Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

April 30, 2025

Mr. Zach Miller
Facility Manager
Hayden Technologies LLC
1600 Amphitheatre Parkway
Mountain View, CA 94043

Location: Loudoun County
Registration No.: 74163

Dear Mr. Miller:

Attached is a minor new source review permit to construct and operate emissions units at Hayden Technologies LLC's 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 supersedes your permit document dated January 3, 2024.

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 6, 2025.

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

The diesel engines may be subject to the requirements of 40 CFR 60, New Source Performance Standards (NSPS) Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, National Emission Standards for Hazardous Air Pollutants (MACT) Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. In summary, the units may be required to comply with certain federal emission standards and operating limitations. The DEQ advises you to review the referenced MACT and NSPS to ensure compliance with applicable emission and operation 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:

Michael S. Rolband, 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 30 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. Cameron Stewart at (571) 866-6093 or via email at cameron.stewart@deq.virginia.gov.

Sincerely,

Justin A. Wilkinson, Regional Air Permit Manager
Virginia Department of Environmental Quality
justin.wilkinson@deq.virginia.gov
Northern Regional Office
13901 Crown Court, Woodbridge, VA 22193
(703) 583-3800

JAW/CLS/74163 mNSR (2025-04-30)

Attachment: Permit

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Stefanie K. Taillon
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE

This permit document supersedes your permit document dated January 3, 2024.

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

Hayden Technologies LLC
1600 Amphitheatre Parkway
Mountain View, CA 94043
Registration No.: 74163

is authorized to construct and operate

emissions units at a data center

located at

20491 Goose Landing Lane
Leesburg, VA 20175
(Loudoun County)

in accordance with the Conditions of this permit.

Approved on: April 30, 2025

Justin A. Wilkinson
Regional Air Permit Manager

Permit consists of 25 pages (w/o attachment).
Permit Conditions 1 to 43.
Attachment A: Source Testing Report Format (1 page)

INTRODUCTION

This permit approval is based on the permit applications and supplemental information listed below:

Application Signature Date	Supplemental Information Received Date	Approval/ Amendment Date
August 7, 2018	September 21, 2018 November 13, 2018	November 13, 2018
June 26, 2019	-	August 16, 2019
February 24, 2020	March 27, 2020 May 21, 2020 June 4, 2020 June 8, 2020 June 11, 2020 July 14, 2020 July 16, 2020 July 22, 2020 July 23, 2020 July 28, 2020 August 26, 2020 September 1, 2020 September 18, 2020 September 25, 2020 September 28, 2020 October 6, 2020 October 7, 2020 October 8, 2020 October 19, 2020 October 21, 2020 October 29, 2020 November 3, 2020 November 4, 2020 November 9, 2020	November 13, 2020
January 29, 2021 Addendum: April 13, 2021	April 1, 2021 April 5, 2021 April 8, 2021	June 15, 2021
April 22, 2021	July 20, 2021 July 26, 2021	August 23, 2021
June 10, 2021	June 15, 2021 July 9, 2021 October 5, 2021 November 11, 2021	December 3, 2021
October 17, 2022	-	January 6, 2023
August 30, 2023	October 5, 2023 December 1, 2023 December 21, 2023	January 3, 2024
October 29, 2024	November 18, 2024 December 16, 2024 February 6, 2025	April 30, 2025

Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-80-1110 (definitions) and 9 VAC 5-10-20 of the State Air Pollution Control Board's (Board) Regulations for the Control and Abatement of Air Pollution (Regulations). The regulatory reference or authority for each condition is listed in parentheses () after each condition. The enabling permit program, or permit programs, is provided below each permit condition in the regulatory authority parenthetical as follows: 9VAC5-80-850 for Article 5, 9VAC5-80-1180 for Article 6, 9VAC5-80-1985 for Article 8, and 9VAC5-80-2050 for Article 9. The most recent effective date for a term or condition is listed in brackets [ ]. When identical conditions for one or more emission units are combined, the effective date listed in this permit does not alter the prior effective date(s) for any such conditions as issued in a previous permit action. In accordance with 9VAC5-80-1120F, any condition not marked as state-only enforceable (SOE) is state and federally enforceable.

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.

Equipment List – Equipment at this facility subject to the permit requirements of 9 VAC 5-80-1100 *et seq.* consists of:

Equipment To Be Constructed:

Reference No.	Equipment Description	Rated Capacity (each unit)	Add-On Control Technology	Delegated Federal Requirements	Original Permit Date
FWP2	One (1) Peerless Fire Pump Model 6AEF17 equipped with Clarke Diesel Engine Model JU6H-UFADMG	175 bhp 131 kW	--	None	April 30, 2025

Previously Permitted Equipment:

Reference No.	Equipment Description	Rated Capacity (each unit)	Add-On Control Technology	Delegated Federal Requirements	Original Permit Date
FWP1	One (1) Clarke Fire Pump Model JU4H-UFAEF2 equipped with John Deere Diesel Engine Model 4045TF290C	74 bhp 55 ekW	--	None	December 3, 2021
Group 1 EG1 through EG26 and EG193 through EG260	Ninety-four (94) Caterpillar 3516E Emergency Diesel Engine Generator Sets	4,043 bhp 2,750 ekW (each)	--	None	Ref. Nos. EG1 through EG26 November 13, 2018 Ref. Nos. EG193 through EG260 November 13, 2020

Reference No.	Equipment Description	Rated Capacity (each unit)	Add-On Control Technology	Delegated Federal Requirements	Original Permit Date
Group 2 EG53 through EG62 and EG261 through EG279	Twenty-nine (29) Caterpillar 3512C Emergency Diesel Engine Generator Sets	2,584 bhp 1,750 ekW (each)	--	None	Ref. Nos. EG53 through EG62 November 13, 2018 Ref. Nos. EG261through EG279 November 13, 2020
Group 3 Power Blocks A through Z (EG63 through EG192) A: EG63 through EG67 B: EG68 through EG72 C: EG73 through EG77 D: EG78 through EG82 E: EG83 through EG87 F: EG88 through EG92 G: EG93 through EG97 H: EG98 through EG102 I: EG103 through EG107 J: EG108 through EG112 K: EG113 through EG117 L: EG118 through EG122 M: EG123 through EG127 N: EG128 through EG132 O: EG133 through EG137 P: EG138 through EG142 Q: EG143 through EG147 R: EG148 through EG152 S: EG153 through EG157 T: EG158 through EG162 U: EG163 through EG167 V: EG168 through EG172 W: EG173 through EG177 X: EG178 through EG182 Y: EG183 through EG187 Z: EG188 through EG192	One hundred thirty (130) Volvo Penta TWD1673GE Non-Emergency Diesel Engine Generator Sets	937 bhp 699 mkW (625 ekW) (each)	Selective Catalytic Reduction (SCR)	None	November 13, 2020, as modified January 3, 2024
CT1 through CT20	Twenty (20) Cooling Towers	309,600 gph (each)	--	None	November 13, 2020

Reference No.	Equipment Description	Rated Capacity (each unit)	Add-On Control Technology	Delegated Federal Requirements	Original Permit Date
CT21 and CT22	Two (2) Cooling Towers	309,600 gph (each)	--	None	January 3, 2024

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 (Ref. Nos. EG1 through EG26, EG53 through 62, and EG193 through EG279), the non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) and the fire pump diesel engines (Ref. Nos. FWP1 and FWP2) shall be controlled by the following:

   a. Nitrogen oxides (NO_X) emissions for the emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through 62, and EG193 through EG279), the non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) shall be controlled by electronic fuel injection, turbocharged engine, and charge-air coolers. The permittee shall maintain documentation that demonstrates the control device/technology have been installed on each emergency diesel engine gen-set and non-emergency diesel engine gen-set.

   b. Nitrogen oxides (NO_X) emissions for the fire pump diesel engines (Ref. Nos. FWP1 and FWP2) shall be controlled by engine design.

   c. Carbon monoxide (CO) emissions, particulate matter (PM_{10} and $PM_{2.5}$) emissions, volatile organic compounds (VOC) emissions, and visible emissions from the emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), the non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) and the fire pump diesel engines (Ref. Nos. FWP1 and FWP2) shall be controlled by the use of the good operating practices and performing appropriate maintenance in accordance with the manufacturer's recommendations. In addition, the permittee may only change those settings that are permitted by the manufacturer and does not degrade the air emissions from the emergency diesel engine gen-sets, non-emergency diesel engine gen-sets, and fire pump diesel engines.

   (9 VAC 5-80-1180 and 9 VAC 5-50-260) [4/30/2025]

2. **Emission Controls –** Nitrogen oxides (NO_X) emissions from each non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) shall be controlled by closed loop Selective Catalytic Reduction (SCR). Each SCR system shall be equipped with monitoring devices to continuously monitor the status of the SCR system which include, but are not limited to, exhaust gas temperature and NO_X emissions measured after the catalyst while the non-emergency diesel engine gen-sets are operational. Engine exhaust gas shall be treated with DEF except for periods of start-up, shutdown, or malfunction.

   Engine exhaust gas from each non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) shall be treated with DEF prior to the engine gen-set operating at twenty-five percent (25%) of the total rated generator capacity in electrical kilowatt output, or 156 ekW. The facility shall demonstrate that the engine exhaust gas is being treated with DEF prior to the engine gen-set operating at twenty-five percent (25%) of the total rated generator capacity in electrical kilowatt output, or 156 ekW in accordance with Condition 29 of this permit.

In the event that the SCR monitoring device indicates an operational parameter is not within manufacturer's recommendations, the facility shall follow the procedure of the SCR Monitoring Plan as required by Condition 9. The SCR shall be provided with adequate access for inspection and shall be in operation when the non-emergency diesel engine gen-sets are operating as stated above.
(9 VAC 5-80-1180 and 9 VAC 5-50-260) [1/3/2024]

3. **Emission Controls –** Particulate emissions from the twenty-two (22) cooling towers (Ref. Nos. CT1 through CT22) shall be controlled by drift eliminator designed for 0.0005% loss. The drift eliminator shall be provided with adequate access for inspection and shall be in operation when the cooling tower is operating.
(9 VAC 5-80-1180 and 9 VAC 5-50-260) [1/3/2024]

4. **Monitoring Devices –** Each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through 62, and EG193 through EG279), non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192), and the fire pump diesel engines (Ref. Nos. FWP1 and FWP2) shall be equipped with a non-resettable hour metering device to monitor the operating hours. The non-resettable hour meter used to continuously measure the hours of operation for each emergency diesel engine gen-set, non-emergency diesel engine gen-set, and fire pump diesel engine shall be observed by the owner with a frequency of not less than once each day the respective emissions unit is operated. The owner 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. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the emergency diesel engine gen-sets, non-emergency diesel engine gen-sets, and fire pump diesel engines are operating.
   (9 VAC 5-80-1180 D) [4/30/2025]

5. **Monitoring Devices –** Each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), and each Power Block (Ref. Nos. A through Z) of non-emergency diesel engine gen-sets shall be equipped with a device to continuously measure and record fuel consumption (in gallons). The device shall be observed by the owner with a frequency of not less than once each day the respective emissions unit set is operated. The owner 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. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the emergency diesel engine gen-sets and non-emergency diesel engine gen-sets are operating.
   (9 VAC 5-80-1180 D) [1/3/2024]

6. **Monitoring Devices –** Each non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) shall be equipped with a device/system to continuously monitor and record the kilowatt output of non-emergency diesel engine gen-set.
(9 VAC 5-80-1180 D) [1/3/2024]

7. **Monitoring Devices –** Each SCR for each non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) shall be equipped with a device to continuously measure and record status of the SCR control system. Parameters observed shall include, but are not limited to, exhaust gas temperature and NO_X concentrations measured after the catalyst. The monitoring device shall be equipped with a mechanism to detect parameters which exceed manufacturer's recommended thresholds and trigger an alarm to operators when the unit is not operating within the manufacturer's recommended conditions. The status of the SCR control system shall be recorded continuously when each non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) is in operation, and correlated to run date, engine load/kilowatt output, and engine operating hours. The device shall be equipped with a mechanism which immediately alerts the operator when the status of the SCR monitoring system indicates a parameter is not within manufacturer's recommended thresholds.

   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 SCR is operating.
   (9 VAC 5-80-1180 D) [1/3/2024]

OPERATING/EMISSION LIMITATIONS

8. **Operation of the Engine-Generator Sets –** The permittee shall operate and maintain each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), the non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192), and the fire pump diesel engines (Ref. Nos. FWP1 and FWP2) 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) [4/30/2025]

9. **SCR Monitoring Plan –** The facility shall maintain a plan and procedure, for instances when the monitoring device identified in Condition 7 detects an alarm. The content and format of such SCR Monitoring Plan shall be arranged with the Regional Air Compliance Manager of DEQ NRO. If the SCR Monitoring Plan is amended, the facility shall submit a copy to the Regional Air Compliance Manager of DEQ NRO within 15 days.
   (9 VAC 5-80-1180) [1/3/2024]

10. **Operating Limitations (Ozone Season) –** The emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through 62, and EG193 through EG279), non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192), and the fire pump diesel engines (Ref. Nos. FWP1 and FWP2) shall not be operated for scheduled maintenance, testing, or operation training (that involves fuel combustion) between the hours of 7 a.m. to 5 p.m. any

day during May 1 through September 30. The permittee may petition of the Regional Air Compliance Manager of DEQ NRO for exception to this requirement, with approvals made on a case-by-case basis.
(9 VAC 5-80-1180) [4/30/2025]

11. **Operating Limitations (Ozone Season) – Integration Operational Period –** During the integration operational period of each emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through 62, and EG193 through EG279), and non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192), 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 (**https://airnow.gov**) for Northern Virginia for that day is less than or equal to 100. In the event that AirNow-EnviroFlash (**www.enviroflash.info**) issues an Air Alert for Metropolitan Washington, D.C. 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) [1/3/2024]

12. **Emergency Power Generation** – The emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279) 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 unit is started on-site and ending when the affected unit is fully integrated with the sources electrical system.

(9 VAC 5-80-1180) [1/3/2024]

13. **Fire Pump Operation –** The fire pump diesel engines (Ref. Nos. FWP1 and FWP2) shall only be operated to provide power to pump water for fire suppression or protection and for periodic maintenance, testing, and operational training.
(9 VAC 5-80-1180) [4/30/2025]

14. **Operating Hours –**

a. Each individual emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279) shall not operate more than 20 hours per year for scheduled maintenance checks and readiness testing (Scheduled MCRT) (as provided in Condition 12.c.).

b. Each individual emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279) shall not operate more than 500 hours per year for all purposes (as provided in Condition 12) combined.

c. Each fire pump diesel engine (Ref. Nos. FWP1 and FWP2) shall not operate more than 100 hours per year for all purposes (as provided in Condition 13) 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 demonstrated daily 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) [4/30/2025]

15. **Diesel Fuel Throughput Limit –** The emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), and the non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) shall only consume a combined quantity of diesel fuel oil (in gallons) each consecutive 365-day period (all uses), as demonstrated by using the following equation:

$$\frac{\text{Group 1 Fuel Consumption}}{690{,}909 \text{ gallons}} + \frac{\text{Group 2 Fuel Consumption}}{685{,}921 \text{ gallons}} + \frac{\text{Group 3 (with SCR) Fuel Consumption}}{1{,}250{,}000 \text{ gallons}} + \frac{\text{Group 3 (without SCR) Fuel Consumption}}{532{,}213 \text{ gallons}} \leq 1$$

Where:

Generator Set Group	Generator Ref. Nos. (Model)
Group 1	EG1 through EG26 and EG193 through EG260 (Caterpillar 3516E)
Group 2	EG53 through EG62 and EG261 through EG279 (Caterpillar 3512C)
Group 3	EG63 through EG192 (Volvo Penta TWD1673GE)

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) [1/3/2024]

16. **Fuel Specification –** The approved fuels for the emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), the non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) and the fire pump diesel engine (Ref. No. FWP1) are ultra-low sulfur diesel fuel oil, hydrotreated vegetable oil (HVO) or a blend of these fuels, and shall meet the specifications below:

    a. Does not exceed the American Society for Testing and Materials (ASTM) specification, D975, for ultra-low sulfur grade No. 1-D S15 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 and 9 VAC 5-50-260) [4/30/2025]

17. **Fuel Specification –** The approved fuel for the fire pump diesel engine (Ref. No. FWP2) is ultra-low sulfur diesel fuel oil, and shall meet the specifications below:

    a. Does not exceed the American Society for Testing and Materials (ASTM) specification, D975, for ultra-low sulfur grade No. 1-D S15 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 and 9 VAC 5-50-260) [4/30/2025]

18. **Fuel Certification –** The permittee shall obtain a certification from the fuel supplier with each shipment of fuel for the emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), the non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) and the fire pump diesel engine (Ref. No. FWP1). Each fuel supplier certification shall include the following:

    a. The name of the fuel supplier;

    b. The date on which the fuel was received;

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

    d. A statement that the fuel complies with the requirements of Condition 16 (Fuel Specification).

    Alternatively, the permittee must obtain approval from the Regional Air Compliance Manager of DEQ NRO, if other documentation will be used to certify the fuel 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 16. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
    (9 VAC 5-80-1180) [4/30/2025]

19. **Fuel Certification –** The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel for the fire pump diesel engine (Ref. No. FWP2). Each fuel supplier certification shall include the following:

    a. The name of the diesel fuel supplier;

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

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

d. A statement that the diesel fuel complies with the requirements of Condition 17 (Fuel Specification).

Alternatively, the permittee must obtain approval from the Regional Air Compliance Manager of DEQ NRO, if other documentation will be used to certify the diesel fuel 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 17. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-1180) [4/30/2025]

20. **Cooling Tower Limits –** The Total Dissolved Solid (TDS) concentration in the process water in each cooling tower (Ref. Nos. CT1 through CT22) shall not exceed 2,500 ppm TDS.
(9 VAC 5-80-1180) [1/3/2024]

EMISSION LIMITS

21. **Emission Limits (Hourly) –** Emissions from the operation of each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26 and EG193 through EG260)(Group 1) shall not exceed the limits specified below:

Pollutant	Group 1 (Ref. Nos. EG1 through EG26 and EG193 through EG260)
Nitrogen Oxides (as NO_2)	53.48 lb/hr
Carbon Monoxide (CO)	10.34 lb/hr
Volatile Organic Compounds (VOC)	1.25 lb/hr
Particulate Matter (PM_{10})	1.01 lb/hr
Particulate Matter ($PM_{2.5}$)	1.01 lb/hr

Compliance with these pollutant emission limits shall be based on the proper operation and maintenance of the emergency diesel engine gen-sets or by testing, if required.
(9 VAC 5-80-1180 and 9 VAC 5-50-260) [1/3/2024]

22. **Emission Limits (Hourly) –** Emissions from the operation of each emergency diesel engine gen-set (Ref. Nos. EG53 through EG62 and EG261 through EG279)(Group 2) shall not exceed the limits specified below:

Pollutant	**Group 2 (Ref. Nos. EG53 through EG62 and EG261 through EG279)**
Nitrogen Oxides (as NO_2)	34.18 lb/hr
Carbon Monoxide (CO)	5.90 lb/hr
Volatile Organic Compounds (VOC)	0.91 lb/hr
Particulate Matter (PM_{10})	0.55 lb/hr
Particulate Matter ($PM_{2.5}$)	0.55 lb/hr

Compliance with these pollutant emission limits shall be based on the proper operation and maintenance of the emergency diesel engine gen-sets or by testing, if required.
(9 VAC 5-80-1180 and 9 VAC 5-50-260) [1/3/2024]

23. **Emission Limits (Hourly) –** Emissions from the operation of each non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192)(Group 3) shall not exceed the limits specified below:

Pollutant	**Group 3 (Ref. Nos. EG63 through EG192)**	
Nitrogen Oxides (NO_X as NO_2)	**With SCR**	**Without SCR**
	1.85 lb/hr	4.24 lb/hr
Carbon Monoxide (CO)	7.24 lb/hr	
Volatile Organic Compounds (VOC)	0.40 lb/hr	
Particulate Matter (PM_{10})	0.13 lb/hr	
Particulate Matter ($PM_{2.5}$)	0.13 lb/hr	

Compliance with these pollutant emission limits shall be based on the proper operation and maintenance of the non-emergency diesel engine gen-sets or by testing, if required.
(9 VAC 5-80-1180 and 9 VAC 5-50-260) [1/3/2024]

24. **Emission Limits (Hourly) –** Emissions from the operation of the fire pump diesel engines (Ref. Nos. FWP1 and FWP2) shall not exceed the limits specified below:

Pollutant	Ref. No. FWP1	Ref. No. FWP2
Nitrogen Oxides (as NO_2)	0.47 lb/hr	1.08 lb/hr
Carbon Monoxide (CO)	0.11 lb/hr	0.43 lb/hr
Volatile Organic Compounds (VOC)	0.03 lb/hr	0.09 lb/hr
Particulate Matter (PM_{10})	0.02 lb/hr	0.04 lb/hr
Particulate Matter ($PM_{2.5}$)	0.02 lb/hr	0.04 lb/hr

Compliance with these pollutant emission limits shall be based on the proper operation and maintenance of the fire pump diesel engines or by testing, if required.
(9 VAC 5-80-1180 and 9 VAC 5-50-260) [4/30/2025]

25. **Cooling Towers Emission Limits (Annual) –** Combined emissions of pollutants from operation of the cooling towers (Ref. Nos. CT1 through CT22) shall not exceed the limits specified below:

Pollutant	Ref. Nos. CT1 through CT22 (all units combined)
Particulate Matter (PM_{10})	3.11 tpy
Particulate Matter ($PM_{2.5}$)	1.87 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 emissions limits shall be determined as stated in Conditions 20 and 28.
(9 VAC 5-80-1180 and 9 VAC 5-50-260) [1/3/2024]

26. **Emission Limits (Annual) –** Emissions from the operation of the diesel engine gen-sets (Ref. Nos. EG1 through EG26 and EG53 through EG279)(Group 1 through Group 3) combined shall not exceed the limits specified below:

Pollutant	Group 1 through Group 3 (Ref. Nos. EG1 through EG26 and EG53 through EG279 (all units combined)
Nitrogen Oxides (as NO_2)	95.00 tpy
Carbon Monoxide (CO)	95.00 tpy
Volatile Organic Compounds (VOC)	5.73 tpy
Particulate Matter (PM_{10})	3.80 tpy
Particulate Matter ($PM_{2.5}$)	3.80 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, 15, 21, 22, and 23.
(9 VAC 5-80-1180) [1/3/2024]

27. **Visible Emission Limit –** Visible emissions from each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) and fire pump diesel engine (Ref. Nos. FWP1 and FWP2) 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 and shutdown.

    During startup and shutdown, visible emissions from each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) and fire pump diesel engine (Ref. Nos. FWP1 and FWP2) 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 50, Appendix A).
    (9 VAC 5-80-1180 and 9 VAC 5-80-260) [4/30/2025]

28. **Cooling Towers –** Once per calendar year, the permittee shall sample and analyze the process water from one cooling tower (Ref. Nos. CT1 through CT22) to demonstrate compliance with the TDS limit in Condition 20, utilizing EPA approved procedures or equivalent methods as determined by the Regional Air Compliance Manager of DEQ NRO.
    (9 VAC 5-80-1180) [1/3/2024]

CONTINUING COMPLIANCE DETERMINATION

29. **Annual Emission Controls Demonstration –** The permittee shall perform Annual Emission Controls Demonstrations for, at minimum, twenty percent (20%) of the installed non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) utilizing a portable analyzer or other comparable method as approved by the DEQ, confirming the engine exhaust gas is being treated with DEF prior to the engine generator set operating at twenty-five percent (25%) of the total rated generator capacity in electrical kilowatt output, or 156 ekW.

    The demonstrations shall be conducted in a manner such that a demonstration for each engine gen-set is completed, at a minimum, once every five years. The details of the demonstration are to be arranged with the Regional Air Compliance Manager of the DEQ NRO. The permittee shall submit a protocol at least 30 days prior to performing the demonstration. Results of the demonstration shall be submitted to the Regional Air Compliance Manager of the DEQ NRO within 30 days after completion of the demonstration. Results of demonstrations shall be maintained on-site in accordance with Condition 33.
    (9 VAC 5-80-1180) [1/3/2024]

30. **Facility Construction –** The emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192), and fire pump diesel engines (Ref. Nos. FWP1 and FWP2) shall be constructed so as to allow for emissions testing upon reasonable notice at any times, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be 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) [4/30/2025]

31. **Emission Testing/Visible Emissions Evaluation –** Upon request by DEQ, the permittee shall conduct stack tests and/or VEEs of the emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192), and fire pump diesel engines (Ref. Nos. FWP1 and FWP2) 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 DEQ NRO.
(9 VAC 5-80-1200 and 9 VAC 5-50-30 G) [4/30/2025]

32. **Emission Controls Demonstration –** Upon request by DEQ, the permittee shall conduct emission controls verifications of non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) to demonstrate compliance with the requirements contained in this permit. The details of the demonstration tests shall be arranged with the Regional Air Compliance Manager of DEQ NRO.
(9 VAC 5-80-1180) [1/3/2024]

RECORDS

33. **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 DEQ NRO. These records shall include, but are not limited to:

    a. Documentation from the manufacturer that each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) and fire pump diesel engine (Ref. Nos. FWP1 and FWP2) is certified to meet applicable EPA 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, non-emergency diesel engine gen-set, and the fire pump diesel engine.

    c. Documentation from the manufacturer that the cooling towers (Ref. Nos. CT1 through CT22) meet the design specifications required by Condition 3.

    d. A log of monitoring device observations as required by Conditions 4, 5, 6, and 7.

e. 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, non-emergency diesel engine gen-set, and the fire pump diesel engine.

f. Records, as necessary, to demonstrate compliance with the operating limitations of Condition 10; which includes but is not limited to: times, dates, and reasons for operation of each emergency diesel engine gen-set, non-emergency diesel engine gen-set, and fire pump diesel engine that was operating between May 1 and September 30.

g. To verify compliance with Condition 11, maintain records for each emergency diesel engine gen-sets (Ref. Nos. EG1 through EG26, EG53 through 62, and EG193 through EG279), and non-emergency diesel engine gen-sets (Ref. Nos. EG63 through EG192) of:

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.

h. Monthly and annual hours of operation of each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279),) and each fire pump diesel engine (Ref. Nos. FWP1 and FWP2) with annual hours of operation for all purposes, calculated monthly as the sum of each consecutive 12-month period, to demonstrate compliance with the requirements of Condition 14.

i. Monthly and annual hours of operation of each emergency diesel engine gen-set each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279),) with annual hours of operation for scheduled maintenance and readiness testing, calculated monthly as the sum of each consecutive 12-month period, to demonstrate compliance with the requirements of Condition 14.

j. Monthly and annual hours of operation of the Group 3 non-emergency diesel engine gen-sets at less than 25 percent (25%) of the total rated generator capacity in electrical kilowatt output.

k. All fuel supplier certifications.

l. Daily and annual fuel consumption for each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192), calculated daily as the sum of each consecutive 365-day period.

m. Daily and annual calculations of fuel consumption for each diesel engine gen-set Group (Group 1, Group 2, Group 3 with SCR, and Group 3 without SCR*), calculated daily as the sum of each consecutive 365-day period for the purposes of the compliance demonstration with the diesel fuel throughput limit equation in Condition 15.

*Fuel throughput for each Group 3 engine shall be calculated using the following equations:

Group 3 with SCR: [Daily total fuel throughput in gallons - (hours of operation <25% * 12 gallons per hour)] = gallons of fuel while operating SCR.

Group 3 without SCR: [Hours of operation <25% * 12 gallons per hour] = gallons of fuel when SCR is not operating.

The facility may request a change to the fuel throughput calculation and must be approved by the NRO Regional Air Compliance Manager prior to implementing the new methodology.

n. Daily records to demonstrate compliance with Condition 15.

o. Daily and annual emissions calculations for NO_X (as NO_2), CO, VOC, PM_{10}, and $PM_{2.5}$, from the diesel engine gen-sets (Ref. Nos. EG1 through EG26 and EG53 through EG279)(Group 1, Group 2, Group 3 with SCR, and Group 3 without SCR) combined for all operations with annual emissions calculated daily as the sum of each consecutive 365-day period to demonstrate compliance with the limits contained in Condition 26.

p. Records of TDS sampling and analytic results used to determine compliance with the cooling tower process water TDS limit as required in Condition 28.

q. SCR operational data for each non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192)(Group 3) to demonstrate compliance with the requirements of Conditions 2, 4, 6, and 7.

r. Maintain a copy of the SCR Monitoring Plan as required by Condition 9.

s. Results of all stack tests, visible emissions evaluations (VEE), and emission controls demonstrations.

t. Scheduled and non-scheduled maintenance and operator training on each emergency diesel engine gen-set (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193

through EG279), non-emergency diesel engine gen-set (Ref. Nos. EG63 through EG192) and fire pump diesel engines (Ref. Nos. FWP1 and FWP2).

u. Records of scheduled maintenance checks and readiness testing (Scheduled MCRT) as referenced in Condition 12.c.

v. Records of unscheduled maintenance, testing, and operational training as referenced in Condition 12.d.

w. Records of maintenance and operator training as referenced in Condition 38.

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

Compliance for the consecutive 365-day period in the subsections above (as applicable) shall be demonstrated daily by adding the total for the most recent 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) [4/30/2025]

NOTIFICATIONS

34. **Initial Notifications –** The permittee shall furnish written notification of the items below to the Regional Air Compliance Manager of DEQ NRO:

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

The permittee shall submit one notification for each building or construction phase containing information on each emergency diesel engine gen-set (Ref. Nos. EG193 through 260 and EG261 through EG279) and cooling tower (Ref. Nos. CT11 through CT22) as described below:

a. The actual date on which installation of the emergency diesel engine gen-sets (Ref. Nos. EG193 through EG260 and EG261 through EG279) in the building, or phase, commenced within 30 days after such date. The notification must contain the following:

i. Name and address of the permittee;

ii. The address of the affected source; and,

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 within 15 days after the last generator at each building, or construction phase, completes its integration operational period. If a period of construction is paused or halted for 45 days this notification shall be provided to 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. 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 sources electrical system.

c. The actual date on which construction of the cooling towers (Ref. Nos. CT11 through CT22) and fire pump diesel engine (Ref. No. FWP2) commenced within 30 days after such date.

d. The actual start-up date of the cooling towers (Ref. Nos. CT11 through CT22) and fire pump diesel engine (Ref. No. FWP2) within 15 days after such date.

(9 VAC 5-50-50 and 9 VAC 5-80-1180) [4/30/2025]

GENERAL CONDITIONS

35. **Permit Invalidation –** This permit to construct the emergency diesel engine gen-sets (Ref. Nos. EG193 through EG279), fire pump diesel engine (Ref. No. FWP2) and the cooling towers (Ref. Nos. CT11 through CT22) 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’ specified in the equipment list in the Introduction section 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)

36. **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)

37. **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)

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

    The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to each emergency diesel engine gen-set and the associated pollution control equipment (Ref. Nos. EG1 through EG26, EG53 through EG62, and EG193 through EG279), non-emergency diesel engine gen-set and the associated pollution control equipment (Ref. Nos. EG63 through EG192), and the fire pump diesel engines (Ref. Nos. FWP1 and FWP2):

    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)

39. **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)

40. **Notification for Facility or Control Equipment Malfunction –** The permittee shall furnish notification to the Northern Regional Office 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 Northern Regional Office.
    (9 VAC 5-20-180 C and 9 VAC 5-80-1180)

41. **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)

42. **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 Northern Regional Office of the change of ownership within 30 days of the transfer.
(9 VAC 5-80-1240)

43. **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