



NRO-207-14

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

Molly Joseph Ward
Secretary of Natural Resources

13901 Crown Court, Woodbridge, Virginia 22193-1453
(703) 583-3800 Fax (703) 583-3821
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David K. Paylor
Director

Thomas A. Faha
Regional Director

November 17, 2014

Robert Gurdikian, PG, CHMM
Senior Environmental Project Manager
Level 3 Communications
1025 Eldorado Blvd, 43C-325
Broomfield, CO 80021-8869

Location: Fairfax County
Registration No.: 73823
Facility ID No. 51-059-01040

Dear Mr. Gurdikian:

Attached is a permit document consisting of two parts: Part I, a permit to construct and operate three (3) diesel engine generator sets (Ref. Nos., 524A, 524B & 524C) at 524 Van Buren Street, Herndon, Virginia 20170 in accordance with the provisions of the Virginia State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution; and Part II, a permit to operate one (1) diesel engine generator set (Ref. No. 1) at 520 Van Buren Street, Herndon, Virginia 20170 in accordance with the provisions of the Virginia State Air Pollution Control Board's Regulations for the Control and Abatement of Air Pollution. The permit in Part II consists of the terms and conditions of the November 2, 2010, permit to operate. The attached permit document supersedes your permit document dated November 2, 2010.

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 October 9, 2014.

The two parts of this permit document contain legally enforceable conditions. Failure to comply may result in a Notice of Violation and possible civil charges. Please read all permit conditions carefully.

The permit approval to construct and operate (Part I) and the permit approval to operate (Part II) shall not relieve Level 3 Communications of the responsibility to comply with all other local, state, and federal permit regulations.

Please note that the four (4) diesel engine generator sets may be affected facilities under 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source

Categories (MACT) Subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines). As the owner/operator of the potentially affected units, DEQ advises you to review the MACT to ensure compliance with applicable emission standards, operational limitations, and the monitoring, notification, reporting and recordkeeping requirements. Applicable notifications shall be sent to EPA, Region III. The MACT may be found at www.ecfr.gov.

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. 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 30 days from the date you actually received this permit document 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 document 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 me, by phone at (703) 583-3928 or e-mail at james.lafratta@deq.virginia.gov.

Sincerely,



James B. LaFratta
Regional Air Permit Manager

TAF/JBL /73823 mNSR&SOP (11-17-14)

Attachment: Permit document (contains a permit to construct and operate and a permit to operate)

cc: Manager/Inspector, NRO Air Compliance



NRO-207-14

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE AND STATIONARY SOURCE PERMIT TO OPERATE

This permit document supersedes your permit dated November 2, 2010.

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

Level 3 Communications
1025 Eldorado Blvd, 43C-325
Broomfield, CO 80021-8869
Registration No.: 73823

is authorized to construct and operate

diesel engine generator sets

located at

524 Van Buren Street
Herndon, VA 20170

and is authorized to operate

a diesel engine generator set

located at

520 Van Buren Street
Herndon, VA 20170

in accordance with the Conditions of this permit.

Approved on

November 17, 2014.

Thomas A. Faha
Regional Director

Permit document consists of 19 pages.
Permit Conditions 1 to 21 in Part I; 1 to 23 in Part II.

Part I

STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE
(Per 9 VAC 5 Chapter 80, Part II, Article 6)

INTRODUCTION

This permit approval is based on the permit application dated September 25, 2014, including supplemental information dated October 1, 2014 and October 9, 2014. 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.

PROCESS REQUIREMENTS

1. **Equipment List** – Equipment at this facility consists of:

Equipment to be Constructed*:			
Reference No.	Equipment Description	Rated Capacity	Delegated Federal Requirements
GEN524A	Katolight D2000FRX4 Diesel Engine-Generator Set (Date of Manufacture 5/12/99)	2935 bhp/2000 ekW	None
GEN524B	Katolight D1600FRX4 Diesel Engine-Generator Set (Date of Manufacture 6/15/01)	2550 bhp/1600 ekW	None
GEN524C	Katolight D2000FRX4 Diesel Engine-Generator Set (Date of Manufacture 4/26/01)	2935 bhp/2000 ekW	None

*This is a list of equipment being authorized by this permit to be constructed, but the DEQ is aware that some or all of this equipment has already been constructed.

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.
(9 VAC 5-80-1180 D 3)

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

- a. Nitrogen oxides (NO_x) emissions from each diesel engine-generator set shall be controlled by electronic fuel injection and turbocharged engine with after cooler. The permittee shall maintain documentation that demonstrates the control devices have been installed on the diesel engine-generator sets.
- b. Carbon monoxide (CO), particulate matter (PM₁₀/PM_{2.5}), volatile organic compounds (VOCs), and visible emissions from the diesel engine-generator 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 engines.

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

3. **Monitoring** – Each diesel engine generator set shall be equipped with a non-resettable hour metering device to continuously monitor the operating hours for each unit.

The non-resettable hour meter shall be observed by the owner with a frequency of not less than once each day the diesel engine-generator set is operated. The owner shall keep a log of these observations.

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.

Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the diesel engine-generator sets are operating.
(9 VAC 5-80-1180 D)

4. **Emergency Power Generation** – The diesel engine-generator sets 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, testing, and operational training.

(9 VAC 5-80-1180)

5. **Operating Hours** – Each diesel engine generator set shall not operate more than 500 hours 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)
6. **Fuel** – The approved fuel for the diesel engine-generator sets is diesel fuel that meets the ASTM D975 specification for Grade No. 1-D S15 or Grade No. 2-D S15 (commonly referred to as Ultra Low Sulfur Diesel or ULSD), with a maximum sulfur content per shipment of 15 ppm.

A change in the approved fuel may require a permit to modify and operate.
(9 VAC 5-80-1180)

7. **Fuel Certification** – The permittee shall obtain a certification from the fuel supplier with each shipment of distillate and diesel fuel oil. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier;
 - b. The date on which the diesel fuel oil was received;
 - c. The quantity of diesel fuel oil delivered in the shipment;
 - d. A statement that the diesel oil complies with the fuel specification requirements of Condition 6;
 - e. The sulfur content of the diesel oil; or
 - f. Alternately, the permittee shall obtain approval from the Regional Air Compliance Manager of the DEQ's NRO if other documentation will be used to certify the diesel fuel oil type (including sulfur content).

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 6. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-1180)

8. **Emission Limits** – Emissions from the operation of the diesel engine-generator sets shall not exceed the limits specified below:

Pollutant	GEN524A	GEN524B	GEN524C
NO _x (as NO ₂)	46.7 lb/hr 11.7 tons/yr	47.8 lb/hr 12.0 tons/yr	46.7 lb/hr 11.7 tons/yr
CO	6.0 lb/hr 1.5 tons/yr	4.0 lb/hr 1.0 tons/yr	6.0 lb/hr 1.5 tons/yr
VOCs	2.8 lb/hr 0.7 tons/yr	3.2 lb/hr 0.8 tons/yr	2.8 lb/hr 0.7 tons/yr
PM ₁₀	2.1 lb/hr 0.5 tons/yr	1.8 lb/hr 0.4 tons/yr	2.1 lb/hr 0.5 tons/yr
PM _{2.5}	2.1 lb/hr 0.5 tons/yr	1.8 lb/hr 0.4 tons/yr	2.1 lb/hr 0.5 tons/yr

These emissions are derived from the manufacturer's "not to exceed" data at maximum design capacity of the diesel engine-generator sets and operating limits to determine the overall emission contribution. Compliance with these pollutant limits shall be based on the proper operation and maintenance of the diesel engines or by testing, if required. Compliance with the annual emission limits may be determined as stated in Condition 5. (9 VAC 5-80-1180 and 9 VAC 5-50-260)

9. **Visible Emission Limit** – Visible emissions from each diesel engine-generator set shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). During startup and shutdown, visible emissions shall not exceed 10 percent opacity, except for one six-minute interval not to exceed 20 percent opacity.
(9 VAC 5-80-1180)

CONTINUING COMPLIANCE DETERMINATION

10. **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)
11. **Stack Tests** – Upon request by the DEQ, the permittee shall conduct performance tests and/or visible emission evaluations of the permitted equipment to demonstrate compliance with the emission limits contained in this permit or the Board's Regulations. The details of the tests shall be arranged with the DEQ's Northern Regional Office.
(9 VAC 5-80-1200 and 9 VAC 5-50-30 G)

RECORDS, REPORTS AND NOTIFICATIONS

- 12. Permit Correspondence** – Unless otherwise indicated in this permit, all correspondence concerning this permit should be submitted to the following address:

Regional Air Compliance Manager
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

(9 VAC 5-50-50)

- 13. 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 DEQ's Northern Regional Office.

These records shall include, but are not limited to:

- a. Log of monitoring device observations for each diesel engine-generator set in accordance with Condition 3.
- b. A log of hours of operation for each diesel engine-generator set, dates, and reason the unit was operated in accordance with Condition 4.
- c. Annual hours of operation of each diesel engine-generator set, 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.
- d. All fuel supplier certifications.
- e. For each diesel engine-generator set, engine information including make, model, serial number, model year, maximum engine power (bhp), and engine displacement.
- f. A copy of the maintenance schedule and records of scheduled and unscheduled maintenance in accordance with Condition 16.
- g. Operator training in accordance with Condition 16.
- h. Records of changes in engine settings that are permitted by the manufacturer of each diesel engine-generator set.

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)

GENERAL CONDITIONS

14. 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)

15. 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)

16. 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 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)

- 17. 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)

- 18. Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Regional Air Compliance Manager of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by electronic mail, 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 Regional Air Compliance Manager.

(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

- 19. 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)

20. **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 Regional Air Compliance Manager of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)
21. **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)

Part II

STATIONARY SOURCE PERMIT TO OPERATE
(Per 9 VAC 5 Chapter 80, Part II, Article 5)

INTRODUCTION

This permit approval is based on the permit application dated May 3, 2010 and supplemental information dated July 8, 2010. 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 5-80-810 (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 to be Operated:			
Reference No.	Equipment Description	Rated Capacity	Year of Manufacture
1	One (1) Kato Diesel Powered Engine-Generator Set, Model No. D1600FRX4	1600 kW _e	1998

Equipment Exempt from Air Permitting:			
Reference No.	Equipment Description	Rated Capacity	Exemption Citation
2	One (1) Above Ground Storage Tank For Diesel Fuel Oil	4000 Gallon	9 VAC5-80-1105

(9 VAC 5-80-850)

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

- a. Carbon monoxide (CO), nitrogen oxides (as NO₂), and volatile organic compound (VOC) emissions from the engine-generator set shall be controlled by proper combustion practices.
- b. Proper combustion for and visible emissions from the engine-generator set shall be controlled by the use of proper 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 engine.

(9 VAC 5-80-850)

3. Monitoring – The engine-generator set shall be equipped with a hour meter which measures the duration of time the engine is operated. See Condition 14 a. for recordkeeping requirements associated with this condition.

(9 VAC 5-80-890)

OPERATING LIMITATIONS

4. Operating Scenarios:

a. Emergency / Critical Power Generation:

- i. **Emergency:** The engine-generator set 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 set may be operated in accordance with Critical Power Generation as defined below.
- ii. **ISO-Declared Emergency:** The engine-generator set 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 engine-generator set each calendar year.
- iii. **Critical Power Generation:** The engine-generator set 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 4.c below, an engine-generator set 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 an engine-generator set is operating at a load level necessary to sustain urea injection. Prior to construction of an SCR unit, when changing from Emergency Power Generation or Critical Power Generation to Alternate Power Generation, the permittee shall submit appropriate documentation to the Department of Environmental Quality (DEQ), and receive DEQ approval for the change in the method of operation of the engine-generator set to ensure that the facility remains in compliance with the appropriate permitting requirements.
- c. The engine-generator set 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 4.a. through 4.c above shall not exceed the limits stated in Condition 9.

(9 VAC 5-80-850)

- 5. **Operating Hours** – Total operating hours for the engine-generator set (Ref. No. 1) shall not exceed 500 hours per year, calculated monthly as the sum of each consecutive twelve month period. Refer to Condition 14 for record keeping requirements to demonstrate compliance with this condition.
(9 VAC 5-80-850)
- 6. **Fuel Specification-** The approved fuel for the engine-generator set shall be diesel fuel oil that meets the specifications below:

DIESEL FUEL OIL:

- a. Conforms to American Society for Testing and Materials (ASTM) specification D975, for grade 2-D or grade 2-D S500, or,
- b. Has a maximum sulfur content not to exceed 0.05% by weight (500 ppm), and either a minimum cetane number of forty or maximum aromatic content of thirty-five volume percent.

Exceedance of these specifications may be considered credible evidence of an exceedance of an emission limit. A change in the fuel may require a permit to modify and operate.

(9 VAC 5-80-850)

7. **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;
 - b. The date on which the diesel fuel oil was received;
 - 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 6 - Fuel Specification; or
 - e. Alternatively, the permittee shall obtain approval from the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO) (at the address listed in Condition 13), 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 the DEQ, may be used to determine compliance with the fuel specifications stipulated in Condition 6.
(9 VAC 5-80-850)

EMISSION LIMITS

8. **Emission Limits: Engine-Generator Set** - Hourly emissions from the operation of the engine-generator set shall not exceed the limits specified below:

Nitrogen Oxides (as NO ₂)	52.3 lbs/hr
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Carbon Monoxide (CO)	13.9 lbs/hr
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(9 VAC 5-80-850)

9. **Annual Emission Limits** - Total combined annual emissions from operation of the engine-generator set shall not exceed the limits specified below:

Nitrogen Oxides (as NO ₂)	13.1 tons/yr
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Carbon Monoxide (CO)	3.5 tons/yr
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These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of an exceedance of emission limits. Compliance with these emission limits shall be determined as stated in Condition number 5, or by other means as approved by DEQ.
(9 VAC 5-80-850)

10. **Visible Emission Limit** - Visible emissions from the engine-generator set shall not exceed twenty percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent opacity, as determined by the EPA Method 9

(reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-850 and 9 VAC 5-40-80)

CONTINUING COMPLIANCE DETERMINATION

11. **Stack Tests** - Upon request by the DEQ, the permittee shall conduct performance testing of the engine-generator set 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 13.
(9 VAC 5-80-880 and 9 VAC 5-40-30 G)
12. **Visible Emissions Evaluation** - Upon request by the DEQ, the permittee shall conduct visible emission evaluations of the engine-generator set 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 13.
(9 VAC 5-80-880 and 9 VAC 5-40-30 G)

RECORDS AND NOTIFICATIONS

13. All correspondence concerning this permit should be submitted to the following address –

Regional Air Compliance Manager
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

(9 VAC 5-40-50)

14. **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 13. These records shall include, but are not limited to:
 - a. A monthly log of the hours of operation, date, and reason operated (as defined in Condition 4) for the engine-generator set, in accordance with Condition 3.
 - b. Annual hours of operation for the engine-generator set, calculated monthly as the sum of each consecutive twelve month period, to demonstrate compliance with the requirements of Condition 5. Compliance for the consecutive twelve-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 eleven months
 - c. All fuel supplier certifications per Condition 7.

- d. A copy of the maintenance schedule and records of scheduled and unscheduled maintenance, in accordance with Condition 18.
- e. A record of operator training, in accordance with Condition 18.

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 5-80-900 and 9 VAC 5-40-50)

GENERAL CONDITIONS

15. 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:
 - i. For a business entity, such as a corporation, association or cooperative, a responsible official is either:
 - A. 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
 - B. 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 (i) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars) or (ii) the authority to sign documents has been assigned or delegated to such representative in accordance with procedures of the business entity.
 - ii. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.
 - iii. 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 data and preparing 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)

16. Permit Suspension/Revocation - The Board may suspend or revoke any permit if the permittee:

- 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
- e. 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.

(9 VAC 5-80-1010)

17. 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)

18. **Maintenance/Operating Procedures** - At all times, including periods of startup, shutdown, and malfunction, owners 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 13), 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, with respect to the engine-generator set:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- c. 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.
- d. Maintain an inventory of spare parts.

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 5-40-20 E)

19. **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 the malfunction), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J)

- 20. 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 13) 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 13.
(9 VAC 5-20-180 C)
- 21. 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)
- 22. 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 13) of the change of ownership within thirty days of the transfer.
(9 VAC 5-80-940)
- 23. Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-850)