fuel sulfur content may require a permit to modify and operate.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

6. **Fuel Certification** – The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier;
 - b. The date on which the distillate oil was received;
 - c. The quantity of distillate oil delivered in the shipment;
 - d. A statement that the distillate oil complies with the requirements of Condition 5 (Fuel Specification).

Alternatively, the permittee shall be arranged with the Director, Piedmont Regional Office if other documentation will be used to certify the diesel fuel oil type. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 5.
(9 VAC 5-80-1180)

7. **Diesel Fuel Throughput Limit** – The emergency engine-generator set[s] (EG01 – EG56) combined shall consume no more than **645,750** gallons of diesel fuel per year, calculated monthly as the sum of each consecutive 12-month period. The emergency engine-generator set[s] (EG01 – EG92) combined shall consume no more than **1,070,750** gallons of diesel fuel 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

8. **Emission Limits** - Emissions from the operation of all emergency generators (EG01 – EG92) shall not exceed the limits specified below:

Pollutant	Cummins QSK95-G11 (each unit)	Cummins QSK95-G11 (each unit) With SCR	Cummins QST30-G5 NR2 (each unit)	Cummins QSK95-G11 and Cummins QST30-G5 NR2 (all units combined)
Nitrogen Oxides (NOx as NO ₂)	55.4 lb/hr 0.257 lb/gal	5.5 lb/hr 0.078 lb/gal	16.8 lb/hr 0.297 lb/gal	99.0 tpy
Carbon Monoxide (CO)	4.8 lb/hr	4.8 lb/hr	4.3 lb/hr	25.5 tpy
Particulate Matter (PM ₁₀)	1.0 lb/hr	1.0 lb/hr	1.0 lb/hr	9.1 tpy
Particulate Matter (PM _{2.5})	1.0 lb/hr	1.0 lb/hr	1.0 lb/hr	9.1 tpy
Volatile Organic Compounds (VOCs)	2.0 lb/hr	2.0 lb/hr	0.4 lb/hr	11.7 tpy

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 Condition 7, 10 and 15.

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

9. **Visible Emission Limit** - Visible emissions from the emergency generators (EG01 – EG92) shall not exceed 5% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10% opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). During startup and shutdown, visible emissions from each engine gen-set (EG01 – EG92) shall not exceed 10% opacity except during one six-minute period in any one-hour in which visible emissions shall not exceed 20% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

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

INITIAL COMPLIANCE DETERMINATION

10. **Stack Tests** – Initial performance tests shall be conducted for nitrogen oxides (as NO_x) and carbon monoxide (CO) from the stacks of the three (3) of the emergency diesel engine gen-sets (Cummins QSK95-G11) with SCR (including inlet and outlet NO_x concentration, each SCR minimum operating temperature and pressure drop), five (5) of the emergency diesel engine gen-sets (Cummins QSK95-G11) and one (1) of the emergency diesel engine gen-sets (QST30-G5 NR2) to determine compliance with the emission limits (lb/hr and lb/gal) contained in Condition 8. The tests shall be performed, reported, and demonstrate compliance within 60 days after commissioning the last generator that allows the facility to fully operate a building equipped with generators with SCR and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Director, Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-50-30 and 9 VAC 5-80-1200)

11. **Visible Emissions Evaluation** – Concurrently with the initial performance tests required by Condition 10, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A-4, Method 9, shall also be conducted by the permittee on the nine (9) emergency diesel engine gen-sets selected for the stack tests of Condition 10. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The evaluations shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. One copy of the test result shall be submitted to the Director, Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-50-30, 9 VAC 5-80-1200 and 9 VAC 5-50-410)

CONTINUING COMPLIANCE DETERMINATION

12. **Facility Construction** – The emergency diesel engine gen-sets (EG01 – EG92) shall be constructed so as to allow for emissions testing upon reasonable notice, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations in accordance with EPA Reference Method 1 (reference 40 CFR Part 60, Appendix A). In addition, safe sampling platforms and access shall be provided.
(9 VAC 5-50-30 F and 9 VAC 5-80-1180)
13. **Emission Testing/Visible Emissions Evaluation** – Upon request by the Director, Piedmont Regional Office, the permittee shall conduct stack tests and/or visible emission evaluations of the emergency diesel engine gen-sets (EG01 – EG92) to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Regional Office.
(9 VAC 5-80-1200 and 9 VAC 5-50-30 G)
14. **Continuing Compliance Demonstration – Fuel Flow Measuring Device** – Upon request by the Director, Piedmont Regional Office, the permittee shall conduct periodic demonstrations to validate the continued accuracy of each fuel flow measuring device required by Condition 2.
(9 VAC 5-80-1180)

RECORDS AND REPORTING

15. **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 Director, Piedmont Regional Office. These records shall include, but are not limited to:
- a. Documentation from the manufacturer that each emergency diesel engine gen-set (EG01 – EG92) is certified to meet the EPA Tier 2 emission standards;
 - b. A monthly log of the monitoring device observations as required by Condition 2.
 - c. Monthly hours of operation (all purposes) of each emergency diesel engine gen-set (EG01 – EG92) and the reasons for operating as defined in Condition 3.

- d. Annual hours of operation (all purposes) of each emergency diesel engine gen-set, calculated monthly as the sum of each consecutive 12-month period.
- e. Annual hours of operation of each emergency diesel engine gen-set, for purposes of maintenance checks/readiness testing, calculated monthly as the sum of each consecutive 12-month period.
- f. Monthly and annual fuel consumption of each emergency diesel engine gen-set, with the annual fuel consumption calculated monthly as the sum of each consecutive 12-month period.
- g. Combined annual fuel consumption of emergency diesel engine gen-sets Fifty-four (54) Cummins QSK95-G11, calculated monthly as the sum of each consecutive 12-month period.
- h. Combined annual fuel consumption of emergency diesel engine gen-sets (Two (2) Cummins (QST30-G5 NR2), calculated monthly as the sum of each consecutive 12-month period.
- i. Combined annual fuel consumption of the Fifty-six (56), emergency diesel engine gen-sets, calculated monthly as the sum of each consecutive 12-month period to verify compliance with the throughput limitation specified in Condition 7.
- j. Combined annual fuel consumption of the ninety-two (92), emergency diesel engine gen-sets (EG01 – EG92), calculated monthly as the sum of each consecutive 12-month period to verify compliance with the throughput limitation specified in Condition 7. The difference is assumed to be annual fuel consumption of emergency diesel engine gen-sets for the thirty-six (36) Cummins QSK95-G11 with SCR in operation.
- k. All fuel supplier certifications.
- l. Results of all stack tests and visible emission evaluations.
- m. A copy of the maintenance schedule and records of scheduled and unscheduled maintenance in accordance with Condition 20.
- n. Operator training in accordance with Condition 20.
- o. Records of the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer.
- p. Records of changes in settings that are permitted by the manufacturer of the emergency diesel engine gen-sets (EG01 – EG92).
- q. Records of the results of the continued compliance demonstrations required by Condition 14 for each emergency diesel engine gen-set fuel flow measuring device.

- r. Documentation for each engine run or operation records used to calculate all emissions, records of the basis or cause for each engine run or operation, total run or operation hours and the maximum percent (%) load achieved during that run or operation.
- s. Monthly and annual NOx emissions (all purposes) shall be determined using engine fuel usage with emission factors from condition 8 or information from the most up to date stack test data.

Compliance for the consecutive 12-month period in subsections d, e, f, g, h, i and j shall be demonstrated monthly by adding the total for the most recently completed month to the individual monthly totals for the preceding 11 months. These records shall be available for inspection by the DEQ and shall be current for the most recent five years, unless otherwise noted.

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

NOTIFICATIONS

16. **Initial Notifications** – The permittee shall furnish written notification (may be grouped by building) to the Director, Piedmont Regional Office of the items below:
- a. The actual date on which construction of each emergency diesel engine gen-set (EG01 – EG92) commenced within 30 days after such date. The notification must contain the following:
 - i. Name and address of the permittee,
 - ii. The address of the affected source,
 - iii. Engine information including make, model, engine family, serial number, model year, maximum engine power and engine displacement.
 - iv. Fuel used.
 - b. The anticipated date of the manufacturer's trials of the emergency diesel engine gen-sets (EG01 – EG56) postmarked not more than 30 days nor less than 15 days prior to such date.
 - c. The actual date on which the manufacturer's trials of the emergency diesel engine gen-sets (EG01 – EG56) occurs within 15 days after such date.
 - d. The anticipated start-up date of the emergency diesel engine gen-sets (EG01 – EG56) postmarked not more than 60 days nor less than 30 days prior to such date.
 - e. The anticipated date of the manufacturer's trials of the emergency diesel engine gen-sets (EG57 – EG92) postmarked not more than 30 days nor less than 15 days prior to such date.
 - f. The actual date on which the manufacturer's trials of the emergency diesel engine gen-sets (EG57 – EG92) occurs within 15 days after such date.

- g. The anticipated start-up date of the emergency diesel engine gen-sets (EG57 – EG92) postmarked not more than 60 days nor less than 30 days prior to such date.
- h. The actual start-up date of the emergency diesel engine gen-sets (EG01 – EG92) within 15 days after such date. The actual start-up date shall be the date on which each engine completes manufacturer's trials, but shall be no later than 30 days after start-up for manufacturer's trials.
- i. The anticipated date of the performance tests and visible emissions evaluation of the emergency diesel engine gen-sets (selected for Conditions 10 and 11), postmarked at least 30 days prior to such date.

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

GENERAL CONDITIONS

17. **Permit Invalidity** – This permit to construct the emergency diesel engine gen-sets (EG01 – EG92) shall become invalid, unless an extension is granted by the Director, Piedmont Regional Office, if:
- a. A program of continuous construction or modification is not commenced within 18 months from the "Original Permit Date" specified in the equipment list in the introduction section 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.
- (9 VAC 5-80-1210)
18. **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 fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the implementation plan in effect at the time that an application is submitted; or
 - e. Fails to comply with the applicable provisions of 9 VAC 5-80-1100 et seq.

(9 VAC 5-80-1210 F and 9 VAC 5-80-1210 G)

19. **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)

20. **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)

21. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shut-down or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. The records shall be maintained in a form suitable for inspection and maintained for at least two years (unless a longer period is specified in the applicable emission standard) following the date of occurrence. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause of malfunction), corrective action, preventive measures taken and name of person generating the record.
(9VAC 5-20-180 J and 9 VAC 5-80-1180 D)
22. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, 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 Director, Piedmont Regional Office.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)
23. **Notification of Control Equipment Maintenance** – The permittee shall furnish notification to the Director, Piedmont Regional Office in case of shutdown or bypassing, or both, of air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour. The intent to shut down or bypass such equipment shall be reported to the Director, Piedmont Regional Office and local air pollution control agency, if any, at least twenty-four hours prior to the planned shutdown. Such prior notice shall include, but is not limited to the following information:
- a. Identification of air pollution control equipment to be taken out of service, as well as its location and registration number;
 - b. The expected length of time that the air pollution control equipment will be out of service;
 - c. The nature and quantity of emissions of air pollution likely to occur during the shutdown period; and
 - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-20-180 B)

24. **Violation of Ambient Air Quality Standard** - Regardless of any other provision of this permit, the permittee shall, upon request of the DEQ, reduce the level of operation of the facility if the DEQ determines that is necessary to prevent a violation of any primary ambient air quality standard. Under worst case conditions, the DEQ may order that the permittee shut down the facility, if there is no other method of operation to avoid a violation of the ambient air quality standard. The DEQ reserves the right to prescribe the method of determining if a facility will cause such a violation. In such cases, the facility shall not be returned to operation until it and the associated air pollution control equipment are able to operate without violation of any primary ambient air quality standard.
(9 VAC 5-20-180 I and 9 VAC 5-80-1180)
25. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Piedmont Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)
26. **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)

SOURCE TESTING REPORT FORMAT

Report Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Test Dates.
4. Tester; name, address and report date

Certification

1. Signed by team leader/certified observer (include certification date)
2. Signed by responsible company official
3. *Signed by reviewer

Copy of approved test protocol

Summary

1. Reason for testing
2. Test dates
3. Identification of unit tested & the maximum rated capacity
4. *For each emission unit, a table showing:
 - a. Operating rate
 - b. Test Methods
 - c. Pollutants tested
 - d. Test results for each run and the run average
 - e. Pollutant standard or limit
5. Summarized process and control equipment data for each run and the average, as required by the test protocol
6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
7. Any other important information

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results

1. Detailed test results for each run
2. *Sample calculations
3. *Description of collected samples, to include audits when applicable

Appendix

1. *Raw production data
2. *Raw field data
3. *Laboratory reports
4. *Chain of custody records for lab samples
5. *Calibration procedures and results
6. Project participants and titles
7. Observers' names (industry and agency)
8. Related correspondence
9. Standard procedures

* Not applicable to visible emission evaluations