

# Commonwealth of Virginia VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

# NORTHERN REGIONAL OFFICE 13901 Crown Court, Woodbridge, Virginia 22193 (703) 583-3800 FAX (804) 698-4178 www.deq.virginia.gov

Ann Jennings Secretary of Natural and Historic Resources David K. Paylor Director (804) 698-4000

Thomas A. Faha Regional Director

October 6, 2021

Mr. François Sterin President Mr. Jeff Hudson Datacenter Manager OVHcloud 6872 Watson Court Warrenton, VA 20187

> Location: Fauquier County Registration No.: 74127

## Dear Messrs. Sterin and Hudson:

Attached is a permit to construct and operate a data center in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. This permit document combines the terms and conditions from, and supersedes, your permit document dated October 13, 2017.

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 August 16, 2021.

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 OVHcloud of the responsibility to comply with all other local, state, and federal permit regulations.

The proposed diesel fired emergency engine generator sets (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 units 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 may be also responsible for any monitoring, notification, reporting and recordkeeping requirements of the MACT and NSPS. Notifications shall only be sent to EPA, Region III.

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 Ms. Katie DeVoss at (703) 583-3861 or katie.devoss@deq.virginia.gov.

Sincerely,

Justin A. Wilkinson

Regional Air Permit Manager

TAF/JAW/KD/mNSR(2021-10-06)

Attachment: Permit



# Commonwealth of Virginia VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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www.deq.virginia.gov

Ann Jennings Secretary of Natural and Historic Resources David K. Paylor Director (804) 698-4000

Thomas A. Faha Regional Director

## STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

This permit document combines the terms and conditions from, and supersedes, your permit document dated October 13, 2017.

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

Vint Hill Data Center, LLC 6872 Watson Court Warrenton, VA 20186 Registration No.: 74127

is authorized to construct and operate

emergency diesel engine generator-sets (gen-sets)

located at

Vint Hill Data Center, LLC 6872 Watson Court Warrenton, VA 20186 (Fauquier County)

in accordance with the Conditions of this permit.

Approved on October 6, 2021.

Thomas A. Faha Regional Director

Permit consists of 14 pages. Permit Conditions 1 to 26.

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#### INTRODUCTION

This permit approval is based on the permit applications dated August 4, 2017 and June 8, 2021 including supplemental information dated August 21, 2017 and August 16, 2021. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-20 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

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

<b>Equipment to be Constructed:</b>						
Ref. No(s).	<b>Equipment Description</b>	Rated Capacity	Delegated Federal Requirements	Original Permit Date		
5 through 8 and 10	Five (5) Kohler Model 2000REOZMD emergency diesel engine gen-sets	2,923 bhp 2,000 ekW (each unit)	None	October 6, 2021		

Equipment previously permitted:						
Ref.	Equipment Description	Maximum Rated	Delegated Federal	Original Permit		
No(s).		Capacity	Requirements	Date		
1	Four (4) Kohler Model	2,923 bhp		October 13,		
through	2000REOZMD emergency	2,000 ekW	None	2017		
4	diesel engine gen-sets	(each unit)		2017		

Equipment Exempt from Permitting:					
Ref. No(s).	<b>Equipment Description</b>	Rated Capacity	Exemption Citation	Exemption Date	
1 through 4	Diesel fuel oil sub base storage tanks one each for the Kohler Model emergency diesel engine gen-sets	1,350 gallons (each storage tank)	9 VAC 5- 80-1105 B.4	October 13, 2017	
5 through 8 and 10	Diesel fuel oil sub base storage tanks one each for the Kohler Model emergency diesel engine gen-sets	1,350 gallons (each storage tank)	9 VAC 5- 80-1105 B.4	October 6, 2021	
9	Diesel fuel underground storage tank	20,000 gallons	9 VAC 5- 80-1105 B.4	October 6, 2021	

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** Emissions from the emergency diesel engine gen-sets shall be controlled by the following:
  - a. Nitrogen oxides (NO<sub>X</sub>) emissions from each emergency diesel engine gen-set (Ref. Nos. 1 through 8 and 10) shall be controlled by turbocharged engines and charge coolers. The permittee shall maintain documentation that demonstrates the control devices have been installed on each emergency diesel engine gen-set.
  - b. Visible emissions, particulate matter emissions (PM<sub>10</sub>/PM<sub>2.5</sub>), carbon monoxide (CO) emissions, volatile organic compound (VOC) emissions, and nitrogen oxide (NO<sub>X</sub>) emissions from the emergency diesel engine gen-sets (Ref. Nos. 1 through 8 and 10) 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)

2. **Monitoring** – Each emergency diesel engine gen-set (Ref. Nos. 1 through 8 and 10) shall be equipped with a non-resettable hour metering device to monitor the operating hours.

Each monitoring device (as required above) shall be observed 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. The details of the monitoring device calibrations are to be arranged with the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO).

Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the emergency diesel engine gen-sets are operating. (9 VAC 5-80-1180 D and 9 VAC 5-50-20(C))

## **OPERATING LIMITATIONS**

- 3. **Operation of the Engine Gen-Sets** The permittee shall operate and maintain each emergency diesel engine gen-set (Ref. Nos. 5 through 8 and 10) 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)
- 4. **Operating Limitations (Ozone Season)** No emergency diesel engine gen-set (Ref. Nos. 5 through 8 and 10) shall be operated for scheduled maintenance checks (Scheduled MCRT), readiness testing, stack testing, or operational training (that involves fuel combustion) between the hours of 7 a.m. to 5 p.m. any day during May 1 through September 30. (9 VAC 5-80-1180)
- 5. **Operating Limitations (Ozone Season) Integration Operational Period** During the integration operational period of each emergency diesel engine gen-set (Ref. Nos. 5 through 8 and 10), any operation of the unit (that involves fuel combustion) between the hours of 7 a.m. to 5 p.m. 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 (<a href="https://airnow.gov">https://airnow.gov</a>) for Northern Virginia for that day is less than or equal to 100. In the event that AirNow-EnviroFlash (<a href="https://www.enviroflash.info">www.enviroflash.info</a>) issues an Air Alert for Northern Virginia for a day which the forecasted AQI for ozone was less than or equal to 100, operation of each unit (which involves fuel combustion) shall be minimized to the maximum extent practical. (9 VAC 5-80-1180)
- 6. **Emergency Power Generation** The emergency diesel engine gen-sets (Ref. Nos. 1 through 8 and 10) shall only be operated in the following modes:
  - a. In situations that arise from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:
    - i. A failure of the electrical grid;
    - ii. On-site disaster or equipment failure; or

- iii. Public service emergencies such as flood, fire, natural disaster, or severe weather conditions.
- b. For participation in an ISO-declared emergency, where an ISO emergency is:
  - i. An abnormal system condition requiring manual or automatic action to maintain system frequency, to prevent loss of firm load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property;
  - ii. Capacity deficiency or capacity excess conditions;
  - iii. A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel:
  - iv. Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state; or
  - v. An abnormal event external to the ISO service territory that may require ISO action.
- c. For scheduled maintenance checks and readiness testing (Scheduled MCRT).
- d. For unscheduled maintenance, testing, and operational training.
- e. For the integration operational period, which is the period of time beginning with the first time the affected units 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 operations under the scenarios above, shall not exceed the limits stated in Condition 10. (9 VAC 5-80-1180)

7. **Operating Hours** – Each individual emergency diesel engine gen-set (Ref. Nos. 1 through 4) shall not operate more than 100 hours per year for scheduled maintenance checks and readiness testing (Scheduled MCRT), unscheduled maintenance, testing, and operational training (as provided in Conditions 6.c and 6.d) and no more than 500 hours per year for all purposes (as provided in Condition 6) combined.

Each individual emergency diesel engine gen-set (Ref. Nos. 5 through 8 and 10) shall not operate more than 30 hours per year for scheduled maintenance checks and readiness testing (Scheduled MCRT, as provided in Condition 6.c). Each individual emergency diesel engine gen-set (Ref. Nos. 5 through 8 and 10) shall not operate more than 500 hours per year for all purposes (as provided in Condition 6) combined.

The annual limits for hours of operation shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be

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demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-1180)

8. **Fuel Specification** – The approved fuel for the emergency diesel engine gen-sets (Ref. Nos. 1 through 8 and 10) is ultra-low sulfur diesel fuel oil and shall meet the specifications below:

## ULTRA LOW SULFUR 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 40 or maximum aromatic content of 35 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)

- 9. **Fuel Certification** The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier;
  - 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 complies with the requirements of Condition 8 (Fuel Specification)

Alternatively, the permittee shall obtain approval from the Regional Air Compliance Manager of the DEQ's NRO, if other documentation will be used to certify the diesel fuel oil type.

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

#### **EMISSION LIMITS**

10. **Emission Limits** – Emissions from the operation of the emergency diesel engine gen-sets (Ref. Nos. 1 through 8 and 10) shall not exceed the limits specified below:

Pollutant	Ref. Nos. 1 through 8 and 10 (each unit)	Ref. Nos. 1 through 8 and 10 (all units combined)
Nitrogen Oxides (NO <sub>x</sub> as NO <sub>2</sub> )	35.15 lb/hr	79.09 tons/yr
Carbon Monoxide (CO)	4.69 lb/hr	10.56 tons/yr
Volatile Organic Compounds (VOCs)	1.72 lb/hr	3.87 tons/yr
Particulate Matter (PM <sub>10</sub> )	0.67 lb/hr	1.51 tons/yr
Particulate Matter (PM <sub>2.5</sub> )	0.67 lb/hr	1.51 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 may be determined as stated in Conditions 1 and 7, or other means acceptable to DEQ. (9 VAC 5-80-1180)

11. **Visible Emission Limit** – Visible emissions from each emergency diesel engine gen-set (Ref. Nos. 1 through 8 and 10) 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 from each engine gen-set (Ref. Nos. 1 through 8 and 10) shall not exceed 10% opacity except during one six-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 5-170-160)

# INITIAL COMPLIANCE DETERMINATION

- 12. **Stack Test** Initial performance tests shall be conducted on 2 (two) emergency diesel engine gen-sets (Ref. Nos. 5 through 8 and 10) for NO<sub>X</sub> (as NO<sub>2</sub>) and CO using appropriate EPA reference methods as approved by the Regional Air Compliance Manager of the DEQ's NRO to determine compliance with the emission limits contained in Condition 10.
  - a. Emissions testing of each pollutant for each selected emergency diesel engine gen-set shall consist of three one-hour test runs under load. The average of the three runs shall be reported as the short-term emission rate for that emergency diesel engine gen-set.
  - b. Testing shall be performed on the exhaust stack of the emergency diesel engine gensets to demonstrate compliance with the  $NO_X$  and CO emission limits specified in Condition 10. Testing shall be conducted with the emergency diesel engine gen-set operating at  $\geq 90$  percent of its rated capacity, unless multiple load band testing is approved by DEQ;
  - c. Recorded emergency diesel engine gen-set operational information shall include, but not be limited to:
    - i. Generator load/kilowatt output.

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- ii. Fuel consumption and fuel sulfur content of the diesel fuel oil.
- d. Perform testing to demonstrate compliance within 120 days after the integration operational period has commenced. The integration operational period is defined as: 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 source electrical system. In no case shall the integration operational period exceed 30 days. 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 9 VAC 5-50-30;
- e. The details of the tests are to be arranged with the Regional Air Compliance Manager of DEQ's NRO. The permittee shall submit the test protocol to the Regional Air Compliance Manager of DEQ's 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;
- f. Should conditions occur which would require rescheduling the testing, the permittee shall notify the Regional Air Compliance Manager of DEQ's NRO, in writing, within seven days of the scheduled test date or as soon as the rescheduling is deemed necessary; and
- g. 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's NRO within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC5-50-30 and 9 VAC5-80-1200)

- 13. **Visible Emissions Evaluation** Concurrent with the initial performance tests required in Condition 12, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the permittee on the emergency diesel engine gen-sets selected for initial performance testing. The details of the tests are to be arranged with the Regional Air Compliance Manager of DEQ's NRO. The permittee shall submit a VEE protocol in conjunction with the initial stack test protocol required by Condition 12, 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 (7) days, and visible emissions testing shall be rescheduled within thirty-days. Rescheduled testing shall be conducted under the same operating conditions 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 sixty

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(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

14. **Facility Construction** – The emergency diesel engine gen-sets 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 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)

15. **Emission Testing/Visible Emissions Evaluation** – Upon request by the DEQ, the permittee shall conduct stack tests and/or visible emission evaluations of the emergency diesel engine gen-sets (Ref. Nos. 1 through 8 and 10) 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 5-80-1200 and 9 VAC 5-50-30 G)

# **RECORDS**

- 16. **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. These records shall include, but are not limited to:
  - a. The monthly log of the monitoring device observations as required by Condition 2.
  - b. The monthly summary table for each emergency diesel engine gen-set (Ref. Nos. 1 through 4) to include:
    - i. Engine operating hours; and
    - ii. Reasons for operating as defined in Condition 6.
  - c. Records of the reasons for operation for each emergency diesel engine gen-set (Ref. Nos. 5 through 8 and 10), including, but not limited to, the date, cause of operation, cause of the emergency, the ISO-declared emergency notification, and the hours of operation.
  - d. Annual hours of operation (all purposes) of each emergency diesel engine gen-set (Ref. Nos. 1 through 8 and 10), calculated monthly as the sum of each consecutive 12-month period.

- e. Annual hours of operation of each emergency diesel engine gen-set (Ref. Nos. 1 through 4), for purposes of scheduled maintenance checks and readiness testing (Scheduled MCRT), unscheduled maintenance, testing, and operational training, calculated monthly as the sum of each consecutive 12-month period.
- f. Annual hours of operation of each emergency diesel engine gen-set (Ref. Nos. 5 through 8 and 10), for purposes of scheduled maintenance check and readiness testing (Scheduled MCRT), calculated monthly as the sum of each consecutive 12-month period.
- g. Annual emissions calculations for  $NO_X$  (as  $NO_2$ ), CO, VOC,  $PM_{10}$ , and  $PM_{2.5}$  from the emergency diesel engine gen-sets (Ref. Nos. 1 through 8 and 10), with annual emissions, calculated monthly, as the sum of each consecutive 12-month period, to verify compliance with the annual emission limits in Condition 10.
- h. All fuel supplier certifications.
- i. Results of all stack tests and visible emission evaluations.
- j. A copy of the maintenance schedule and records of unscheduled and scheduled maintenance checks and readiness testing (Scheduled MCRT) in accordance with Condition 21.
- k. Operator training in accordance with Condition 21.
- 1. Records of the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer.
- m. Records of changes in settings that are permitted by the manufacturer of the emergency diesel engine gen-sets.
- n. For emergency diesel engine gen-sets (Ref. Nos. 1 through 8 and 10), maintain documentation from the manufacturer that the emergency diesel engine gen-sets are certified to meet the EPA's Tier 2 emission standards.
- o. Engine information including make, model, serial number, model year, maximum engine power (bhp), and engine displacement for each emergency diesel engine genset (Ref. Nos. 5 through 8 and 10).
- p. Records, as necessary, to demonstrate compliance with the operating limitations of Condition 4; which includes but is not limited to: times, dates and reasons for operation of each diesel engine gen-set that was operating between May 1 and September 30.
- q. To verify compliance with Condition 5, maintain records for the emergency diesel engine gen-sets (Ref. Nos. 5 through 8 and 10) of:

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- i. The forecasted AQI, as determined by the AirNow website for Northern Virginia, for ozone for the days 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 days that an 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.

Compliance for the consecutive 12-month period (as applicable for the items above) shall be demonstrated monthly by adding the total for the most recently completed month to the individual monthly totals for the preceding 11-months.

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

#### **NOTIFICATIONS**

17. **Initial Notifications** – The permittee shall furnish written notification of the items below to the Regional Air Compliance Manager of the DEQ's NRO at the following address:

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

The permittee shall submit notification(s) for each building containing the information as described below:

- a. The actual date on which installation of the emergency diesel engine gen-sets (Ref. Nos. 5 through 8 and 10) commenced in each building, 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.

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b. The start and end dates of the integration operational period for each emergency diesel engine gen-set (Ref. Nos. 5 through 8 and 10) 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 engine gen-set. The notification must contain the following:

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

For the purpose of this notification, the integration operational period is defined as 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 source's electrical system. (9 VAC 5-50-20)

#### **GENERAL CONDITIONS**

- 18. **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 date of this permit, or if
  - 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)

- 19. **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

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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)

- 20. **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)

21. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, soot blowing, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

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

- 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)

22. **Notification for Facility or Control Equipment Malfunction** – The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's 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 (4) 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 fourteen (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 of the DEQ's NRO.

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

23. **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)

- 24. **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)
- 25. **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 thirty (30) days of the transfer.

(9 VAC 5-80-1240)

26. **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

#### Cover

- 1. Plant name and location
- 2. Units tested at source (indicate Ref. No. used by source in permit or registration)
- 3. Tester name, address and report date

## Certification

- 1. Signed by team leader / certified observer (include certification date)
- \*2. Signed by reviewer

#### Introduction

- 1. Test purpose
- 2. Test location, type of process
- 3. Test dates
- \*4. Pollutants tested
- 5. Test methods used
- 6. Observers' names (industry and agency)
- 7. Any other important background information

# Summary of Results

- 1. Pollutant emission results / visible emissions summary
- 2. Input during test vs. rated capacity
- 3. Allowable emissions
- \*4. Description of collected samples, to include audits when applicable
- 5. Discussion of errors, both real and apparent

# Source Operation

- 1. Description of process and control devices
- 2. Process and control equipment flow diagram
- 3. Process and control equipment data

# \* Sampling and Analysis Procedures

- 1. Sampling port location and dimensioned cross section
- 2. Sampling point description
- 3. Sampling train description
- 4. Brief description of sampling procedures with discussion of deviations from standard methods
- 5. Brief description of analytical procedures with discussion of deviation from standard methods

## Appendix

- \*1. Process data and emission results example calculations
- 2. Raw field data
- \*3. Laboratory reports
- 4. Raw production data
- \*5. Calibration procedures and results
- 6. Project participants and titles
- 7. Related correspondence
- 8. Standard procedures
- \* Not applicable to visible emission evaluations