

NRO-110-11

COMMONWEALTH of VIRGINIA

Douglas W. Domenech Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY NORTHERN REGIONAL OFFICE 13901 Crown Court, Woodbridge, Virginia 22193-1453

901 Crown Court, Woodbridge, Virginia 22193-14 (703) 583-3800 Fax (703) 583-3821 www.deq.virginia.gov David K. Paylor Director

Thomas A. Faha Regional Director

April 21, 2011

Mr. Osvaldo Morales Manager VADATA, Inc. 4101 Westfax Drive Chantilly, VA 20151-1538

> Location: Fairfax County Registration No.: 73790

Dear Mr. Morales:

Attached is a permit to construct and operate a portable generator at a computer data center, in accordance with the provisions of the Commonwealth of Virginia State Air Pollution Control Board's (Board's) Regulations (Regulations) for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. This permit supersedes your March 16, 2010 minor New Source Review Permit that was amended on April 9, 2010. 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 February 14, 2011.

This permit approval to modify and operate shall not relieve VADATA, Incorporated of the responsibility to comply with all other local, state, and federal permit regulations. It should be noted that the portable engine generator set (Ref. # MEG-3) is subject to the requirements of 40 CFR 60 Subpart IIII, and 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT) Subpart ZZZZ. Each unit is required to comply with certain federal standards and operating limitations over the useful life of the unit. As the owner/operator of the unit, the DEQ advises you to review the NSPS and MACT to ensure compliance with applicable emission standards, operational limitations, and the monitoring, notification, reporting and recordkeeping requirements. Applicable notifications shall be sent to EPA Region III. Both NSPS and MACT can be found at http://ecfr.gpoaccess.gov/.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 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

Mr. Osvaldo Morales VADATA, Inc. April 21, 2011 Page 2

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.

A copy of the results of performance test(s) required by 40 CFR 60, Subpart IIII shall to be sent to:

Associate Director
Office of Air Enforcement (3AP10)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029]

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/TMV/11110mnsr.doc

Attachments: Permit

Source Testing Report Format

cc: Director, OAPP (electronic file submission)

Manager, Data Analysis (electronic file submission)

Regional Air Compliance Manager (electronic file submission)

File



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Douglas W. Domenech Secretary of Natural Resources DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193-1453
(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

David K. Paylor Director

Thomas A. Faha Regional Director

STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE

This permit supersedes your March 16, 2010 minor New Source Review Permit that was amended on April 9, 2010

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

VADATA, Incorporated 4101 Westfax Drive Fairfax, VA 20151-1538 Registration No.: 73790

is authorized to modify and operate

A portable emergency generator (MEG-3)

To be located at

IAD -1 Data Center 4101 Westfax Drive Chantilly, Virginia 20151-1538

in accordance with the Conditions of this permit.

Approved on

April 21, 2011.

Thomas A. Faha, Regional Director

Permit consists of 15 pages. Permit Conditions 1 to 32.

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INTRODUCTION

This permit approval is based on the permit application dated October 8, 2009, March 18, 2010, and February 14, 2011. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-80-1110 (definitions) and 9 VAC 5-10-20 of the State Air Pollution Control Board's (Board's) 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 Board's 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	Federal Requirements	Installation Date	
MEG-3	One Caterpillar model C27 diesel emergency generator	1,141 brake horsepower / 750 kilowatts (kW)	NSPS IIII	2011	

Equipment Exempt from Permitting					
Reference No.	Equipment Description	Rated Capacity	Exemption Citation	Exemption Date	
MEG-3	One diesel fuel oil storage tank	1,300 gallons	9 VAC 5-80-1320 B.8.		

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)

OPERATING LIMITATIONS

2. 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 set(s) 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 generator each calendar year. The permittee shall submit notification to the Regional Air Permit Manager of the DEQ's Northern Regional Office (NRO) within thirty days of signing a contract to participate in the ELRP.
 - iii. Critical Power Generation: The engine-generator set(s) 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: Alternate Power Generation: Except as specified in subsection 2.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. Prior to construction of the SCR unit, when changing from Emergency Power or Critical Power Generation to Alternate Power Generation, the permittee shall submit appropriate documentation to the Department of Environmental Quality (DEQ), and receive DEQ approval for the change in the method of operation of the engine-generator set.
- 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 2.a. through 2.c above, shall not exceed the limits stated in Condition 10.

(9 VAC 5-80-1180 D)

3. Monitoring -

- a. Fuel Flow: The engine generator set (Ref. # MEG 3) shall be equipped with a device to continuously measure and record fuel consumption (in gallons).
- b. Engine Operating Hours: The engine-generator set (Ref. # MEG 3) shall be equipped with a non-resettable hour meter which measures the duration of time that the engine is operated.
- c. Operation Log: A monthly operation log shall be maintained and shall include, at a minimum, the following information:
 - i. Engine run hours (including idle time);
 - ii. Fuel consumption, and;
 - iii. Date and reason for operation as defined in Condition 2.

Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.

Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the engine is operating. (9 VAC 5-80-1180 D, 9 VAC 5-50-20 C, and 9 VAC 5-50-260)

- 4. Monitoring Device Observation To ensure proper performance, the monitoring device used to continuously measure operating hours and fuel flow shall be observed by the permittee at a minimum frequency of once per day during days in which the enginegenerator set is called into service. Refer to Condition 16 for record keeping requirements to demonstrate compliance with this condition.
 (9 VAC 5-80-1180)
- 5. **Emission Controls -** Emissions from the engine-generator set shall be controlled by the following:
 - a. Sulfur Dioxide (SO₂) emissions from the engine-generator set (Ref. # MEG-3) shall be controlled by the use of ultra low sulfur diesel fuel oil with a sulfur content not to exceed 0.0015% by weight.
 - b. Combustion and visible emissions from the diesel engine-generator set (Ref. # MEG-3) 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 engine.

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

- Fuel Throughput The diesel engine-driven emergency generator (Ref. # MEG-3) shall not consume more than 13,380 gallons per year, calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-1180)
- 7. **Fuel Specification** The approved fuel for the generator (Ref. # MEG-3) is ultra low sulfur diesel fuel oil, and shall meet the specifications below:

ULTRA LOW 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 an exceedance of emission limits. A change in the fuel type or the fuel sulfur content may require a permit to modify and operate.

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

- 8. **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:
 - d. A statement that the distillate oil complies with the requirements of Condition 7 Fuel Specification, or;
 - e. Alternately, the permittee shall obtain approval from the Regional Air Compliance Manager (RACM) of the DEQ's Northern Regional Office (NRO), at the address in Condition 16, 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 Conditions 5 and 7. (9 VAC 5-80-1180)

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EMISSION LIMITS

9. **Process Emission Limits** - Emissions from the operation of the emergency generator (Ref. # MEG-3) shall not exceed the limits specified below:

Pollutant	MEG - 3	
Nitrogen Oxides (as NO2)	15.1 lbs/hr	
Carbon Monoxide	1.5 lbs/hr	
Volatile Organic Compounds	0.22 lbs/hr	

These emissions are derived from the manufacturer "not to exceed" data on emissions at maximum design capacity of the diesel engine and it's operating limits to determine the overall emission contribution. Compliance with the sulfur dioxide emissions limit shall be based on the fuel sulfur content and the fuel supplier certification, as stated in Condition numbers 7 and 8. Compliance with the hourly nitrogen oxides (as NO₂) emission limit shall be demonstrated by stack testing, as stated in Condition 14. Compliance with the other pollutant limits shall be based on the proper operation and maintenance of the diesel engine or by testing, if required. Exceedance of the operating limits may be considered credible evidence of the exceedance of the emission limits. (9 VAC 5-80-1180)

10. **Annual Engine Generator Emission Limits** – Total emissions from the engine generator set (Ref. # MEG-3) shall not exceed the limits specified below:

Nitrogen Oxides (as NO₂)

Carbon Monoxide (CO)

Total
1.7 tons/yr
0.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits shall be determined by calculation methods as stated in Condition 11 or other means acceptable to DEQ.

(9 VAC 5-80-1180)

11. **Annual Emissions Calculations** – The total annual emissions of each regulated pollutant from the diesel engine-generator set (Ref. # MEG-3) shall be calculated monthly as the sum of each consecutive twelve-month period. Compliance for the 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. Refer to Condition 16 for record keeping requirements to demonstrate compliance with this condition.

Monthly emissions for each pollutant shall be calculated using the following calculation method and applicable emission factor as listed in the tables below:

a. Emission Factor Table

Reference No. MEG - 3				
Pollutant	Emission Factor (EF) (lb/gal)			
Nitrogen Oxides (as NO ₂)	2.50 E - 01			
Carbon Monoxide (CO)	3.54 E – 02			

b. Emission Calculations: Monthly emissions for each pollutant shall be calculated using the following equations using the emission factors and the appropriate emission factors listed below:

NOx* = (Total fuel consumption for (Ref. # MEG - 3) x EF per Condition 11.a) ÷ 2000 lbs/ton

CO = (Total fuel consumption for (Ref. # MEG - 3) x EF per Condition 11.a) ÷ 2000 lbs/ton

- 12. **Visible Emission Limit** Visible emissions from each emergency generator (Ref. # MEG-3) shall not exceed 5% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). During startup and shutdown, visible emissions shall not exceed 10% opacity, except for one six-minute interval not to exceed 20% opacity. (9 VAC 5-80-1180, 9 VAC 5-50-260 and 9 VAC 5-170-160)
- 13. Emissions Testing The emergency generator (Ref. # MEG-3) shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations in accordance with EPA Reference Method 1 (reference 40 CFR Part 60, Appendix A). In addition, safe sampling platforms and access shall be provided. (9 VAC 5-50-30 F and 9 VAC 5-80-1180)

INITIAL COMPLIANCE DETERMINATION

- 14. **Visible Emissions Evaluation -** Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted by the permittee on the exhaust from the installed diesel engine (Ref. # MEG-3).
 - a. The VEE shall be performed on the exhaust stack from the engine operating at greater than 90% of its rated capacity.

^{*} Upon DEQ verification of the initial performance test, the facility has the option of using a lower NOx (as NO2) emission rate (average of three one-hour test runs x 120%), by undergoing a permit amendment to incorporate the new lower rate. (9 VAC 5-80-1180 and 9 VAC 5-50-260)

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b. Each test shall consist of thirty sets of twenty-four consecutive observations (at 15 second intervals) to yield a six minute average.

- c. The details of the test are to be arranged with the RACM of the DEQ's NRO. The permittee shall submit a test protocol in conjunction with the initial stack test protocol as required by Condition 14.e at least thirty days prior to testing to ensure adequate time for DEQ approval. If the test protocol is received by the DEQ with less than thirty days for review and acceptance, DEQ approval may not be issued in a timely manner to allow for testing to take place according to the permittee's schedule.
- d. The evaluation shall be performed within sixty days after achieving maximum production rate at which each engine generator set will be operated, but in no event later than 180 days after start-up of the permitted equipment.
- e. Should conditions occur which would require rescheduling the testing, the permittee shall notify the RACM of the DEQ's NRO (at the address listed in Condition 16) in writing, within seven days of the scheduled test date, or as soon as the rescheduling is deemed necessary. In any case the visible emissions testing shall be rescheduled within thirty days.
- f. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests.
- g. Two copies, one paper and one on removable electronic media, of the test result shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO (at the address listed in Condition 16) 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)

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 Air Compliance Manager, Northern Regional Office at the address listed in Condition 16. These records shall include, but are not limited to:
 - a. A monthly log of the monitoring device observations as required by Condition 4.
 - b. Reasons for operating as defined in Condition 2
 - c. Annual hours of operation of the diesel engine-driven emergency generator (Ref. # MEG-3), 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.

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- d. Annual fuel consumption of the engine generator set, 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.
- e. Monthly and annual emissions calculations for NO_X (as NO₂), CO, SO2, VOC, and PM10 from the engine-generator set (Ref. # MEG-3) to verify compliance with the applicable ton/yr emissions limitations in Condition 10. 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.
- f. All fuel supplier certifications.
- g. Results of all stack tests and visible emission evaluations.
- h. A copy of the maintenance schedule and records of scheduled and unscheduled maintenance in accordance with Condition 26.
- i. Operator training in accordance with Condition 26.
- j. Records of the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer.
- Records of changes in settings that are permitted by the manufacturer of the enginegenerator set.
- I. For the engine generator set (Ref. # MEG-3), maintain records of:
 - i. Maintenance conducted on the engine.
 - ii. Documentation from the manufacturer that the engine (Ref. # MEG-3) is certified to meet the emission standards in Conditions 9 and 10.
 - iii. Documentation that the engine (Ref. # MEG-3) meets the emission standards in Conditions 9 and 10.

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

NOTIFICATIONS

16. **Initial Notifications** - The permittee shall furnish written notification to the Air Compliance Manager, Northern Regional Office at the address listed below:

Regional Air Compliance Manager Department of Environmental Quality 13901 Crown Court

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Woodbridge, VA 22193

- a. The actual start-up date of the emergency generator set (Ref. # MEG-3) commenced within fifteen days after such date. The notification must include the following:
 - i. Name and address of the permittee,
 - ii. The address of the affected source.
 - iii. Engine information including make, model, engine family, serial number, model year, maximum engine power and engine displacement.
 - iv. Fuel used.
- b. The anticipated commencement date of manufacturer's trials for the engine generator set, postmarked within fifteen days prior to such date.
- c. The anticipated start up date of the engine generator set, (Ref. # MEG-3), postmarked not more than sixty days nor less than thirty days prior to such date.
- d. The actual start-up date of the engine-generator set (Ref. # MEG-3) within 15 days after such date. The actual start-up date shall be the date on which the engine completes manufacturer's trials, but shall be no later than thirty days after start-up for manufacturer's trials, unless otherwise approved by the DEQ.
- e. The anticipated date of performance tests of the emergency generator (Ref. # MEG-3) postmarked at least 30 days prior to such date.

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

PORTABLE FACILITIES

17. **Relocation of Portable Facilities** – The permittee is authorized to apply for relocation of the engine generator set (Ref. # MEG-3) to other project sites within Virginia under the provisions of 9 VAC 5-80-1320.A.1.c. Such requests will be evaluated on a case by case basis.

(9 VAC 5-80-1320 A.1.c)

- 18. **Notification for Relocation of Portable Facilities** Within five business days of relocation of the engine-generator set (Ref. # MEG-3), the following information shall be submitted to the RACM of the DEQ's NRO at the address listed in Condition 16:
 - a. The facility description and registration number,
 - b. The date of the permit,
 - c. The date of the relocation and the startup of the portable generator,
 - d. The location and description of the proposed new site, including a map showing the exact location.
 - The anticipated period of time the facility will be operated at the new site and the anticipated fuel consumption,
 - f. The previous location of the equipment (prior to relocation),

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- g. The actual period of operation and fuel consumed at the previous site (prior to relocation),
- h. The hours of operation and fuel throughput for the previous 12 consecutive months. (9 VAC 5-80-1180 and 9 VAC 5-170-160 and 9 VAC 5-80-1320 A.1.c.)
- 19. **Operation of Portable Facilities** The portable engine generator set (Ref. # MEG-3) may not operate at any one single temporary site for a period in excess of 18 months without written approval from the DEQ.

(9 VAC 5-80-1180 and 9 VAC 5-170-160 and 9 VAC 5-80-1320 A.1.c.)

21. **Operation at other Permitted facilities -** If the portable engine generator set (Ref. # MEG-3) is to be operated at the site of another permitted stationary source, the emissions from the portable equipment shall be added to the emissions from the existing stationary source, and the total emissions shall not exceed the stationary source permit limits, as applicable. (9 VAC 5-80-1180 and 9 VAC 5-170-160 and 9 VAC 5-80-1320 A.1.c.)

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:
 - 1. 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.
 - 2. For a partnership or sole proprietorship, a responsible official is a general partner or the proprietor, respectively.
 - 3. 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 a 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.

(9 VAC 5-20-230)

- 23. **Permit Invalidation** This permit to construct the diesel engine-driven emergency generator (Ref. # MEG-3) shall become invalid, unless an extension is granted by the DEQ, if:
 - a. A program of continuous construction 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 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)

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- 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 a permitted emissions unit;
 - d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or fails to operate in conformance with any applicable control strategy, including any emission standards or emission limitations, in the implementation plan in effect at the time that an application is submitted; or
 - e. Fails to comply with the applicable provisions of 9 VAC 5-80-1100 et seq. (9 VAC 5-80-1210 F and 9 VAC 5-80-1210 G)
- 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;
 - 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 measures in order to minimize the duration and frequency of excess emissions, including the following:

- 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 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. (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 Air Compliance Manager, Northern Regional Office at the address listed in Condition 16, 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 Air Compliance Manager, Northern Regional Office.

 (9 VAC 5-20-180 C and 9 VAC 5-80-1180)
- 29. **Notification of 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 16) 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;
- 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 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 Air Compliance Manager, Northern Regional Office at the address listed in Condition 16 of the change of ownership within 30 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
- 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 reports4. *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