Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703)583-3800 FAX (703) 583-3821
www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

Thomas A. Faha
Regional Director

August 9, 2019

Mr. Todd J. Genovese
Vice President
Vadata, Inc.
13200 Woodland Park Rd.
Herndon, VA 20171

Location: Loudoun County
Registration No.: 74174

Dear Mr. Genovese:

Attached is a permit to construct and operate emergency diesel engine generator sets (gen-sets) at Vadata, Inc. IAD-150, IAD-151, and IAD-152 data centers in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution.

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 12, 2019.

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.

This permit approval to construct and operate shall not relieve Vadata, Inc. IAD-150, IAD-151 and IAD-152 of the responsibility to comply with all other local, state, and federal permit regulations.

The proposed emergency diesel engine gen-sets may be subject to 40 CFR 63, Maximum Achievable Control Technology (MACT), Subpart ZZZZ and 40 CFR 60, New Source Performance Standard (NSPS), Subpart IIII. Virginia has not accepted delegation of this rule. In summary, the unit may be required to comply with certain federal emission standards and operating limitations. The Department of Environmental Quality (DEQ) advises you to review

the referenced MACT and NSPS to ensure compliance with applicable emission and operational limitations. As the owner/operator you are also responsible for any monitoring, notification, reporting and recordkeeping requirements of the MACT and NSPS. Notifications shall only be sent to EPA, Region 3.

To review any federal rules referenced in the above paragraph or in the attached permit, the US Government Publishing Office maintains the text of these rules at www.ecfr.gov, Title 40, Part 60 and 63.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit 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 Jon Lutz at (703) 385-3836 or via email at timothy.lutz@deq.virginia.gov.

Sincerely,

Justin Wilkinson
Regional Air Permit Manager

TAF/JAW/TJL/74174 mNSR Permit (8/9/2019)

Attachment: Permit

cc: Aizhan Dossanova, Vadata, Inc. (electronic file submission)
Regional Air Compliance Manager (electronic file submission)

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Thomas A. Faha
Regional Director

STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

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

Vadata, Inc.
13200 Woodland Park Rd.
Herndon, Virginia 20171
Registration No.: 74174

is authorized to construct and operate

emergency diesel engine generator sets (gen-sets)

located at

Vadata IAD-150, IAD-151, and IAD-152
25430, 25420 and 25390 Sutton Bay Plaza
Chantilly, Virginia 20152
(Loudoun County)

in accordance with the Conditions of this permit.

Approved on: August 9, 2019

Thomas A. Faha
Regional Director

Permit consists of 19 pages.
Permit Conditions 1 to 33.

INTRODUCTION

This permit approval is based on the permit application dated March 19, 2019 and supplemental information dated April 23, 2019.

Any changes in the permit application specifications or any existing facilities, which alter the impact of the facility on air quality, may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

Words or terms used in this permit shall have meanings as provided in 9VAC5-80-1110 and 9VAC5-10-20 of the Commonwealth of Virginia's State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the 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 9VAC5-170-60 of the State Air Pollution Control Board's Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

Equipment List – Equipment at this facility subject to permit requirements of 9VAC5-80-1100 *et. seq.* consists of:

Equipment to be constructed:				
Reference No.	**Equipment Description**	**Standby Rated Capacity**	**Delegated Federal Requirements**	**Original Permit Date**
1 - 62	Sixty Two (62) Caterpillar 3516C-HD emergency diesel engine gen-sets	3,634 bhp 2,500 ekW (each unit)	None	8/9/2019

Transitory equipment to be constructed:				
Reference No.	**Equipment Description**	**Standby Rated Capacity**	**Delegated Federal Requirements**	**Original Permit Date**
T-1 and T-2	Two (2) Caterpillar 3516C emergency diesel engine gen-set	2,937 bhp 2,000 ekW (each unit)	None	8/9/2019

Specifications included in the above tables are for informational purposes only and do not form enforceable terms or conditions of the permit.

PROCESS REQUIREMENTS

1. Emission Controls - Nitrogen oxides (NO_X) emissions from each emergency diesel engine gen-set included in the Equipment List section of this permit shall be controlled by engine design.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

2. Emission Controls - Visible emissions, particulate matter (PM_{10} and $PM_{2.5}$) emissions, carbon monoxide (CO) emissions, volatile organic compound (VOC) emissions, and nitrogen oxide (NO_X) emissions from the emergency diesel engine gen-sets included in the Equipment List section of this permit shall be controlled by the use of good operating practices and performing appropriate maintenance in accordance with the manufacturer recommendations. In addition, the permittee may only change those settings that are permitted by the manufacturer and does not increase air emissions.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

3. Monitoring Devices - Each emergency diesel engine gen-set included in the Equipment List section of this permit shall be equipped with a non-resettable hour meter which measures the duration of time that each emergency diesel engine gen-set is operated and a fuel flow monitoring device used to continuously measure the fuel throughput for each emergency diesel engine gen-set.

   The data from each monitoring device shall be recorded by the permittee with a frequency of not less than once each day the emergency diesel engine gen-set is operated. The permittee shall keep a log of these observations.

   Each monitoring device shall be installed, maintained, calibrated (as appropriate), and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.
   (9 VAC 5-80-1180 D)

OPERATING/EMISSION LIMITATIONS

4. Operation of the Engine-Generator Set - The permittee shall operate and maintain each emergency diesel engine gen-set included in the Equipment List section of this permit 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 does not increase air emissions.
(9 VAC 5-80-1180)

5. Operating Limitations (Ozone Season) - No emergency diesel engine gen-sets included in the Equipment List section of this permit shall be operated for scheduled and non-scheduled maintenance, readiness testing, or operation training (that involves fuel combustion)

between the hours of 7 AM to 5 PM any day during May 1 through September 30. The permittee may petition the Regional Air Compliance Manager, DEQ NRO for exceptions to this requirement, with approvals made on a case-by-case basis.
(9 VAC 5-80-1180)

6. Operating Limitations (Ozone Season) – Integration Operational Period - During the integration operational period of each emergency diesel engine gen-sets included in the Equipment List of the permit, any operation of the unit (that involves fuel combustion) between the hours of 7 AM to 5 PM any day during the ozone season of May 1 through September 30 shall only occur if the forecast Air Quality Index (AQI) for ozone as published on the AirNow website (http://airnow.gov) for Northern Virginia for that day is ≤100. In the event that AirNow-EnviroFlash (www.enviroflash.info) issues an Air Alert for Ozone for the Metropolitan Washington, D.C. for a day which the forecasted AQI for ozone was ≤100, operation of each unit (which involves fuel combustion) shall be minimized to the maximum extent practical.
(9 VAC 5-80-1180)

7. Emergency Power Generation - The emergency diesel engine gen-sets included in the Equipment List section of this permit shall only be operated for the following purposes:

   a. In situations that arises from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:

      i. A failure of the electrical grid;

      ii. On-site disaster or equipment failure; or

      iii. Public service emergencies such as flood, fire, natural disaster, or severe weather conditions.

   b. An Independent System Operator (ISO) declared emergency, where an ISO emergency is any of the following:

      i. An abnormal system condition requiring manual or automatic action to maintain system frequency, to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property;

      ii. Capacity deficiency or capacity excess conditions;

      iii. A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel;

iv. Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state; or

v. An abnormal event external to the ISO service territory that may require ISO action.

c. For maintenance (scheduled and non-scheduled), testing, and operational training.

d. For the integration operational period, which is the period of time beginning with the first time the affected unit is started on-site and ending when the affected unit is fully integrated with the sources electrical system.

Total emissions for any annual period calculated as the sum of all emissions from operation under the scenarios above, shall not exceed the limits stated in Condition 14.
(9 VAC 5-80-1180)

8. Operating Hours - Each individual emergency diesel engine gen-set shall not operate more than 100 hours per year for planned non-emergency operation and no more than 500 hours per year for all purposes (as provided in Condition 7).

Planned non-emergency operation includes scheduled and non-scheduled maintenance, readiness testing, and operational training. Planned non-emergency operation cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The annual limits for hours of operation shall be calculated daily as the sum of each consecutive 365-day period. Compliance for each consecutive 365-day period shall be demonstrated daily by adding the total for the most recently completed calendar day to the individual daily totals for the preceding 364 days.
(9 VAC 5-80-1180)

9. Diesel Fuel Throughput -

a. The emergency diesel engine gen-sets (Ref. No.: 1 - 62) combined, shall consume no more than 678,844 gallons of diesel fuel per year, calculated daily as the sum of each consecutive 365 day period.

b. The emergency diesel engine gen-sets (Ref. No.: T1 and T2) combined, shall consume no more than 21,100 gallons of diesel fuel per year, calculated daily as the sum of each consecutive 365 day period.

c. The emergency diesel engine gen-sets included in the Equipment List section of this permit combined, shall consume no more than 279,682 gallons of diesel fuel per year

for maintenance checks and readiness testing, calculated daily as the sum of each consecutive 365 day period.

Maintenance checks and readiness testing fuel consumption limits does not include the integration operational period, manufacturer recall updates, and repairs.

Compliance for the consecutive 365 day period shall be demonstrated daily by adding the total for the most recently completed calendar day to the individual daily totals for the preceding 364 days.
(9 VAC 5-80-1180)

10. Fuel Specification - The approved fuel for the emergency diesel engine gen-sets included in the Equipment List section of this permit is diesel fuel oil. The diesel fuel oil shall meet the ASTM D975 specification for S15 diesel fuel oil with a maximum sulfur content per shipment of 0.0015% (15 ppm). Exceedance of these specifications may be considered credible evidence of an exceedance of emission limits.
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

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

    a. The name of the fuel supplier;

    b. The date on which the diesel fuel was received;

    c. The quantity of diesel fuel delivered in the shipment;

    d. A statement that the diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D975) for S15 diesel fuel oil; and

    e. The sulfur content of the diesel fuel.

    Alternatively, the permittee must obtain approval from the Regional Air Compliance Manager, DEQ NRO, 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 DEQ, may be used to determine compliance with the fuel specifications stipulated in Condition 10.
    (9 VAC 5-80-1180)

EMISSION LIMITS

12. Emission Limits (Hourly) - Emissions from the operation of each Caterpillar 3516C-HD emergency diesel engine gen-set (Ref. Nos.: 1 - 62) shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	48.06 lbs/hr
Carbon Monoxide (CO)	6.09 lbs/hr
Volatile Organic Compounds (VOC)	1.21 lbs/hr
Particulate Matter (PM_{10})	0.40 lbs/hr
Particulate Matter ($PM_{2.5}$)	0.40 lbs/hr

(9 VAC 5-80-1180)

13. Emission Limits (Hourly) - Emissions from the operation of each Caterpillar 3516C emergency diesel engine gen-set (Ref. Nos.: T1 and T2) shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	38.85 lbs/hr
Carbon Monoxide (CO)	3.95 lbs/hr
Volatile Organic Compounds (VOC)	1.14 lbs/hr
Particulate Matter (PM_{10})	0.57 lbs/hr
Particulate Matter ($PM_{2.5}$)	0.57 lbs/hr

(9 VAC 5-80-1180)

14. Emission Limits (Annual) - Emissions from the combined operation of all emergency diesel engine gen-sets (Ref. Nos. 1 – 62, T1 and T2) included in the Equipment List section of this permit for all purposes shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	97.00 tpy
Carbon Monoxide (CO)	51.07 tpy
Volatile Organic Compounds (VOC)	10.69 tpy
Particulate Matter (PM_{10})	3.50 tpy
Particulate Matter ($PM_{2.5}$)	3.50 tpy

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of

the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1, 2, and 4.
(9 VAC 5-80-1180)

15. Emission Limits (Maintenance Checks and Readiness Testing) - Emissions from the combined operation of the Caterpillar 3516C-HD emergency diesel engine gen-set (Ref. Nos.: 1 - 62) for maintenance checks and readiness testing shall not exceed the limits specified below:

Nitrogen Oxides (as NO_2)	38.7 tpy
Carbon Monoxide (CO)	20.9 tpy
Volatile Organic Compounds (VOC)	4.4 tpy
Particulate Matter (PM_{10})	1.4 tpy
Particulate Matter ($PM_{2.5}$)	1.4 tpy

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1, 2, 4, and 9.
(9 VAC 5-80-1180)

16. Visible Emission Limit - Visible emissions from each emergency diesel engine gen-set included in the Equipment List section of this permit shall not exceed 5% opacity except during one 6-minute period in any one hour in which visible emissions shall not exceed 10% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.

During startup and shutdown, visible emissions from each emergency diesel engine gen-set shall not exceed 10% opacity except during one 6-minute period in any one hour in which visible emissions shall not exceed 20% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-1180 and 9 VAC 5-50-260)

INITIAL COMPLIANCE DETERMINATION

17. Stack Test - Initial performance tests shall be conducted on one Caterpillar Model 3516C-HD emergency diesel engine gen-set (Ref. Nos.: 1 - 62) for filterable particulate matter, using EPA Reference Method 5 or 5A, and condensable particulate matter, using EPA Reference Method 202.

a. Testing shall be conducted on the Caterpillar Model 3516C-HD emergency engine gen-set operating at ≥90 percent of its rated capacity, unless multiple load band testing is approved by DEQ;

b. Perform testing to demonstrate compliance within 120 days after the integration operational period has commenced. If this deadline falls within the ozone season (May 1 through September 30) the facility shall perform testing to demonstrate compliance within 30 days after the end of the ozone season. Tests shall be conducted and reported and data reduced as set forth in 9VAC5-50-30 and 9VAC5-60-30, and the test methods and procedures contained in each applicable section or subpart listed in 9VAC5-50-410 and 9VAC5-60-70;

c. The details of the tests are to be arranged with the Regional Air Compliance Manager, DEQ NRO. The permittee shall submit the test protocol to the Regional Air Compliance Manager, DEQ NRO at least thirty days prior to testing to ensure adequate time for DEQ approval. If the test protocol is received by the DEQ with less than thirty days for review and acceptance, DEQ approval may not be issued in a timely manner to allow for testing to take place according to the permittee's schedule;

d. Should conditions occur which would require rescheduling the testing, the permittee shall notify the Regional Air Compliance Manager, DEQ NRO in writing, within seven days of the scheduled test date or as soon as the rescheduling is deemed necessary; and

e. Two copies, one paper copy and one on removable electronic media, of the test results shall be submitted to the Regional Air Compliance Manager, DEQ NRO within 60 days after test completion and shall conform to the test report format enclosed with this permit.

For lab testing only (not field testing): Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
(9 VAC 5-50-30, 9 VAC 5-80-1200, 9 VAC 5-50-410)

18. Visible Emissions Evaluation - Concurrent with the initial compliance determination required in Condition 17, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the permittee on the selected emergency diesel engine-generator sets selected for initial performance testing. The details of the tests shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO. The permittee shall submit a VEE protocol in conjunction with the initial stack test protocol required by Condition 17 at least 30 days prior to testing.

a. Should conditions prevent concurrent opacity observations, the Regional Air Compliance Manager of the DEQ's NRO shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled

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

b. Two copies of the test result (one hard copy and one on electronic media) shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO within 60 days after test completion and shall conform to the test report format enclosed with this permit (Attachment A).

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

CONTINUING COMPLIANCE DETERMINATION

19. Facility Construction - The emergency diesel engine gen-sets included in the Equipment List section of this permit shall be constructed so as to allow for emissions testing upon reasonable notice, 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 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)

20. Emissions Testing/Visible Emissions Evaluation - Upon request by the DEQ, the permittee shall conduct stack tests and/or VEEs of the emergency diesel engine gen-sets included in the Equipment List of this permit to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO.
(9 VAC 5-50-30 G and 9 VAC 5-80-1200)

RECORDS

21. On Site Records - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. All on-site recordkeeping and compliance submittals to DEQ must utilize the reference numbers for permitted equipment identified in the Equipment List of this permit. The content and format of such records shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO. These records shall include, but are not limited to:

    a. Documentation from the manufacturer that each emergency diesel engine gen-set included in the Equipment List section of this permit is certified to meet the EPA Tier 2 emission standards.

b. Engine information including make, model, serial number, model year, maximum engine power (bhp), and engine displacement for each emergency diesel engine gen-set.

c. The manufacturer's written operating instructions or procedures developed by the owner/operator that are approved by the engine manufacturer for each emergency diesel engine gen-set.

d. A log of monitoring device observations, as required by Condition 3.

e. Records of the reasons for operation for each emergency diesel engine gen-set, including, but not limited to, the date, cause of operation, cause of the emergency, the ISO-declared emergency notification, and the hours of operation.

f. Records for emergency diesel engine gen-set operations, as necessary, to demonstrate compliance with the operating limitations of Condition 5; which includes but is not limited to: times, dates, and reasons for operation of each emergency diesel engine gen-set that was operating between May 1 and September 30.

g. To verify compliance with Condition 6, maintain records of:

   i. The forecasted AQI, as determined by the AirNow website for Northern Virginia, for ozone for the day(s) that an emergency diesel engine gen-set operated during the integration operational period;

   ii. The measured AQI, as determined by the AirNow website for Northern Virginia, for ozone for the day(s) that the emergency diesel engine gen-set operated during the integration operational period;

   iii. Documentation recording any Air Alerts issued for that operating day, as determined by AirNow-EnviroFlash; and,

   iv. Details of commissioning activities, to include, but not limited to, clock hours and duration.

h. Annual hours of operation of each emergency diesel engine gen-set included in the Equipment List section of this permit, calculated as the sum of each consecutive 365-day period.

i. Annual fuel consumption of each emergency diesel engine gen-set included in the Equipment List sections of this permit, calculated as the sum of each consecutive 365-day period.

j. Annual diesel fuel consumption of each emergency diesel engine gen-set included in the Equipment List section of this permit for purposes of maintenance

checks/readiness testing, calculated daily as the sum of each consecutive 365-day period.

k. Annual fuel consumption for the combined operation of the 62 emergency diesel engine gen-sets (Ref. Nos.: 1 - 62), calculated daily as the sum of each consecutive 365-day period.

l. Annual fuel consumption for the combined operation of the 2 emergency diesel engine gen-sets (Ref. Nos.: T1 and T2), calculated daily as the sum of each consecutive 365-day period.

m. Annual emissions calculations for NOX (as NO2), CO, VOC, PM10, and PM2.5 from the emergency diesel engine gen-sets included in the Equipment List section of this permit, calculated daily as the sum of each consecutive 365-day period.

n. All fuel supplier certifications.

o. Results of all stack tests and visible emission evaluations.

p. Records of scheduled and unscheduled maintenance

q. Records of operator training.

r. Records of changes in settings that are permitted by the manufacturer of the emergency diesel engine gen-sets.

Compliance for the consecutive 365-day period shall be demonstrated daily by adding the total for the most recently completed day to the individual daily totals for the preceding 364 days.

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)

NOTIFICATIONS

22. Initial Notifications - The permittee shall furnish written notification of the items below to the Regional Air Compliance Manager, DEQ NRO at the following address:

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

The permittee shall submit one notification for each building containing information on each emergency engine gen-set as described below:

a. The actual date on which installation of the emergency diesel engine gen-sets in the building commenced within 30 days after such date. The notification must contain the following:

   i. Name and address of the permittee;
   ii. The building;
   iii. Unit reference number of the initial unit installed; and,
   iv. The date installation commenced.

b. The date that the integration operational period started for each emergency diesel engine gen-sets (Ref. Nos. 1-62) within 15 days after the last generator at each building completes its integration operational period. If a period of construction is paused or halted for 45 days this notification shall be provided to the DEQ within 15 days after completion of the integration operational period for the most recently installed emergency diesel engine gen-set. The notification must contain the following:

   i. Engine information including make, model, engine family, serial number, model year, maximum engine power, engine displacement, fuel used;
   ii. Installation date; and,
   iii. Integration operational period start and end dates.

For the purpose of this notification, the integrational operational period is defined as: the period of time beginning with the first time the affected unit is started on-site and ending with the affected unit is fully integrated with the sources electrical system. In no case shall this period exceed 30 days.
(9 VAC 5-80-1180 and 9 VAC 5-50-50)

SPECIAL CONDITIONS - TRANSITORY ENGINE GEN-SETS

23. Operation of the Transitory Engine Gen-Sets - The facility shall only operate the transitory emergency diesel engine gen-sets (Ref. Nos. T1 and T2) in support of the facility such as serving as back up during construction, commissioning, and maintenance of engine gen-sets (Ref. Nos. 1 through 44).
(9 VAC 5-80-1180)

24. Notifications - The permittee shall furnish the following written notifications to DEQ's NRO Air Compliance Manager of:

   a. The actual date and reason for each occurrence that each transitory emergency diesel engine gen-set (Ref. Nos. T1 and T2) was placed into service within 15 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; and

v. Hours operated.

b. The actual date of the removal of each transitory emergency diesel engine gen-set (Ref. Nos. T1 and T2) within 15 days after such date.

(9 VAC 5-80-1180)

GENERAL CONDITIONS

25. Permit Invalidation - This permit to construct the emergency diesel engine gen-sets shall become invalid, unless an extension is granted by the DEQ, if:

a. A program of continuous construction is not commenced within 18 months from the 'Original Permit Date' as listed for the diesel engine gen-sets in the Introduction section of this permit; or

b. A program of construction is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of the phased construction of a new stationary source or project.

(9 VAC 5-80-1210)

26. Permit Suspension/Revocation - This permit may be suspended or revoked if the permittee:

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

b. Fails to comply with the conditions of this permit;

c. Fails to comply with any emission standards applicable to a permitted emissions unit;

d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or

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

(9 VAC 5-80-1210 G)

27. 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)

28. Maintenance/Operating Procedures - At all times, including periods of start-up, shutdown, soot blowing, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated monitoring devices and 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)

29. Record of Malfunctions - The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.
(9 VAC 5-20-180 J and 9 VAC 5-80-1180 D)

30. Notification for Facility or Control Equipment Malfunction - The permittee shall furnish notification to the Regional Air Compliance Manager, DEQ NRO of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour. Such notification shall be made 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 14 days 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, DEQ NRO.
(9 VAC 5-20-180 C and 9 VAC 5-80-1180)

31. 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)

32. Change of Ownership - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current minor NSR permit issued to the previous owner. The new owner shall notify the DEQ's NRO of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)

33. Permit Copy - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
(9 VAC 5-80-1180)

Attachment A

Source Testing Report Format

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