NRO-420-07

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN VIRGINIA REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3801
www.deq.virginia.gov

L. Preston Bryant, Jr.
Secretary of Natural Resources

David K. Paylor
Director

~~Jeffery A. Steers~~
Regional Director

December 19, 2007

Mr. Jerry C. Corbin
Vice President
VISA U.S.A., Inc.
1764 Old Meadow Lane
McLean, VA 22102

Registration No.: 73643

Dear Mr. Corbin:

Attached is a permit to construct and operate a critical power data center facility with twenty-two diesel fired engine driven generator sets 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. Failure to comply may result in a Notice of Violation and/or civil charges. 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 December 17, 2007.

This permit approval to construct and operate shall not relieve VISA U.S.A., Inc. of the responsibility to comply with all other local, state, and federal permit regulations. Engine-generator sets (**EG-1 thru EG-22**) are subject to the requirements of 40 CFR 60 Subpart IIII which can be found at http://ecfr.gpoaccess.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 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 Martha Lee at (703) 583-3819.

Sincerely,

Terry H. Darton
Regional Air Permit Manager

TAF/THD/MCL/07-420-mnsr

Attachments: Permit
Source Testing Report Format

cc: Director, OAPP (electronic file submission)
Manager/Inspector, Air Compliance
Chief, Air Enforcement Branch, EPA (3AP12)

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Secretary of Natural Resources

David K. Paylor
Director

Jeffery A. Steers
Regional Director

STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE
This permit includes designated equipment subject to New Source Performance Standards (NSPS)

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

VISA U.S.A., Inc.
1764 Old Meadow Lane
McLean, VA 22102
Registration No.: 73643

is authorized to construct and operate

a critical power data center facility

located at

45005 Russell Branch Parkway
Ashburn, Virginia 20147

in accordance with the Conditions of this permit.

Approved on December 19, 2007

Thomas A. Faha
Regional Director

Permit consists of 18 pages.
Permit Conditions 1 to 32.

INTRODUCTION

This permit approval is based on the permit application dated July 26, 2007, and supplemental information dated August 27, 2007, September 10, 2007, October 9, 2007, November 26, 2007, and December 17, 2007. 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 Constructed				
Reference No.	**Equipment Description**	**Rated Capacity**	**Add-On Control Technology**	**Federal Requirements**
EG-1 (Group 1)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-2 (Group 1)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII

Equipment to be Constructed (Cont.)				
Reference No.	**Equipment Description**	**Rated Capacity**	**Add-On Control Technology**	**Federal Requirements**
EG-3 (Group 1)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-4 (Group 2)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-5 (Group 2)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-6 (Group 2)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-7 (Group 3)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-8 (Group 3)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-9 (Group 3)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-10 (Group 4)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-11 (Group 4)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-12 (Group 5)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-13 (Group 5)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII

Equipment to be Constructed (Cont.)				
Reference No.	**Equipment Description**	**Rated Capacity**	**Add-On Control Technology**	**Federal Requirements**
EG-14 (Group 5)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-15 (Group 6)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-16 (Group 6)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-17 (Group 6)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-18 (Group 7)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-19 (Group 7)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-20 (Group 7)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-21 (Group 8)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII
EG-22 (Group 8)	One engine-generator, Detroit Diesel Model 16V4000G83	3848 hp, generating 2500 ekW	N/A	40CFR60, Subpart IIII

Equipment Exempt from Permitting				
Reference No.	**Equipment Description**	**Rated Capacity**	**Exemption Citation**	**Exemption Date**
EG-1AT through EG-22AT	Twenty-two (22) above ground storage tanks (AST) for diesel fuel oil	100 gallons each	9 VAC 5-80-1320B.8	12/21/07
UST-1 through UST-6	Six (6) underground storage tanks (UST) for diesel fuel oil	50,000 gallons each	9 VAC 5-80-1320B.8	12/21/07

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 form the basis for conditions in the permit.
(9VAC 80-1180 D 3)

2. **Emission Controls** – Emissions from the engine-generator sets shall be controlled by the following;
   a. Nitrogen Oxides (as NO_2) emissions from all of the diesel engines shall be controlled by the manufacturer's low NOx emission package.
   b. Sulfur Dioxide (SO_2) emissions from the diesel engines shall be controlled by the use of low sulfur diesel fuel with a sulfur content not to exceed 500 ppm (0.05% by weight).
   c. Carbon Monoxide (CO) and volatile organic compound (VOC) emissions from the diesel engines shall be controlled by good combustion practices.
   d. Visible emissions from the diesel engines shall be controlled by the use of clean fuel and good operating practices.

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

3. **Monitoring Devices**
   a. The load from each engine-generator (**EG-1 thru EG-22**) shall be recorded at a frequency of not less than once every fifteen (15) minutes during the operation of each engine-generator set. The records shall be maintained on site to demonstrate compliance with Condition 15a. and current for the most recent five year period.
   b. Each engine shall be equipped with a non-resettable hour meter which measures the period each engine is operated. A record of engine operation shall be maintained to provide dates, engine run hours (including idle time), generator load as required by Condition 3a, and reason for operation.
   c. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the engines are operating.

d. 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.
(9 VAC 5-80-1180 D)

4. **Engine-generator Use** – The engine-generator sets (**EG-1 thru EG-22**) shall be operated temporarily in situations where immediate action on the part of the source is needed due to a failure, loss, or anticipation of loss of primary acceptable electrical power service, and is beyond the reasonable control of the facility. In addition, the engine-generator sets may be operated for periodic maintenance, testing, and operational training.

   Engine-generator sets (**EG-1 thru EG-22**) shall not be operated for peak-shaving purposes, or to fulfill a contractual obligation with a third party or any other party.
   (9 VAC 5-80-1180 D)

OPERATING LIMITATIONS

5. **Load Distribution** – When the permittee is required to operate the engine-generator sets (**EG-1 thru EG-22**) within a load group (Group 1 thru Group 8), the permittee shall be allowed to bring all units within each load group on-line to an operating capacity not to exceed 4000 ekW.
   (9 VAC 5-170-160 and 9 VAC 5-80-1180)

6. **Operation of the Engine-Generator Sets** - The permittee must operate and maintain the engine-generator sets and any 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 do not impact on air emissions.
   (9 VAC 5-80-1180 and 9 VAC 5-50-410)

7. **Fuel** - The approved fuel for the engine-generator sets is low sulfur diesel fuel with a sulfur content not to exceed 500 ppm (0.05% by weight). A change in the fuel may require a permit to modify and operate.
   (9 VAC 5-80-1180)

8. **Fuel Specification** - The low sulfur diesel fuel shall meet the specifications below:

   a. The diesel fuel oil conforms to the American Society for Testing and Materials (ASTM) specification, D975, for grade low sulfur No. 2-D, Grade No. 2-D S500, or Grade No. 2-D S15, or

b. Has a minimum cetane number of forty, or has a maximum aromatic content of thirty-five percent by volume, and

c. Has a sulfur content per shipment not-to-exceed 0.05%.

(9 VAC 5-80-1180)

9. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each purchased 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;

   d. A statement that the diesel fuel oil:

      i. Does not exceed the American Society for Testing and Materials (ASTM) specification, D975, for grade low sulfur No. 2-D, Grade No. 2-D S500, or Grade No. 2-D S15, or

      ii. Has a sulfur content per shipment not to exceed 500 ppm (0.05% by weight) and either a minimum cetane number of 40 or maximum aromatic content of 35 volume percent, or

      iii. 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 15 if other documentation will be used to certify the diesel fuel type.

   (9 VAC 5-80-1180)

10. **Requirements by Reference** - Diesel engine-generator sets (**EG-1 thru EG-22**) are subject to 40 CFR 60, Subpart IIII which is federally enforceable only, at this time.

    The permittee shall furnish a copy of notifications sent to EPA as required by 40 CFR 60, Subpart IIII, to the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 15.

    Once 40 CFR 60, Subpart IIII has been adopted into the provisions of the Board's Regulations, the following requirement applies:

    Except where this permit is more restrictive than the applicable requirement, the NSPS equipment as described in Condition 1 shall be operated in compliance with the requirements of 40 CFR 60, Subpart IIII.
    (9 VAC 5-80-1180, 9 VAC 5-50-400 and 9 VAC 5-50-410)

EMISSION LIMITS

11. **Emission Limits** - Emissions from the operation of the each diesel engine-generator set shall not exceed the limits specified below:

Hourly Limit per engine:

Nitrogen Oxides (as NO_2)	54.3 lbs/hr
Carbon Monoxide (CO)	7.5 lbs/hr
Sulfur Dioxide (SO_2)	1.6 lbs/hr
Particulate Matter (PM_{10})	0.9 lbs/hr
Volatile Organic Compounds (VOC)	1.1 lbs/hr

(9 VAC 5-80-1180)

12. **Facility wide Emission Limits** - Total annual emissions from the facility shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	71.0 tons/yr
Carbon Monoxide (CO)	33.0 tons/yr
Sulfur Dioxide (SO_2)	9.0 tons/yr
Particulate Matter (PM_{10})	4.0 tons/yr
Volatile Organic Compounds (VOC)	5.0 tons/yr

The total annual emissions from the diesel engine-generator sets shall be calculated monthly as the sum of each consecutive twelve-month period. 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.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

13. **Annual Emissions Calculations**

a. The total annual emissions of each regulated pollutant from the diesel engine-generator sets shall be calculated monthly as the sum of each consecutive twelve-month period. 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.

Each month's emissions shall be calculated as follows:

NOx = (Total hours of operation of engine-generator sets **EG-1 thru EG-22** for the current month x 45.4 lb/hr) ÷ 2000

CO = (Total hours of operation of engine-generator sets **EG-1 thru EG-22** for the current month x 6.0 lb/hr) ÷ 2000

SO_2 = (Total hours of operation of engine-generator sets **EG-1 thru EG-22** for the current month x 1.6 lb/hr) ÷ 2000

PM_{10} = (Total hours of operation of engine-generator sets **EG-1 thru EG-22** for the current month x 0.7 lb/hr) ÷ 2000

VOC = (Total hours of operation of engine-generator sets **EG-1 thru EG-22** for the current month x 0.85 lb/hr) ÷ 2000

Note: Emission factors are derived from AP-42 or the manufacturer's highest nominal emission rate over the operating range of the engine.

b. The facility has the option of using lower lb/hr emission rates by requesting a permit modification to incorporate the new lower rates.

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

14. **Visible Emission Limit** - Visible emissions from the engine-generator sets (**EG-1 thru EG-22**) 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 the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

Visible emissions during startup, shutdown, and malfunction from the engine-generators 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 and 9 VAC 5-50-260)

RECORDS

15. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO at the following address:

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

These records shall include, but are not limited to:

a. Monthly hours of operation of each engine (**EG-1 thru EG-22**), correlated with each generator load band, per Condition 3a., and the reason operated:

a) Load band 1 : ≤ 200 kW
b) Load band 2: > 200 kW to ≤ 625 kW
c) Load band 3: > 625 kW to ≤ 1250 kW

d) Load band 4: > 1350 to ≤ 2000 kW
e) Load band 5: > 2000 kW

b. Monthly and annual emissions calculations for each pollutant from the engine-generator sets (**EG-1 thru EG-22**) using the calculation methods in Condition 13 to verify compliance with the ton/yr emissions limitations in Condition 12.
c. Log of the operating load per load group (Group 1 thru Group 8) as specified in Condition 5.
d. All fuel supplier certifications.
e. All VEE and emission stack test reports.
f. Scheduled and unscheduled maintenance.
g. Logs of monitoring device observations as per Condition 3.
h. Operator training in accordance with Condition 26D.

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

16. **Emissions Testing** - The twenty-two diesel engine-generator sets (**EG-1 thru EG-22**) 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 and safe sampling platforms and access shall be provided.
(9 VAC 5-50-30 F and 9 VAC 5-80-1180)

INITIAL COMPLIANCE DETERMINATION

17. **Testing Verification Meeting** –
a. The permittee shall arrange to meet with the Regional Air Compliance Manager of the DEQ's NRO at the address referenced in Condition 15 to discuss the stack testing requirements associated with engine-generator sets installed in Phase 1 of this project. The meeting shall take place prior to the submittal of the final test protocol.

b. The permittee shall arrange to meet with the Regional Air Compliance Manager of the DEQ's NRO at the address referenced in Condition 15 to discuss the stack testing requirements associated with the engine-generator sets installed in Phase 2 of this project. The meeting shall take place prior to the submittal of the final test protocol

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

18. **Stack Test –**

a. Initial performance tests shall be conducted for nitrogen oxides (as NO_2) and carbon monoxide (CO) on the initial five of the eleven engine-generator sets (**EG-1 thru EG-11**) installed in Phase 1, and the initial six of the eleven engine-generator sets (**EG-12 thru EG-22**) installed in Phase 2, using the emission compliance testing procedures outlined at 40 CFR 60, Appendix A to demonstrate compliance with the emission limits in Condition 11.a.

b. NO_2 and CO emissions testing from each selected engine-generator set shall consist of three one-hour test runs per load band. The average of the three runs shall be reported as the short-term emissions for the engine-generator set.

i. Testing of five of the eleven engines, **EG-1 thru EG-5**, installed during Phase 1 shall be conducted at each of the loads listed below:

a) Load 1 : 175 kW
b) Load 2: 500 kW
c) Load 3: 1000 kW
d) Load 4: 1675 kW
e) Load 5: 2250 kW

ii. Testing of six of the eleven engines, **EG-12 thru EG-17**, installed during Phase 2 shall be conducted at each of the loads listed below:

a) Load 1: 175 kW
b) Load 2: 500 kW
c) Load 3: 1000 kW
d) Load 4: 1675 kW
e) Load 5: 2250 kW

The specific load points for performance testing delineated above are intended to be representative of the average emission rates for each load band described in condition 15.a.

c. The initial performance testing shall be performed to demonstrate compliance within sixty days after achieving the maximum operating rate at which each engine-generator set will operate, but in no case later than 180 days after start-up of each permitted engine-generator set. Tests shall be conducted, reported, and the data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410.

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 15. The permittee shall submit one copy of the test 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 at least thirty days prior to testing.

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 15 in writing, within seven days of the scheduled test date or as soon as the rescheduling is deemed necessary. In any case the stack testing shall be rescheduled within thirty days.

f. Rescheduled testing shall be conducted under the same conditions as the initial performance tests or other condition as approved in writing from the Regional Air Compliance Manager of the DEQ's NRO at the address referenced in Condition 15.

g. Two copies of the test results shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO at the address indicated in Condition 15 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)

19. **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 engine-generator sets **(EG-1 thru EG-22)** not selected for initial stack testing in Condition 18.

a. Testing shall be performed on the exhaust stack of each engine while operating between 35% and 50% of rated capacity.

b. Each test 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 15.

c. The permittee shall submit a test protocol at least thirty days prior to testing.

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 15 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 of the test result shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 15 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)

20. **Initial Notifications** - The permittee shall furnish written notification to the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 15 of:
    a. The actual date on which construction of each engine-generator set commenced within thirty days after such date.
    b. The actual start-up date of each engine-generator set within fifteen days after such date.
    c. The anticipated date of performance tests of each engine-generator set postmarked at least thirty days prior to such date.
    (9 VAC 5-50-50 and 9 VAC 5-80-1180)

CONTINUING COMPLIANCE

21. **Control Technology Reassessment** – No later than six months or earlier than nine months prior to commencing construction of the additional eleven engine-generator sets, (**EG-12 thru EG-22**) scheduled for installation during Phase 2, the applicant shall notify the Regional Air Permit Manager, at the addressed listed in Condition 15, of the anticipated date for commencing construction of the engine-generator sets, (**EG-12 thru EG-22**). The original best available control technology (BACT) analysis for the additional eleven engine-generator sets, (**EG-12 thru EG-22**), shall be reviewed by the NRO permitting staff to determine whether the original BACT determination continues to be acceptable to the DEQ. Construction of the engine-generator sets, (**EG-12 thru EG-22**), shall not begin until such time as the DEQ notifies the owner/operator of the acceptability of the BACT analysis.
    (9 VAC 5-50-260 and 9 VAC 5-80-1180)

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 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** - This permit to construct the twenty-two diesel engine-generator sets 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:

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 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)

24. **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 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. Fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9 VAC 5-80-1210 F)

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 start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

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

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

28. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 15 of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO at the address listed in Condition 15.
(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 15 of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least twenty-four hours prior to the shutdown. The notification 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 5-20-180B)

30. **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)

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 15 of the change of ownership within thirty days of the transfer.
(9 VAC 5-80-1240)

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)

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