NRO-265-09

COMMONWEALTH of VIRGINIA

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

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

August 28, 2009

Mr. Al Nielsen
Vice President, Corporate Services
AOL, LLC
7777 Infantry Ridge Road
Manassas, Virginia 20109

Registration No.:72368

Dear Mr. Nielsen:

Attached is a permit to modify and operate a computer network operations center located at 7777 Infantry Ridge Road in Manassas, 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 supersedes your permit dated December 29, 2003, as amended February 27, 2004.This permit contains legally enforceable conditions. Failure to comply may result in appropriate enforcement. Please read all permit conditions carefully.

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 5, 2009.

This permit approval to modify and operate shall not relieve AOL, LLC of the responsibility to comply with all other local, state, and federal permit regulations

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code (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 also provides that you may request direct consideration of the decision by the Board if the Director of the DEQ

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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 703.583.3800.

Sincerely,

Terry H. Darton
Regional Air Permit Manager

TAF/THD/EHA/09-265-mnsr

Attachments: Permit

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

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L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE

This permit supersedes your permit dated December 29, 2003, as amended February 27, 2004.

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

AOL, LLC
7777 Infantry Ridge Road
Manassas, Virginia 20109
Registration No.: 72368

is authorized to modify and operate

a computer network operations facility

located at

7777 Infantry Ridge Road
Manassas, Virginia 20109

in accordance with the Conditions of this permit.

Approved on: August 28, 2009

Thomas A. Faha,
Regional Director

Permit consists of 19 pages.
Permit Conditions 1 to 32.

INTRODUCTION

This permit approval is based on permit applications dated May 4, 2009, October 4, 2003 and March 26, 1999 and the Consent Order dated May 29, 2009 and supplemental information dated June 5, 2009, August 1, 2003, September 12, 2003; November 10, 2003 (e-mail); November 24, 2003 (e-mail); and April 16, 2001. Additional correspondence regarding this facility includes correspondence dated April 2, 1999; April 12, 1999; April 16, 1999; June 21, 1999 and July 12, 1999. 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 consists of the following:

Equipment to be modified and operated:				
Reference No.	**Equipment Description**	**Rated Capacity**	**Add-On Control Technology**	**Federal Requirements**
3	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	N/A
4	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	N/A

7	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	N/A
8	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	N/A

Equipment permitted prior to the date of this permit:

Reference No.	Equipment Description	Rated Capacity	Add-On Control Technology	Original Permit Date
1	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	07/15/99
2	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	07/15/99
5	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	07/15/99
6	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	07/15/99
9	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	07/15/99
10	One (1) CAT 3516B engine-generator set	2000 ekW (2876 bhp)	Steuler CERNOx 3516B/2000 -14092 open-loop SCR system	07/15/99
RPU1–RPU3	Three (3) CAT 3516B rotary power engine-generator sets.	1,333 ekW each (1940 bhp each)	N/A	07/15/99

Equipment Exempt from Air Permitting:

Reference No.	Equipment Description	Rated Capacity	Exemption Citation	Exemption Date
BLR1-BLR2	Two (2) Teledyne-Larrs, Model # PH1670-IN-09-K1-AC-CM natural gas fired boilers	1.67 MMBtu/hr each	9 VAC 5-80-1320.B	07/15/99
UST1-UST4	Four (4) diesel fuel oil underground storage tanks	40,000 gallons each	40 CFR 60.110b(b)	07/15/99

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 (Ref. No. 1-10 and RPU1-RPU3) shall be controlled by the following;

   a. Nitrogen Oxides (as NO_2) emissions from the engine-generator sets (Ref. No. RPU1-RPU3) shall be controlled by low NO_X emission package.

   b. Nitrogen Oxides (as NO_2) emissions from the engine-generator sets (Ref. No. 1-10) shall be controlled by Selective Catalytic Reduction (SCR) control devices installed on each engine-generator set. Each SCR system shall be equipped with temperature probes to monitor the catalyst bed exhaust temperature at all times when an engine-generator set is operating. The SCR urea enabling temperature shall be 570°F when using diesel fuel with a sulfur content less than or equal to 0.05% (500 parts per million). At such time as the sulfur content of the fuel used by a diesel engine falls below 0.005%, the SCR urea enabling temperature shall be adjusted to 540°F. At such time as the sulfur content of the fuel used by a diesel engine falls below 0.0015% the SCR urea enabling temperature shall be adjusted to 500°F or such higher temperature as testing or other reliable information (as approved by DEQ) demonstrates is necessary to achieve at least ninety percent control of NOx emissions. Engine exhaust gas shall be treated with urea solution when the engine is operating at or above a twenty-five percent load and the appropriate fuel-based temperature as identified above, has been achieved, except for periods of start-up, shutdown, or malfunction. In the event that catalyst bed exhaust temperature exceeds 950°F, urea injection shall be discontinued and any operations above that level will be considered a malfunction. The SCR system control device shall be provided with adequate access for inspection.

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

3. **Monitoring Devices–**

   a. Each engine-generator set (Ref. No 1-10 and RPU1- RPU3) shall be equipped with a non-resettable hour meter which measures the duration of time that each engine is operated.

   b. The facility shall be equipped with devices to monitor and record each engine-generator kilowatt output at a minimum frequency of once every fifteen minutes.

   c. The SCR system on each engine-generator set (Ref. No. 1-10) shall be equipped with a device to continuously measure and record the SCR catalyst bed exhaust

temperature and urea injection rate. The information shall be recorded at a minimum frequency of once every fifteen minutes, and correlated to run date, engine-generator kilowatt output, and engine operating hours.

d. The facility shall be equipped with a Veeder-Root System to measure and record total fuel usage of the engine-generator sets and RPUs. In the event of a Veeder-Root system malfunction or shut-down, the engine-generator sets shall be equipped with a device to measure and record fuel consumption of each engine-generator set.

e. 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.

f. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the engines are operating.

Refer to Condition 20 for recordkeeping requirements associated with this condition.

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

4. **Monitoring Device Observations** - To ensure proper performance, the monitoring devices used to continuously measure catalyst bed exhaust temperature, urea injection rate for each SCR systems, and the fuel flow meter shall be observed by the permittee before and after engine operations. See Condition 20 for recordkeeping associated with this condition.
(9 VAC 5-80-1180D)

5. **SCR Performance Monitoring** -

a. Within the first twelve months subsequent to commissioning of the new SCR units, concurrent with the annual maintenance, and annually thereafter, the permittee shall perform a portable analyzer test to determine the nitrogen oxide (as NO_2) emission concentration for each engine-generator set equipped with SCR (Ref. No. 1-10). The annual analyzer test shall be performed with the engines operating at twenty-five to fifty percent load. Results of the testing shall be maintained on-site in accordance with Condition 20.

b. Immediately prior to conducting the portable analyzer test, the portable analyzer shall be calibrated using EPA Protocol 1 gases.

i. Calibrations shall be accurate to within five parts per million (ppm) of the sample gas.

ii. The permittee shall maintain on-site records of annual calibration testing, calibration gas certifications, and any corrective action that may have been taken.

c. The details of the performance monitoring are to be arranged with the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO) at the address listed in Condition 19. The permittee shall submit one copy of the performance monitoring protocol to the Regional Air Compliance Manager of the DEQ's NRO and one copy to the Regional Air Permit Manger of the DEQ's NRO and receive approval from DEQ prior to the initial monitoring. The permittee shall maintain a copy of the approved monitoring protocol and results of all assessments on-site in accordance with Condition 20.

(9 VAC 5-80-1180)

OPERATING LIMITATIONS

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

a. Emergency / Critical Power Generation:

i. Emergency: The engine-generator sets 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 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.

iii. Critical Power Generation: The engine-generator sets 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 6.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 the engine-generator set is operating at a load level necessary to sustain urea injection. When initially 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 an engine-generator set 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 6.a. through 6.c above, shall not exceed the limits stated in Condition 12.
(9 VAC 5-80-1180 D and 9 VAC 5-50-260)

7. **Operation of the engine-generator Set** - The permittee must operate and maintain each engine-generator set and control device 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 do not degrade air emissions.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

8. **Fuel Specification**- The diesel fuel oil delivered subsequent to the issuance of this permit shall be diesel fuel oil that meets the specifications below:

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 forty or maximum aromatic content of thirty-five volume percent.

Exceedance of these specifications may be considered credible evidence of the 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 the Condition 8 - 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 in Condition 19) 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 8. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
   (9 VAC 5-80-1180)

10. **Fuel Sampling and Analysis –**

    a. The permittee shall sample and analyze the fuel from each storage tank, (Ref. No. UST 1 – UST 4) that supplies fuel oil to engine-generator sets equipped with SCR, (Ref. No. 1-10). Fuel sampling and analysis shall be performed every calendar quarter on each tank that has taken delivery of fuel during that quarter. Fuel sampling shall be conducted in accordance with ASTM Method 5453, or other DEQ approved method, to determine fuel sulfur content by weight.

    b. The results of the fuel analysis shall be reported to the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 19) within thirty calendar days after the end of each calendar quarter. Data shall include: fuel sulfur content by weight (weight % or ppm), company and individual collecting the sample, identification of sampling method used, sample volume, number of samples, date sample collected, location of fuel when sample taken, date of analysis, company and individual conducting the analysis.

    c. At such time as the sulfur content of a tank is determined to be at or below 0.0015% (15 ppm Sulfur by weight), the permittee may discontinue fuel sampling of that tank.

    (9 VAC 5-80-1180)

EMISSION LIMITS

11. **Emission Limits: Engine-generator set** - Emissions from the operation of each engine-generator sets (Ref. No. 1-10 and RPU1-RPU3) shall not exceed the limits specified below:

    a. Engine-generator sets 1-10 (Units with SCR)

        i. NO_x 0.0343 lbs/gal controlled

        OR

        ii. NO_x 0.343 lb/gal uncontrolled

    c. Rotary power unit RPU1, RPU2, RPU3 (units without SCR):

        i. NO_x 0.343 lbs/gal

    The NOx emissions are derived from manufacturer's data. Compliance with the NOx emission limit may be based on testing, if required by DEQ. When required, engine-generator set air emissions testing shall be conducted between twenty-five and fifty percent load.
    (9 VAC 5-80-1180 and 9 VAC 5-50-260)

12. **Plant-wide Emission Limits** - Total emissions from the operation of all engine-generator sets (Ref. No. 1-10 and RPU 1-RPU3) and the boilers (Ref. No. BLR1-BLR2) shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	24.4 tons/yr
Volatile Organic Compounds	6.7 tons/yr
PM-10	4.8 tons/yr
Carbon Monoxide	17.5 tons/yr

    The emissions are derived from the estimated overall emission contribution from emission factors supplied by the permittee. Compliance with these emission limits shall be determined by Conditions 8, 9, 11, and 13.
    (9 VAC 5-50-260 and 9 VAC 5-80-1180)

13. **Annual Emissions Calculations** – The total annual emissions from the engine-generator sets, RPUs, and boilers shall be calculated monthly as the sum of each consecutive twelve-month period.

Emissions Calculations: Annual emissions for each pollutant shall be calculated using the following equations:

NO_x Emissions (tons/yr) = [(Gallons of fuel oil burned by the RPUs/yr) x (1.49×10^{-4} ton NO_x/gal)] + [(Gallons of fuel oil burned by 2,000 kW generators without SCR systems operating/yr) x (1.49×10^{-4} ton NO_x/gal)] + [(Gallons of fuel oil burned by 2,000 kW generators with SCR systems operating/yr) x (1.49×10^{-5} ton NO_x/gal)] + [(Cubic feet, ft^3, of natural gas used by the boilers / yr) x (5.0×10^{-8} ton NO_x/ft^3)]

CO Emissions (tons/yr) = [(Gallons of fuel oil burned by the engine-generator sets and RPUs /yr) x (1.92×10^{-5} ton CO/gal)] + [(Cubic feet, ft^3, of natural gas used by the boilers / yr) x (4.20×10^{-8} ton CO /ft^3)]

VOC Emissions (tons/yr) = [(Gallons of fuel oil burned by the engine-generator sets and RPUs /yr) x (7.5×10^{-6} ton VOC/gal)] + [(Cubic feet, ft^3, of natural gas used by the boilers / yr) x (2.75×10^{-9} ton VOC /ft^3)]

PM_{10} Emissions (tons/yr) = [(Gallons of fuel oil burned by the engine-generator sets and RPU's /yr) x (5.5×10^{-6} ton PM_{10}/gal)] + [(Cubic feet, ft^3, of natural gas used by the boilers / yr) x (3.80×10^{-9} ton PM_{10} /ft^3)]

(9 VAC 5-80-1180)

14. **Visible Emission Limit** - Visible emissions from the engine-generator sets and boilers 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. (VAC 5-50-80)

CONTINUING COMPLIANCE DETERMINATION

15. **Continuing Compliance Demonstration: SCR** – The permittee shall contact the Regional Air Compliance Manager and the Regional Air Permit Manager of the DEQ's NRO (at the addressed listed in Condition 19) within thirty days following each change or regeneration of a catalyst in any SCR unit, to discuss the supplemental compliance demonstration.
(9 VAC 5-50-30 and 9 VAC 5-80-1200)

16. **Stack Tests** - Upon request of the DEQ, the permittee shall conduct additional performance testing of the engine-generator sets (Ref. No. 1-10 and RPU1-RPU3) to demonstrate compliance with the emission limits and control efficiency requirements 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 19.
(9 VAC 5-80-1200 and 9 VAC 5-50-30 G)

17. **Visible Emissions Evaluation** - Upon request of the DEQ, the permittee shall conduct additional visible emission evaluations of the engine-generator sets (Ref. No. 1-10 and RPU1-RPU3) 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 19.
(9 VAC 5-80-1200 and 9 VAC 5-50-30 G)

18. **Testing/Monitoring Ports** - The facility shall be modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. 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

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

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

    (9 VAC 5-50-50)

20. **On Site Records** - The permittee shall maintain records of emission data, calculations, 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 19.

These records shall include, but are not limited to:

a. The number of gallons of fuel oil burned per year by engine generator sets and the RPUs (as required in Condition 3d), calculated monthly as the sum of the previous consecutive twelve months.

b. The amount of natural gas burned by boilers (Ref. No. BLR1 and BLR2) per year in cubic feet, calculated monthly as the sum of each consecutive twelve month period.

c. Annual emissions from the facility, using the calculation methods in Condition 13 (or other methods preapproved by the Regional Air Compliance Manager of the DEQ's NRO), to verify compliance with the ton/yr emissions limitations in Condition 12. Emissions shall be calculated monthly as the sum of the previous consecutive twelve months.

d. A log of data obtained by the monitoring devices for each engine generator set (Ref. No. EG1-EG10 and RPU1-RPU3), per Condition 3, including:

    i. Hours of operation of each engine-generator associated with each of the following:

        1. Generator load with and without SCR (if applicable),

        2. Catalyst bed exhaust temperature (if applicable),

        3. Urea injection rates (if applicable),

        4. Fuel consumption rates,

        5. Reason operated (as defined in Condition 6), and

        6. Date, time of operation, and total engine run time.

e. A log of monitoring device observations in accordance with Condition 4.

f. A NOx Urea Table (Load Map) for each engine-generator set equipped with SCR (Ref. No. 1-10), to verify that the SCR is operating as specified by the manufacturer. Each NOx Urea Table (Load Map) shall include the engine load, temperature after the catalyst, NOx concentration before and after the catalyst, urea consumption rate, and the catalyst efficiency.

g. Fuel sampling analyses, per Condition 10, indicating the sulfur content of the diesel fuel oil to verify the urea enabling temperature in accordance with Condition 2.b.

h. A record of the date that each engine-generator set equipped with SCR (Ref. No. 1-10) adjusted the urea enabling temperature to 540°F and 500°F (or such higher temperature as specified in Condition 2.b).

i. All fuel supplier certifications in accordance with Condition 9.

j. All SCR performance monitoring results and approved the approved protocol in accordance with Condition 5.c.

k. A log of scheduled and unscheduled maintenance, and operator training records for both the engine-generator sets and SCR systems, as required in Condition 26.

l. All VEE, emission stack test reports, portable analyzer calibrations, and annual SCR performance monitoring results for each engine-generator set.

m. 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 the occurrence.

n. The manufacturer's written operating and maintenance instructions for the SCR systems.

Compliance for the consecutive twelve-month period required in subsections a., b. and c. 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)

21. **Emission Statement** - The permittee shall submit a completed emission statement to the Regional Air Compliance Manager of the DEQ's NRO (at the address referenced in Condition 19) by April 15th of each year for the emissions discharged during the previous calendar year. The emission statement shall be prepared and submitted in the appropriate format.
(9 VAC 5-20-160 B)

GENERAL CONDITIONS

22. **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)

23. **Permit Invalidation** - The portions of this permit to modify that pertain to construction of the SCR devices on engine-generator sets (Ref. No. 3, 4, 7, and 8) shall become invalid, unless an extension is granted by the DEQ, if:

    a. A program of continuous modification is not commenced within the latest of the following:

        i. Eighteen months from the date of this permit;

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

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

    b. A program of 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)

24. **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 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)

25. **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)

26. **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 19), 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 air pollution control equipment, monitoring devices, 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)

27. **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.
(9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)

28. **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 19) 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 19.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

29. **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 19) 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 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 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)

30. **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)

31. **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 19) of the change of ownership within thirty days of the transfer.
    (9 VAC 5-80-1240 B)

32. **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)