NRO-263-11

COMMONWEALTH of VIRGINIA

Douglas W. Domenech
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193-1453
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

David K. Paylor
Director

Thomas A. Faha
Regional Director

November 11, 2011

Mr. Yatish Mishra
President and CEO
RagingWire Enterprise Solutions, Inc.
P.O. Box 348060
Sacramento, CA 95834

Registration No.: 73954

Dear Mr. Mishra:

Attached is a permit to construct and operate nineteen (19) diesel engine driven generator sets at your office facility located in Ashburn, Virginia. This permit is issued in accordance with the provisions of the Commonwealth of Virginia State Air Pollution Control Board's (Board) Regulations for the Control and Abatement of Air Pollution (Regulations). This permit contains legally enforceable conditions. Please read all permit conditions carefully as failure to comply may result in appropriate enforcement and civil penalties.

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 November 7, 2011.

This permit approval to construct and operate shall not relieve RagingWire Enterprise Solutions, Inc. of the responsibility to comply with all other local, state, and federal permit regulations. It should be noted the proposed engine-generator sets (Ref. # 1 – 7 and A – H and J - M) are affected facilities under 40 CFR 60, New Source Performance Standard (NSPS) Subpart IIII and 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT) Subpart ZZZZ. The engines are required to comply with certain federal emission standards and operating limitations over the useful life of the units. As the owner/operator of the affected units, the DEQ advises you to review the NSPS and MACT to ensure compliance with applicable emission standards, operational limitations, and the monitoring, notification, reporting and recordkeeping requirements. Applicable notifications shall be sent to the EPA, Region III. Both the NSPS and MACT can be found at **http://ecfr.gpoaccess.gov/.**

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code (VAC) 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within thirty days after this case decision notice was mailed or delivered to you. 9 VAC 5-170-200 provides that you may request direct consideration of the

decision by the Board if the Director of the DEQ made the decision. 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 thirty 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 regional office at 703.583.3858.

Sincerely,

Terry H. Darton
Regional Air Permit Manager

TAF/THD/KDG/11-263-mnsr

Attachments: Permit
Source Testing Report Format

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Manager/Inspector, Air Compliance

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STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE
This permit includes designated equipment subject to New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT)

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

RagingWire Enterprise Solutions, Inc.
P.O. Box 348060
Sacramento, CA 95834
Registration No.: 73954

is authorized to construct and operate

nineteen (19) engine-generator sets

located at

44664 Guilford Dr.
Ashburn, VA 20147

in accordance with the Conditions of this permit.

Approved on November 11, 2011

Thomas A. Faha
Regional Director

Permit consists of 16 pages.
Permit Conditions 1 to 33.

INTRODUCTION

This permit approval is based on the permit application dated July 26, 2011 with supplemental information received on September 29, 2011, October 19, 2011 and November 7, 2011. 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 5-80-1110 (definitions) and 9 VAC 5-10-20 of the State Air Pollution Control Board's (Board) Regulations for the Control and Abatement of Air Pollution (Regulations). 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 Department of Environmental Quality (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.

PROCESS REQUIREMENTS

1. **Equipment List** - Equipment at this facility will consist of the following:

Equipment to be Constructed				
Reference No.	**Equipment Description**	**Rated Capacity**	**Add-On Control Technology**	**Federal Requirements**
1 – 7 (7 Units)	Cummins 2000DQKAB Diesel Engines	2919 hp each 2000 kW each		(9 VAC 5-50-410 and/or 9 VAC 5-60-100)
A – H and J-M (12 Units)	Cummins 2000DQKAB Diesel Engines	2919 hp each 2000 kW each		(9 VAC 5-50-410 and/or 9 VAC 5-60-100)

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit unless the specifications are needed to form the basis for one or more of the other terms or conditions in the permit. (9 VAC 80-1180 D 3)

2. **Emission Controls** – Emissions from the engine-generator sets shall be controlled by the following:

   A. Proper combustion for and visible emissions from the engine-generator sets (Ref.#s 1 – 7, A – H and J - M) shall be controlled by the use of good operating practices and performing appropriate maintenance in accordance with the manufacturer's 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 engine.

   B. Sulfur Dioxide (SO_2) emissions from the engine-generator sets (Ref. #s 1 – 7, A – H and J - M) shall be controlled by the use of ultra low sulfur diesel fuel oil with a sulfur content not to exceed 0.0015% by weight (15 ppm).

   C. Carbon Monoxide (CO) and volatile organic compounds (VOC) emissions from the engine-generator sets (Ref. #s 1 – 7, A – H and J - M) shall be controlled by good combustion practices.

   D. Nitrogen Oxides (as NO_2) emissions from the engine-generator sets (Ref. #s 1 – 7, A – H and J - M) shall be controlled by electronic fuel injection, turbocharged engines and aftercoolers.

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

3. **Monitoring**

   A. The engine-generator sets (Ref. #s 1 – 7, A – H and J - M) shall be equipped with a non-resettable hour meter which measures the duration of time each engine is operated, including any periodic maintenance and operation checks. Refer to Condition 21 for record keeping requirements to demonstrate compliance with this condition.

   B. 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 engines are operating.
   (9 VAC 5-80-1180 D and 9 VAC 5-50-20 C)

4. **Monitoring Device Observation** – To ensure proper performance, the monitoring devices identified in Condition 3 shall be observed by the permittee at a minimum frequency of once per day during each test firing and during days in which the engine generator sets are called into service. Data captured by the monitoring devices shall be reviewed or observed by the permittee, at a frequency of not less than once each twenty-four hour period, during days in which the engine-generator sets are called into service. Refer to Condition 21 for record keeping requirements to demonstrate compliance with this condition.
   (9 VAC 5-80-1180)

OPERATING LIMITATIONS

5. **Operating Scenarios for Diesel Engine Generator Sets -**

   a. Emergency / Critical Power Generation:

i. Emergency: The engine-generator sets (Ref.#s 1 – 7, A – H and J - M) may be operated in situations where immediate action on the part of the facility is needed due to a failure or loss of electrical power service resulting from a failure of the primary power provider and the failure or loss of power service is beyond the reasonable control of the facility. Operation under these circumstances shall be allowed for the period of time the primary electrical power provider service is unavailable. Once primary electrical power provider service is available the engine-generator sets may be operated in accordance with Critical Power Generation as defined below.

ii. ISO-Declared Emergency: The engine-generator sets (Ref.#s 1 – 7, A – H and J - M) may be operated for participation in an Independent System Operator's (ISO) Emergency Load Response Program (ELRP) during times of an ISO-declared emergency, as defined in the ISO's emergency operations manual. Operations under this scenario shall not exceed 60 hours per generator each calendar year. The permittee shall submit notification to the Regional Air Permit Manager of the DEQ's Northern Regional Office (NRO) within thirty days of signing a contract to participate in the ERLP.

iii. Critical Power Generation: The engine-generator sets (Ref.#s 1 – 7, A – H and J - M) may be operated in situations where immediate action on the part of the facility is needed due to a loss or anticipated loss of acceptable electrical power service from the primary provider and the loss or anticipated loss of power service is beyond the reasonable control of the facility. Operation under these circumstances shall be allowed until such time as acceptable power provider service is restored or the loss of acceptable power provider service is no longer reasonably anticipated.

b. Alternate Power Generation: Except as specified in subsection 5.c below, an engine-generator set (Ref.#s 1 – 7, A – H and J - M) may be operated voluntarily for the purposes of peak-shaving, demand response, or as part of an interruptible power supply arrangement with a power provider, other market participant, or system operator if the engine is equipped with a selective catalytic reduction system (SCR) that achieves the manufacturer's guaranteed maximum emission reductions based on fuel type. Operations, as outlined in this subsection, shall be allowed when the engine-generator set is operating at a load level necessary to sustain urea injection. Prior to construction of the SCR unit, when changing from Emergency Power or Critical Power Generation to Alternate Power Generation, the permittee shall submit appropriate documentation to the DEQ, and receive DEQ approval for the change in the method of operation of the engine-generator sets to ensure that the facility remains in compliance with the appropriate permitting requirements.

c. The engine-generator sets may be operated for periodic maintenance, testing, and operational training.

Total emissions for any twelve month period, calculated as the sum of all emissions from operations under scenarios 5.a. through 5.c above, shall not exceed the limits stated in Condition 11.
(9 VAC 5-80-1180 D and 9 VAC 5-50-260)

6. **Operating Hours** - The combined operating hours for the engine-generator sets (Ref.#s 1 – 7, A – H and J - M) shall not exceed 1580 hours per year, calculated monthly as the sum of each consecutive twelve month period. Refer to Condition 21 for record keeping requirements to demonstrate compliance with this condition.
(9 VAC 5-80-1180)

7. **Operation of the Engine-Generator Sets** - The permittee must operate and maintain the engine-generator sets and control devices according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer and does not degrade air emissions.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

8. **Fuel** - The approved fuel for the engine-generator sets (Ref.#s 1 – 7, A – H and J - M) shall be diesel fuel oil that meets the specifications below:

   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 forty, or has a maximum aromatic content of thirty-five percent by volume.

   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)

9. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel oil. Each fuel supplier certification shall include the following:

   A. The name of the fuel supplier; and

   B. The date on which the diesel fuel oil was received; and

   C. The quantity of diesel fuel oil delivered in the shipment; and

   D. A statement that the diesel fuel oil conforms to the requirements of Condition 8 – Fuel Specification; or

   E. Alternatively, the permittee must obtain approval from the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO) at the address referenced in Condition 20 if other documentation will be used to certify the diesel fuel type.

   Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by the DEQ, may be used to determine compliance with the fuel specifications stipulated in Condition 8.
   (9 VAC 5-80-1180)

EMISSION LIMITS

10. **Emission Limits** – Hourly emissions from the operation of each engine-generator set (Ref.#s 1 – 7, A – H and J - M) shall not exceed the limits specified below:

	Each Unit
Nitrogen Oxides (as NO_2)	38.61 lbs/hr*
Carbon Monoxide (CO)	1.62 lbs/hr
Volatile Organic Compounds (VOC)	1.78 lbs/hr

The hourly emissions are derived from the manufacturer's data at maximum design capacity of the diesel engine. Compliance with the hourly emission limits may be based on testing if required by the DEQ.

*NO_2 – Upon DEQ verification of the initial performance test, the facility has the option of using a lower emission rate (average of three one-hour test runs x 120%) by undergoing a permit amendment to incorporate the new lower rate.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

11. **Annual Engine-Generator Emission Limits** – Total emissions from the engine-generator sets (Ref.#s 1 – 7, A – H and J - M) shall not exceed the limits specified below:

	Combined
Nitrogen Oxides (as NO_2)	26.00 tpy
Carbon Monoxide (CO)	1.07 tpy
Volatile Organic Compounds (VOC)	1.17 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 shall be determined by calculation methods as stated in Condition 12 or by an alternate method as approved by the Regional Air Compliance Manager of the DEQ's NRO. Any changes in calculation methods shall receive written approval from the Regional Air Compliance Manager of the DEQ's NRO prior to use.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

12. **Annual Emissions Calculations** - The total annual emissions of each regulated pollutant from the engine-generator sets (Ref.#s 1 – 7, A – H and J - M) shall be calculated monthly as the sum of each consecutive twelve-month period. Refer to Condition 21 for record keeping requirements to demonstrate compliance with this condition.

A. Emissions Calculations: Monthly emissions for each pollutant (listed in Condition 11) shall be calculated using the following equation and the appropriate emission factors listed below:

NOx* =
(Total monthly hours of operation for all the engine-generator sets x 32.88 lb/hr) ÷ 2000

CO =
(Total monthly hours of operation for all the engine-generator sets x 1.35 lb/hr) ÷ 2000

VOC =
(Total monthly hours of operation for all the engine-generator sets x 1.48 lb/hr) ÷ 2000

B. Emission Factors:

Engine-generator emission factors:

NO as (NO_2)	32.88 lbs/hr
CO	1.35 lbs/hr
VOC	1.48 lbs/hr

*Upon DEQ verification of the initial performance test, the facility has the option of using a lower lb/hr NOx (as NO_2) emission rate (average of three one-hour test runs x 120%), by undergoing a permit amendment to incorporate the new lower rate.
(9 VAC 5-80-1180)

13. **Visible Emission Limit** - Visible emissions from the engine-generator sets (Ref.#s 1 – 7, A – H and J - M) shall not exceed five percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed ten percent opacity as determined by EPA Method 9 (reference 40 CFR 60 Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

During startup and shutdown times visible emissions from the engine-generator sets (Ref.#s 1 – 7, A – H and J - M) shall not exceed ten percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-1180, 9 VAC 5-50-260 and 9 VAC 5-50-80)

INITIAL COMPLIANCE DETERMINATION

14. **Testing Verification Meeting:** The permittee shall arrange to meet with the Regional Air Compliance Manager of the DEQ's NRO to discuss the stack testing in accordance with Condition 15. The meeting shall take place prior to the submittal of the final test protocol, and is required in order for the protocol to be accepted.
(9 VAC 5-80-1180)

15. **Performance Testing – Stack Test**

An initial performance test shall be conducted on ten of the nineteen engine-generator sets (Ref.#'s 1 – 7, A – H and J - M) for nitrogen oxides (as NO_2) using EPA Reference Method 7 or 7E and Carbon Monoxide (CO) using EPA Reference Method 10 to determine compliance with the emissions limits contained in Condition 10.

A. Emissions testing of each pollutant for each selected engine-generator set shall consist of three one-hour test runs under load. The average of the three runs shall be reported as the short-term emission rate for that engine-generator.

B. Testing shall be conducted with the engine operating at greater than ninety percent capacity, unless multiple load band testing is approved by DEQ during the Testing Verification Meeting required by Condition 14.

C. The tests shall be performed, reported, and demonstrate compliance within sixty days after achieving maximum power demand rate at which the facility will be operated, but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported 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 5-60-70.

D. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 20). The permittee shall submit two copies, one paper copy and one on removable electronic media, of the test protocol to the Regional Air Compliance Manager of the DEQ's NRO and one paper copy to the Regional Air Permit Manager of the DEQ's NRO at least thirty days prior to testing to ensure adequate time for DEQ approval. If the test protocol is received by the DEQ with less than thirty days for review and acceptance, the DEQ approval may not be issued in a timely manner to allow for testing to take place according to the permittee's schedule.

E. Should conditions occur which would require rescheduling the testing, the permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 20) in writing, within seven days of the scheduled test date or as soon as the rescheduling is deemed necessary.

F. Two copies, one paper copy and one on removable electronic media, of the test results shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO and one paper copy to the Regional Air Permit Manager of the DEQ's NRO (at the address indicated in Condition 20) within sixty 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)

16. **Initial Visible Emissions Evaluation** - Visual emission evaluations (VEE) in accordance with 40 CFR 60, Appendix A, Reference Method 9, shall be conducted by the permittee on the remaining nine engine-generator sets (Ref. # s 1 – 7, A – H and J - M) not tested for NOx in accordance with Condition 15.

A. The VEE shall be performed on the exhaust stack of each engine while operating at ninety percent or greater of its rated capacity.

B. Each VEE shall consist of thirty sets of twenty four consecutive observations (at fifteen second intervals) to yield a six minute average. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 20.

C. The details of the tests are to be arranged with the Regional Air Compliance Manager. During the Testing Verification Meeting required by Condition 14. The permittee shall submit a test protocol in conjunction with the initial stack test protocol as required by Condition 14 at least thirty days prior to testing to ensure adequate time for DEQ approval. If the test protocol is received by the DEQ with less than thirty days for review and acceptance, the DEQ approval may not be issued in a timely manner to allow for testing to take place according to the permittee's schedule.

D. The evaluation shall be performed within sixty days after achieving maximum production rate at which each engine-generator set will be operated, but in no event later than 180 days after start-up of each permitted engine-generator set.

E. Should conditions occur which would require rescheduling the testing, the permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 20 in writing, within seven days of the scheduled test date or as soon as the rescheduling is deemed necessary. In any case the visible emissions testing shall be rescheduled within thirty days.

F. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests.

G. Two copies, one paper copy and one on removable electronic media, of the test result shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 20 within sixty 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)

CONTINUED COMPLIANCE DETERMINATION

17. **Stack Tests** – Upon request by the DEQ, the permittee shall conduct additional performance testing of the engine-generator sets (Ref. #s 1 – 7, A – H and J - M) to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 20.
(9 VAC 5-50-30 G and 9 VAC 5-80-1200)

18. **Visible Emissions Evaluation** - Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations of the engine-generator sets (Ref. #s 1 – 7, A – H and J - M) to demonstrate compliance with the visible emission limits contained in this permit. The details of the VEE shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 20.
(9 VAC 5-80-1200 and 9 VAC 5-50-30 G)

19. **Testing/Monitoring Ports** - The facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested by the DEQ at the appropriate locations and safe sampling platforms and access shall be provided. (9 VAC 5-50-30 F and 9 VAC 5-80-1180)

RECORDS AND NOTIFICATIONS

20. All correspondence concerning this permit should be submitted to the following address -

    Regional Air Compliance Manager or Regional Air Permit Manager
    Department of Environmental Quality
    Northern Regional Office
    13901 Crown Court
    Woodbridge, VA 22193
    (9 VAC 5-50-50)

21. **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 Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 20).

    These records shall include, but are not limited to:

    A. A monthly log of the monitoring device data required by Condition 3.

    B. Log of monitoring device observations in accordance with Condition 4.

    C. Annual hours of operation for each engine-generator set calculated monthly as the sum of each consecutive twelve month period to demonstrate compliance with the requirements of Condition 6.

    D. Monthly and annual emissions calculations for NOx (as NO2), CO and VOCs from the engine-generator sets (Ref.# s 1 -7, A – H and J - M) using the calculation methods in Condition 12 to verify compliance with the ton/yr emissions limitation in Condition 11.

    E. All fuel supplier certifications per Condition 9.

    F. All VEE and emission stack test reports for each engine-generator set.

    G. A copy of the maintenance schedule and records of all scheduled and unscheduled maintenance in accordance with Conditions 27 and 30.

    H. Operator training in accordance with Condition 27.

    I. Records of the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer.

    J. Records of changes in settings that are permitted by the manufacturer of the engine-generator sets.

Compliance for the consecutive twelve-month period referenced in Subsections C. and D. above, shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven 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)

22. **Initial Notifications** - The permittee shall furnish written notification to the Regional Air Compliance Manager (or Regional Air Permit Manager if so designated) of the DEQ's NRO at the address listed in Condition 20 of:

    A. The actual date on which construction of each engine-generator set (Ref.#'s 1 -7, A – H and J - M) commenced within thirty days after such date. The notification must include the following:

        1. Name and address of the permittee:

        2. The address of the affected source;

        3. Engine information, including make, model, engine family, serial number, model year, maximum engine power and engine displacement.

        4. Emission control equipment; and

        5. Fuel used.

    B. The anticipated start-up date of each engine-generator set (Ref.#'s 1 -7, A – H and J - M) postmarked not more than sixty days nor less than thirty days prior to such date.

    C. The actual start-up date of the diesel engine-generator sets (Ref. #s 1 -7, A – H and J - M) within fifteen 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 thirty days after start-up for manufacturer's trials.

    D. The anticipated date of the performance tests of the engine-generator sets (Ref. #'s 1 -7, A – H and J - M) postmarked at least thirty days prior to such date.

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

GENERAL CONDITIONS

23. **Certification of Documents**

    A. The following documents submitted to the board shall be signed by a responsible official: (i) any emission statement, application, form, report, or compliance certification; (ii) any document required to be signed by any provision of the regulations of the board; or (iii) any other document containing emissions data or compliance information the owner wishes the board to consider in the administration of its air quality programs. A responsible official is defined as follows:

a. For a business entity, such as a corporation, association or cooperative, a responsible official is either:

   i. The president, secretary, treasurer, or a vice president of the business entity in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the business entity; or

   ii. A duly authorized representative of such business entity if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either (a the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars) or (b) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.

b. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.

c. For a municipality, state, federal, or other public agency, a responsible official is either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of the principal geographic unit of the agency.

B. Any person signing a document under subsection A above shall make the following certification:

> *"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering and evaluating the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

C. Subsection B shall be interpreted to mean that the signer must have some form of direction or supervision over the persons gathering the data and preparing the document (the preparers), although the signer need not personally nor directly supervise these activities. The signer need not be in the same line of authority as the preparers, nor do the persons gathering the form need to be employees (e.g., outside contractors can be used). It is sufficient that the signer has authority to assure that the necessary actions are taken to prepare a complete and accurate document.

D. Any person who fails to submit any relevant facts or who has submitted incorrect information in a document shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

(9 VAC 5-20-230)

24. **Permit Invalidation** – This permit to construct and operate nineteen engine-generator sets (Ref. #s 1 -7, A – H and J - M) shall become invalid, unless an extension is granted by the DEQ, if:

    A. A program of continuous construction, reconstruction, or modification is not commenced within the latest of the following:

        a. Eighteen months from the date of this permit;

        b. Nine months from the date that the last permit or other authorization was issued from any other governmental entity;

        c. Nine months from the date of the last resolution of any litigation concerning any such permits or authorization; or

    B. A program of construction, reconstruction, or modification is discontinued for a period of eighteen months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of a phased construction project.

    (9 VAC 5-80-1210)

25. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permitee:

    A. Knowingly makes material misstatements in the permit application or any amendments to it;

    B. Fails to comply with the terms or conditions of this permit;

    C. Fails to comply with any emission standards applicable to an emissions unit included in this permit;

    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 an application for this permit is submitted;

    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)

26. **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)

27. **Maintenance/Operating Procedures** - At all times, including periods of start-up, shutdown, soot blowing and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 20), which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

The permittee shall take the following measures in order to minimize the duration and frequency of excess 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)

28. **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. 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.
(9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)

29. **Notification for Facility or Control Equipment Malfunction** – In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 20) by facsimile transmission, telephone, email or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the facility or control equipment is again in operation, the owner shall notify the Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 20).
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

30. **Notification for Control Equipment Maintenance** - The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 20) in case of shut down 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 Regional Air Compliance Manager of the DEQ's NRO and local air pollution control agency, if any, at least twenty-four hours prior to the shutdown. Such prior notice shall include, but is not limited to, the following information:

    A. Identification of the air pollution control equipment to be taken out of service, as well as its location and its 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 pollutants likely to occur during the shut-down period.

    D. Measures that will be taken to minimize the length of the shut-down or to negate the effect of the outage.

    (9 VAC 5-20-180 B)

31. **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 return 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)

32. **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 Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 20) of the change of ownership within thirty days of the transfer.
(9 VAC 5-80-1240 B)

33. **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