



*Commonwealth of Virginia*

*VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY*

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Stefanie K. Taillon  
Secretary of Natural and Historic Resources

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

April 8, 2025

Mr. Eric Tatum  
Director Federal Energy Solutions  
Virginia Electric and Power Company d/b/a Dominion Energy Virginia  
Dominion Energy – Fort Belvoir Privatization  
P.O. Box 53  
Fort Belvoir, VA 22060  
[eric.tatum@dominionenergy.com](mailto:eric.tatum@dominionenergy.com)

Location: Fairfax County  
Registration No.: 74055

Dear Mr. Tatum:

Attached is an initial Title V permit to operate your facility pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit will be in effect beginning April 8, 2025.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on April 13, 2015 and solicited written public comments by placing a newspaper advertisement in *The Washington Times* February 25, 2025. The thirty-day required comment period, provided for in 9VAC5-80-270 expired on March 27, 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 operate shall not relieve Dominion Energy – Fort Belvoir Privatization of the responsibility to comply with all other local, state, and federal permit regulations.

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 DEQ 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:

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 the Northern Regional Office at (703) 583-3800.

Sincerely,



*for* Robert J. Weld, Regional Director  
Virginia Department of Environmental Quality  
540-562-6870  
robert.weld@deq.virginia.gov  
Blue Ridge Regional Office  
901 Russell Drive, Salem, VA 24153  
540-562-6700

Attachment: Permit

cc: Anita Walthall, DEQ BRRO Air Permit Writer (*electronic*)  
Peter Thaler, DEQ NRO Air Compliance Inspector (*electronic*)  
R. David Hartshorn, DEQ NRO Air Compliance Manager (*electronic*)  
Yongtian (Tom) He, PhD, U.S. EPA Region III ([he.yongtian@epa.gov](mailto:he.yongtian@epa.gov))  
Maya Whitaker, DEQ Office of Air Permit Programs (OAPP) (*electronic*)  
Bryan Nichols, Dominion Energy ([bryan.t.nichols@dominionenergy.com](mailto:bryan.t.nichols@dominionenergy.com))



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Federal Operating Permit

Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Virginia Electric Power Company dba Dominion  
Energy Virginia  
Facility Name: Dominion Energy – Fort Belvoir Privatization  
Facility Location: 9685 Gunston Road  
Fort Belvoir, VA 22060  
Registration Number: 74055  
Permit Number: NRO-74055

This permit includes the following program:

Federally Enforceable Requirements - Clean Air Act

April 8, 2025  
Effective Date

April 7, 2030  
Expiration Date

Paul R. Jenkins  
for Robert J. Weld, BRRO Regional Director

April 8, 2025  
Signature Date

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## **Facility Information**

### **Permittee**

Dominion Energy – Fort Belvoir Privatization  
P.O. Box 53  
Fort Belvoir, VA, 22060

### **Responsible Official**

Eric Tatum  
Director, Federal Energy Solutions

### **Facility**

Dominion Energy – Fort Belvoir Privatization  
9685 Gunston Road  
Fort Belvoir, VA 22060

### **Contact Person**

Bryan Nichols  
Environmental Specialist  
(803) 605-5665

**County-Plant Identification Number:** 51-059-01129

### **Facility Description:**

Dominion Energy - Fort Belvoir Privatization is an electric distribution and backup power generation support facility for a U.S. Department of Defense installation at Fort Belvoir, Virginia. The source consists of 24 emergency generators, that are diesel or gas-fired (natural gas) engines. These unmanned emergency generators are configured to automatically start in the event of local electric power failure. These generators are periodically started up for maintenance and readiness testing.

The facility is a Title V major source due to it being a support facility for Ft. Belvoir (Title V facility Registration Number 70550). The source is located in a nonattainment area for ozone (VOC, NOx) and in a Prevention of Significant Deterioration (PSD) Area for all other regulated pollutants.

## Emission Units

Process Equipment to be operated consists of:

<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Description</b>	<b>Size/Rated Capacity*</b>	<b>Pollution Control Device (PCD) Description *</b>	<b>PCD ID</b>	<b>Pollutant Controlled</b>	<b>Applicable Permit Date</b>
EG-1	ES-1	MTU Model 1000-XC6DT2 diesel emergency generator – Bldg. 1261 Certified, Model Year 2013, Installed 2014	1,000 ekW / 1,495 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-2	ES-2	MTU Model 1000-XC6DT2 diesel emergency generator – Bldg. 1262 Certified, Model Year 2013, Installed 2014	1,000 ekW / 1,495 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-3	ES-3	MTU Model DS350D6SPA diesel emergency generator – Bldg. 1442 Certified, Model Year 2013, Installed 2014	350 ekW / 547 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-4	ES-4	MTU Model DS250D6S diesel emergency generator – Bldg. 2118 Certified, Model Year 2014, Installed 2014	250 ekW / 418 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-5	ES-5	Caterpillar 3512C diesel emergency generator – Bldg. 2444 Certified, Model Year 2014, Installed 2015	1,500 ekW / 2,206 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-6	ES-6	Caterpillar 3516DITA diesel emergency generator – Bldg. 2444 Certified, Model Year 2007, Installed 2012	2,250 ekW / 3,286 bhp	Selective Catalytic Reduction	SCR-6	NO <sub>x</sub>	September 4, 2024
EG-7	ES-7	Caterpillar 3516DITA diesel emergency generator – Bldg. 2444 Certified, Model Year 2007, Installed 2012	2,250 ekW / 3,286 bhp	Selective Catalytic Reduction	SCR-7	NO <sub>x</sub>	September 4, 2024

<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Description</b>	<b>Size/Rated Capacity*</b>	<b>Pollution Control Device (PCD) Description *</b>	<b>PCD ID</b>	<b>Pollutant Controlled</b>	<b>Applicable Permit Date</b>
EG-8	ES-8	Caterpillar 3516DITA diesel emergency generator – Bldg. 2444 Certified, Model Year 2007, Installed 2012	2,250 ekW / 3,286 bhp	Selective Catalytic Reduction	SCR-8	NO <sub>x</sub>	September 4, 2024
EG-9	ES-9	Kohler 100REZG natural gas emergency generator – Bldg. 191 Certified, Model Year 2011, Installed 2015	100 ekW / 162 bhp	--	--	--	--
EG-10	ES-10	Kohler 100REZG natural gas emergency generator – Bldg. 1182 Certified, Model Year 2011, Installed 2015	100 ekW / 162 bhp	--	--	--	--
EG-11	ES-11	MTU Model 12V4000DS1500 diesel emergency generator – Bldg. 315 Certified, Model Year 2015, Installed 2017	1,500 ekW / 2,328 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-12	ES-12	MTU Model 12V2000DS750 diesel emergency generator – Bldg. 315 Certified, Model Year 2016, Installed 2017	750 ekW / 1,193 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-13	ES-13	MTU Model 10V1600DS500 diesel emergency generator – Bldg. 319 Certified, Model Year 2016, Installed 2016	500 ekW / 752 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-14	ES-14	MTU Model 10V1600DS500 diesel emergency generator – Bldg. 319 Certified, Model Year 2016, Installed 2016	500 ekW / 752 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-15	ES-15	MTU Model 12V2000DS750 diesel emergency generator – Bldg. 3245 Certified, Model Year 2016, Installed 2017	750 ekW / 1,193 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023

<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Description</b>	<b>Size/Rated Capacity*</b>	<b>Pollution Control Device (PCD) Description *</b>	<b>PCD ID</b>	<b>Pollutant Controlled</b>	<b>Applicable Permit Date</b>
EG-16	ES-16	MTU Model 12V2000DS750 diesel emergency generator – Bldg. 3246 Certified, Model Year 2016, Installed 2017	750 ekW / 1,193 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-17	ES-17	MTU Model 16V2000DS1000 diesel emergency generator – Army Museum Certified, Model Year 2017, Installed 2017	1,000 ekW / 1,495 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-18	ES-18	Caterpillar 3512C diesel emergency generator – Bldg. 2444 Certified, Model Year 2017, Installed 2017	1,500 ekW / 2,206 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-19	ES-19	MTU Model 16V2000DS1000 diesel emergency generator – Bldg. 247 Certified, Model Year 2017, Installed 2018	1,000 ekW / 1,495 bhp	Electronic Fuel Injection and After Coolers	--	NO <sub>x</sub>	May 4, 2023
EG-20	ES-20	Waukesha Model P48GLD natural gas emergency generator – Bldg. 245 Non-Certified, Model Year 2012, Installed 2012	880 ekW / 1,175 bhp	--	--	--	--
EG-21	ES-21	Waukesha Model P48GLD natural gas emergency generator – Bldg. 1189 Non-Certified, Model Year 2010, Installed 2012 at Bldg. 245 (moved to Bldg. 1189 in 2019)	880 ekW / 1,175 bhp	--	--	--	--
EG-22	ES-22	MTU Model 12V4000G84S diesel emergency generator – Bldg. 245 Certified, Model Year 2019, Installed 2019	1,910 ekW / 2,561 bhp	--	--	--	--



<b>Emission Unit ID</b>	<b>Stack ID</b>	<b>Emission Unit Description</b>	<b>Size/Rated Capacity*</b>	<b>Pollution Control Device (PCD) Description *</b>	<b>PCD ID</b>	<b>Pollutant Controlled</b>	<b>Applicable Permit Date</b>
EG-32	ES-32	Model Volvo Penta TWD1673GE emergency diesel generator – Bldg. 1458 Certified, Model Year 2020, Installed 2023	685ekW / 932 bhp	Selective Catalytic Reduction	SCR-32	NO <sub>x</sub>	--
EG-33	ES-33	Model Volvo Penta TWD1673GE emergency diesel generator – Bldg. 1458 Certified, Model Year 2020, Installed 2023	685 ekW / 932 bhp	Selective Catalytic Reduction	SCR-33	NO <sub>x</sub>	--

\*The Size/Rated capacity and PCD efficiency is provided for informational purposes only and is not an applicable requirement.

## **Emergency Engine Requirements – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-9, EG-10, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-20, EG-21, EG-22, EG-32, EG-33)**

### **Limitations**

1. **Emergency Engines – Emission Controls – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Nitrogen oxide (NO<sub>x</sub>) emissions from the engine generator sets (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) shall be controlled by electronic fuel injection and after coolers.  
(9VAC5-80-110 and Condition 1 of 5/4/2023 Permit Document)
2. **Emergency Engines – Emission Controls – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Visible emissions, carbon monoxide (CO) emissions, nitrogen oxide (NO<sub>x</sub>) emissions, particulate matter (PM-10 and PM-2.5) emissions and volatile organic compound (VOC) emissions from the emergency engine generator sets (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) 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 setting that are permitted by the manufacturer and do not increase air emissions from the engine generator sets.  
(9VAC5-80-110 and Condition 2 of 5/4/2023 Permit Document)
3. **Emergency Engines – Emission Controls – (EG-6, EG-7, EG-8)** – Emissions from the engine-generator sets (Ref. Nos. EG-6, EG-7, EG-8) shall be controlled by the following:
  - a. Nitrogen oxides (as NO<sub>2</sub>) emissions from each engine-generator set shall be controlled by either open or closed loop Selective Catalytic Reduction (SCR). Each SCR system shall be equipped with a temperature probe at the outlet to the catalyst bed to continuously monitor the catalyst bed temperature, while the engine-generator set is operational. Engine exhaust gas shall be treated with urea when the engines are operating at or above twenty percent load and the SCR outlet temperature of 545°F is achieved, except for periods of start-up, shutdown, or malfunction. In the event that the SCR outlet temperature exceeds 950°F, urea solution injection shall be discontinued and any operations above that level will be considered a malfunction.
  - b. Sulfur Dioxide (SO<sub>2</sub>) emissions from the engine-generator sets shall be controlled by the use of ultra-low sulfur diesel fuel oil with a sulfur content not to exceed 0.0015% by weight (15ppm).
  - c. Proper combustion for and visible emissions from the engine-generator sets 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 do not degrade the air emissions from the engines.

(9VAC5-80-110 and Condition 1 of September 4, 2024 Permit Document)

4. **Emergency Engines – Fuel Specifications – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – The approved fuel for the emergency diesel engine generator sets (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) 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 grade ultra-low sulfur 2-D or grade 2-D S15, and,
- b. Has a maximum sulfur content not to exceed 0.0015% by weight (15 ppm).

A change in the fuel type or the fuel sulfur content may require a permit to modify and operate.

(9VAC5-80-110 and Condition 12 of 5/4/2023 Permit Document)

5. **Emergency Engines – Fuel Specifications – (EG-6, EG-7, EG-8)** – The approved fuels for the engine-generator sets shall be diesel fuel oil that meets the specifications below:

DIESEL FUEL OIL:

- a. Does not exceed the American Society for Testing and Materials (ASTM) specification, D975, for grade ultra-low sulfur 2-D or grade 2-D S15, or
- b. Has a maximum sulfur content not to exceed 0.0015% by weight (15 ppm), and either a minimum cetane number of forty or maximum aromatic content of thirty-five volume percent.

Exceedance of these specifications may be considered credible evidence of an exceedance of emission limits. A change in the fuel type or the fuel sulfur content may require a permit to modify and operate.

(9VAC5-80-110 and Condition 7 of September 4, 2024 Permit Document)

6. **Emergency Engines – Fuel Certification – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the diesel fuel was received;

- c. The quantity of diesel fuel delivered in the shipment; and
- d. A statement that the diesel fuel:
  - i. complies with the ASTM specifications for Grade No. 1-D S15 or Grade No. 2-D S15 (also known as ultra-low sulfur diesel (ULSD)); or
  - ii. has a sulfur content per shipment not to exceed 0.0015% by weight (15 ppm) and either a minimum cetane number of forty or maximum aromatic content of thirty-five percent by volume.

Alternatively, the permittee must obtain approval from the Air Compliance Manager of the 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 the DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 5. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.  
(9VAC5-80-110 and Condition 14 of 5/4/2023 Permit Document)

7. **Emergency Engines – Fuel Certification – (EG-6, EG-7, EG-8)** – The permittee shall obtain a certification from the fuel supplier for the engine generators (Ref. Nos. EG-6, EG-7 and EG-8) with each shipment of diesel fuel oil. If certifications are not available to the permittee, either prior to or following startup of manufacturers trials, the permittee may substitute compliance with Condition 8 for compliance with this condition. 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; and
- d. A statement that the diesel fuel oil conforms to the fuel specification requirements; or
- e. Alternatively, the permittee shall obtain approval from the Regional Air Compliance Manager of the DEQ's Northern Regional Office (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 the DEQ, may be used to determine compliance with the fuel specifications stipulated in Condition 5.  
(9VAC5-80-110 and Condition 8 of September 4, 2024 Permit Document)

8. **Emergency Engines – Fuel Sampling and Analysis – (EG-6, EG-7, EG-8)** – If the permittee cannot comply with Condition 7, fuel sampling and analysis in accordance with the stipulations below may be conducted as an alternative means of demonstrating compliance:
  - a. The permittee shall sample and analyze the fuel from the storage tank that supplies fuel oil to engine-generator sets equipped with SCR, (Ref. Nos. EG-6, EG-7 and EG-8). Fuel sampling and analysis shall be performed every calendar quarter on each tank that has taken delivery of fuel during that quarter. Fuel sampling shall be conducted in accordance with ASTM Method 5453, or other DEQ approved method, to determine fuel sulfur content by weight.
  - b. The results of the fuel analysis shall be reported to the Regional Air Compliance Manager of the DEQ's NRO within thirty calendar days after the end of each calendar quarter. Data shall include: fuel sulfur content by weight (weight % or ppm), company and individual collecting the sample, identification of sampling method used, sample volume, number of samples, date sample collected, location of fuel when sample taken, date of analysis, company and individual conducting the analysis.
  - c. At such time as the sulfur content of a tank is determined to be at or below 0.0015 % (15 ppm Sulfur by weight), the permittee may discontinue fuel sampling of that tank if the permittee can obtain Fuel Certifications in accordance with Condition 7 when shipments arrive thereafter.

(9VAC5-80-110 and Condition 9 of September 4, 2024 Permit Document)
9. **Emergency Engines – Operating Limitations – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Each emergency diesel engine generator set (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) shall not operate more than 250 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 10 of 5/4/2023 Permit Document)
10. **Emergency Engines – Operating Limitations – (EG-6, EG-7, EG-8)** – The combined operating hours for the engine-generator sets (Ref. Nos. EG-6, EG-7, EG-8) shall not exceed 1500 hours per year, calculated monthly as the sum of each consecutive 12-month period.

(9VAC5-80-110 and Condition 5 of September 4, 2024 Permit Document)
11. **Emergency Engines – Maintenance/Operating Procedures – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air

pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

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

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.  
 (9VAC5-80-110 and Condition 39 of 5/4/2023 Permit Document)

12. **Emergency Engines – Emission Limitations – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Emissions from the operation of each emergency diesel gen-set (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) shall not exceed the limits specified below:

Ref. No.	NO <sub>x</sub> (as NO <sub>2</sub> ) (lb/hr)	CO (lb/hr)
EG-1	14.67	1.23
EG-2	14.67	1.23
EG-3	4.75	0.63
EG-4	3.20	0.41
EG-5	29.20	4.01
EG-11	26.80	2.68
EG-12	12.20	1.18
EG-13	11.3	0.74
EG-14	11.3	0.74

Ref. No.	NO <sub>x</sub> (as NO <sub>2</sub> ) (lb/hr)	CO (lb/hr)	VOC (lb/hr)
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EG-15	12.26	1.18	3.42
EG-16	12.26	1.18	3.42
EG-17	15.2	1.22	0.30
EG-18	29.2	2.92	0.49
EG-19	15.2	1.22	0.21

These emissions are derived from the manufacturer's data at maximum design capacity of the diesel engines and operating limits to determine the overall emission contribution.  
(9VAC5-80-110 and Condition 15 of 5/4/2023 Permit Document)

13. **Emergency Engines – Emission Limitations – EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Emissions from the operation of the emergency diesel engine gen-sets (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) shall not exceed the limits specified below:

Ref. No.	NO <sub>x</sub> (as NO <sub>2</sub> ) (tpy)	CO (tpy)
EG-1	1.83	0.15
EG-2	1.83	0.15
EG-3	0.59	0.08
EG-4	0.40	0.05
EG-5	3.65	0.50
EG-11	3.35	0.33
EG-12	1.53	0.15
EG-13	1.41	0.09
EG-14	1.41	0.09

Ref. No.	NO <sub>x</sub> (as NO <sub>2</sub> ) (tpy)	CO (tpy)	VOC (tpy)
EG-15	1.53	0.15	0.43
EG-16	1.53	0.15	0.43
EG-17	1.90	0.15	0.04
EG-18	3.65	0.37	0.06
EG-19	1.90	0.15	0.03

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 Condition 9.  
(9VAC5-80-110 and Condition 19 of 5/4/2023 Permit Document)

14. **Emergency Engines – Emission Limits – (EG-6, EG-7, EG-8)** – Emissions from the engine-generator sets (Ref. Nos. EG-6, EG-7, EG-8) shall not exceed the limits specified below:

	Uncontrolled without SCR	Controlled with SCR
NO <sub>x</sub> (as NO <sub>2</sub> )	65.6 lb/hr*	4.49 lb/hr
CO	9.33 lb/hr	
VOC	0.98 lb/hr	
Particulate Matter (PM-10)	0.54 lb/hr	

\*NO<sub>2</sub> – Upon DEQ Verification of the initial performance test, the facility has the option of using a lower emission rate (average of three one-hour test runs x 120 percent) by undergoing a permit amendment to incorporate the new lower rate.

The hourly emissions are derived from manufacturer's data at maximum or other design capacity of the diesel engines. Compliance with the hourly emission limits may be based on testing, if required by DEQ.

(9VAC5-80-110 and Condition 10 of September 4, 2024 Permit Document)

15. **Emergency Engines – Annual Engine-Generator Emission Limits – (EG-6, EG-7, EG-8)** – Total emissions from the engine-generator sets (Ref. Nos. EG-6, EG-7, EG-8) shall not exceed the limits specified below:

	Total (Ref. Nos. EG-6, EG-7, and EG-8)
Nitrogen Oxides (as NO <sub>2</sub> )	4.20 tons/yr
Carbon Monoxide (CO)	3.89 tons/yr
Volatile Organic Compounds (VOC)	0.56 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits shall be determined by calculation methods as stated in Condition 38 or other means acceptable to DEQ.

(9VAC5-80-110 and Condition 11 of September 4, 2024 Permit Document)

16. **Emergency Engines – Operating Limitations – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – The engine generator sets (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) shall only be operated in the following modes:



- a. In situations that arises from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:
  - i. A failure of the electrical grid;
  - ii. On-site disaster or equipment failure; or
  - iii. Public service emergencies such as flood, fire, natural disaster, or severe weather conditions.
- b. 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 periodic maintenance, testing, and operational training on the emergency engine generator sets.

(9VAC5-80-110 and Condition 8 of 5/4/2023 Permit Document)

**17. Emergency Engines – Operating Limitations – (EG-6, EG-7, EG-8) – Operating Scenarios for Engine Generator Sets (Ref. Nos. EG-6, EG-7, EG-8)**

- a. Emergency / Critical Power Generation:
  - i. Emergency: The engine-generator sets may be operated in situations where immediate action on the part of the facility is needed due to a failure or loss of electrical power service resulting from a failure of the primary power provider and the failure or loss of power service is beyond the reasonable control of the facility. Operation under these circumstances shall be allowed for the period of time the primary electrical power provider service is unavailable. Once primary

electrical power provider service is available the engine-generator sets may be operated in accordance with Critical Power Generation as defined below.

- ii. ISO-Declared Emergency: The engine-generator sets may be operated for participation in an Independent System Operator's (ISO) Emergency Load Response Program (ELRP) during times of an ISO-declared emergency, as defined in the ISO's emergency operations manual. Operations under this scenario shall not exceed 60 hours per generator each calendar year. The permittee shall submit notification to the Regional Air Permit Manager of the DEQ's Northern Regional Office (NRO) within thirty days of signing a contract to participate in the ELRP.
  - iii. Critical Power Generation: The engine-generator sets may be operated in situations where immediate action on the part of the facility is needed due to a loss or anticipated loss of acceptable electrical power service from the primary provider and the loss or anticipated loss of power service is beyond the reasonable control of the facility, Operation under these circumstances shall be allowed until such time as acceptable power provider service is restored or the loss of acceptable power provider service is no longer reasonably anticipated.
- b. Alternate Power Generation: Except as specified in subsection c below, an engine-generator set may be operated voluntarily for the purposes of peak-shaving, demand response, or as part of an interruptible power supply arrangement with a power provider, other market participant, or system operator if the engine is equipped with a selective catalytic reduction system (SCR) that achieves the manufacturers guaranteed maximum emission reductions based on fuel type. Operations, as outlined in this subsection, shall be allowed when the engine-generator set is operating at a load level necessary to sustain urea injection.
- c. The engine-generator sets may be operated for periodic maintenance, testing, and operational training.

Total emissions for any twelve-month period, calculated as the sum of all emissions from operations under a through c above, shall not exceed the limits stated in Condition 15. (9VAC5-80-110 and Condition 4 of September 4, 2024 Permit Document)

18. **Emergency Engines – Operating Limitations – (EG-6, EG-7, EG-8)** – The permittee must operate and maintain each engine-generator set and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer and do not degrade air emissions. (9VAC5-80-110 and Condition 6 of September 4, 2024 Permit Document)
19. **Emergency Engines – Visible Emission Limit – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Visible emissions

from each engine generator set (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) exhausts shall not exceed 5 percent opacity except during one 6-minute period in any one hour in which visible emissions shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.

(9VAC5-80-110 and Condition 21 of 5/4/2023 Permit Document)

20. **Emergency Engines – Visible Emission Limit – (EG-6, EG-7, EG-8)** – Visible emissions from the engine-generator sets (Ref. Nos. EG-6, EG-7, EG-8) shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

During start-up and shut-down times, visible emissions from the generators (EG-6, EG-7, and EG-8) shall not exceed 10 percent except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).

(9VAC5-80-110 and Condition 13 of September 4, 2024 Permit Document)

21. **Emergency Engines – Visible Emission Limit – (EG-9, EG-10, EG-20, EG-21, EG-22, EG-32, EG-33)** – Visible emissions from EG-9, EG-10, EG-20, EG-21, EG-22, EG-32, and EG-33 shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by 40 CFR 60, Appendix A, Method 9. This condition applies at all times except during startup, shutdown, and malfunction.

(9VAC5-50-80 and 9VAC5-80-110 E & K)

## Monitoring

22. **Emergency Engines – Monitoring – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Each engine generator set (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) 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 engine generator set shall be observed by the owner with a frequency of not less than once each day the engine generator set is operated. The owner shall keep a written or electronic log of these observations. This data shall be available for inspection by the DEQ.

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 engine-generator set is operating.

(9VAC5-80-110 and Condition 7 of 5/4/2023 Permit Document)

**23. Emergency Engines – Monitoring – (EG-6, EG-7, EG-8)**

- a. Each engine-generator set (Ref. Nos. EG-6, EG-7, EG-8) shall be equipped with a non-resettable hour meter which measures the duration of time that an engine is operated, and a device to monitor and record the engine-generator kilowatt output at a minimum frequency of once every fifteen minutes.
- b. The SCR system on each engine-generator set (Ref. Nos. EG-6, EG-7, EG-8) shall be equipped with a device to continuously measure and record the SCR outlet temperature and the urea/ammonia consumption. The information shall be recorded at a minimum frequency of once every fifteen minutes, and correlated to run date, engine load/kilowatt output, and engine operating hours.

Each monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturers written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the engines are operating.

(9VAC5-80-110 and Condition 2 of September 4, 2024 Permit Document)

- 24. Emergency Engines – Monitoring – (EG-6, EG-7, EG-8)** – To ensure proper performance, the monitoring device(s) used to continuously measure the information required in Condition 23 shall be observed by the permittee during each test firing and at a minimum frequency of once per day during days in which the engine-generator set is called into service. Observations may be made remotely if logged and made available to DEQ personnel to the satisfaction of the Regional Air Compliance Manager.

(9VAC5-80-110 and Condition 3 of September 4, 2024 Permit Document)

- 25. Emergency Engines – Monitoring – (EG-1, EG-2, EG-3, EG-4 EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)** – Observations for the presence of visible emissions from the emergency engine exhaust stacks (EG-1, EG-2, EG-3, EG-4 EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33) shall be made at the following frequencies, as applicable:

<b>Emissions Unit Operating Hours per Year (hr/yr)</b>	<b>Frequency of Observations for Presence of Visible Emissions</b>
Less than 250 hr/yr	Once per year
Greater than or equal to 250 hr/yr	Once every 250 hours

“Year” as used above means each rolling 12-month period, calculated monthly as the sum of each consecutive 12-month period. Each observation shall be at least two minutes

duration. If visible emissions are detected during the observation or at any time, the permittee shall:

- a. Take timely corrective action such that the emissions unit resumes operation with no visible emissions, or,
- b. Conduct a visible emission evaluation (VEE) on the emissions unit exhaust stack with visible emissions in accordance with EPA Reference Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six minutes, to assure visible emissions from the emission unit is either 5 percent, 20 percent or less as stated in conditions 19, 20, and 21, respectively. If any observations exceed the 5 percent or 20 percent opacity limit, the observation period shall continue until a total of 60 minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the emissions unit resumes operation within the 5 percent or 20 percent opacity limit.

The permittee shall maintain written or electronic logs of operating hours and observations for the emergency engine to demonstrate compliance. The logs shall include the hours of operation for each engine, the date and time of each observation, whether visible emissions were detected during the observation, the results of all VEEs, any corrective action taken, and the name of the observer. If any emissions unit has not been operated for any period, it shall be noted in the log.

(9VAC5-80-110 E & K)

## Testing

26. **Emergency Engines – Continuous Compliance – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – The facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations in accordance with EPA Reference Method 1 (reference 40 CFR Part 60, Appendix A). In addition, safe sampling platforms and access shall be provided.  
(9VAC5-80-110 and Condition 27 of 5/4/2023 Permit Document)
27. **Emergency Engines – Continuous Compliance – (EG-6, EG-7, EG-8)** – The facility shall be constructed or modified so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment for the engine-generator sets (Ref Nos. EG-6, EG-7 and EG-8) 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 by the DEQ (at the stack or at the appropriate locations) and safe sampling platforms and access shall be provided.  
(9VAC5-80-110 and Condition 22 of September 4, 2024 Permit Document)
28. **Emergency Engines – Continuous Compliance – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Upon request by the

DEQ, the permittee shall conduct stack tests and/or visible emission evaluations of the engine generator sets (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Air Compliance Manager of the DEQ NRO.  
(9VAC5-80-110 and Condition 28 of 5/4/2023 Permit Document)

29. **Emergency Engines – Continuous Compliance – (EG-6, EG-7, EG-8)** – Upon request by the DEQ, the permittee shall conduct additional performance testing of the engine-generator sets (Ref. Nos. EG-6, EG-7, and EG-8) 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.  
(9VAC5-80-110 and Condition 20 of September 4, 2024 Permit Document)
30. **Emergency Engines – Continuous Compliance – (EG-6, EG-7, EG-8)** – Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations of the engine-generator sets. (Ref. Nos. EG-6, EG-7, and EG-8) to demonstrate compliance with the visible emission limits contained in this permit. The details of the VEE shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO.  
(9VAC5-80-110 and Condition 21 of September 4, 2024 Permit Document)
31. **Emergency Engines – Continuous Compliance – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – Upon request by the DEQ, the permittee shall conduct emission controls verifications of engine generator sets (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) to demonstrate compliance with the requirements contained in this permit. The details of the demonstration tests shall be arranged with the Air Compliance Manager of the DEQ NRO.  
(9VAC5-80-110 and Condition 29 of 5/4/2023 Permit Document)
32. **Emergency Engines – Continuous Compliance – (EG-6, EG-7, EG-8) – Annual Performance Assessment**
  - a. Engine selected for stack testing:
    - i. Unless the permittee switches to a closed loop SCR, within the first twelve months subsequent to the initial performance tests, concurrent with the annual maintenance, and annually thereafter, the permittee shall perform a portable analyzer test to determine the nitrogen oxide (as NO<sub>2</sub>) emission concentration for the engine-generator set. The annual analyzer test shall be performed at a comparable load at which the engine-generator set operated during the stack test performance demonstration. Results of the testing shall be maintained on site in accordance with Condition 36 (recordkeeping condition).
    - ii. Additional nitrogen oxide (as NO<sub>2</sub>) stack testing may be required if the difference between the initial NO<sub>x</sub> emission concentration established for the portable analyzer during the initial performance demonstration, and the NO<sub>x</sub>

emission concentration determined during the annual portable analyzer test per Condition 32.a.i is equal to or greater than ten percent (10%).

- b. Engines not selected for stack testing:
  - i. Within the first twelve months, subsequent to the issuance of this permit, concurrent with the annual maintenance, and annually thereafter, the permittee shall perform a portable analyzer test to determine the nitrogen oxide (as NO<sub>2</sub>) emission concentration for the engine-generator sets not tested. Results of the testing shall be maintained on-site in accordance with Condition 36.
- c. Immediately prior to conducting the portable analyzer test, the portable analyzer shall be calibrated using EPA Protocol 1 gases.
  - i. Calibrations shall be accurate to within five parts per million (ppm) of the sample gas.
  - ii. The permittee shall maintain on-site records of annual calibration testing, calibration gas certifications, and any corrective action that may have been taken.

(9VAC5-80-110 and Condition 17 of September 4, 2024 Permit Document)

- 33. **Emergency Engines – Continuous Compliance – (EG-6, EG-7, EG-8)** – If the applicant switches to a closed loop SCR, the closed loop SCR monitoring system for each engine-generator set employed to monitor NO<sub>x</sub> (as NO<sub>2</sub>) emissions shall be calibrated annually in accordance with the manufacturer's recommended procedures, using EPA Protocol 1 calibration gases.
  - a. Calibrations shall be accurate to within five parts per million (ppm) of the sample gas.
  - b. The permittee shall maintain on-site records of annual calibration testing, calibration gas certifications, and any corrective action that may have been taken.

(9VAC5-80-110 and Condition 18 of September 4, 2024 Permit Document)

- 34. **Emergency Engines – Continuous Compliance – (EG-6, EG-7, EG-8)** – The permittee shall contact the Regional Air Compliance Manager and the Regional Air Permit Manager of the DEQ's NRO within thirty days following each change or regeneration of a catalyst in any SCR unit, to discuss the supplemental compliance demonstration.  
(9VAC5-80-110 and Condition 19 of September 4, 2024 Permit Document)

## Recordkeeping

- 35. **Emergency Engines – On Site Records – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19)** – The permittee shall maintain

records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager of the DEQ NRO. These records shall include, but are not limited to:

- a. A monthly log of the monitoring device observations as required by Condition 22.
- b. Monthly and annual hours of operation of each engine generator set (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19), with annual hours of operation calculated monthly as the sum of each consecutive 12-month period.
- c. All fuel supplier certifications.
- d. Engine information including make, model, serial number, model year, maximum engine power (bhp), and engine displacement for each engine generator set.
- e. The manufacturer's written operating instructions or procedures developed by the owner/operator that are approved by the engine manufacturer for engine generator set.
- f. Records of the reasons for operation for each engine generator set (Ref. Nos. EG-1 through EG-5 and EG-11 through EG-19) including, but not limited to, the date, cause of operation and hours of operation.
- g. Results of all stack tests and visible emissions evaluations.
- h. Records of scheduled and nonscheduled maintenance and operator training.
- i. Records of changes in settings that are permitted by the manufacturer of the engine generator sets.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years, unless otherwise noted.

(9VAC5-80-110 and Condition 30 of 5/4/2023 Permit Document)

36. **Emergency Engines – On Site Records – (EG-6, EG-7, EG-8)** – 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. A monthly log of the monitoring device data required by Condition 23. Data may be recorded in a format similar to that shown in Appendix A - Table 1 Monitoring Data or other format as approved by DEQ.
- b. Monthly Summary Table for each engine-generator set (Ref. Nos. EG-6, EG-7, EG-8) to include at a minimum:



- (1) Engine Hours with and without SCR.
  - (2) Total engine hours on a rolling 12-month basis ending with the month of this summary.
- c. Log of monitoring device observations in accordance with Condition 24.
  - d. Annual hours of operation for each engine-generator set calculated monthly as the sum of each consecutive twelve-month period to demonstrate compliance with the requirements of Condition 10.
  - e. Monthly and annual emissions calculations for NO<sub>x</sub> (as NO<sub>2</sub>), CO, and VOC from the engine-generator sets (Ref. Nos. EG-6, EG-7, EG-8) using the calculation methods in Condition 38 to verify the compliance with the ton/yr emissions limitations in Condition 15.
  - f. A NO<sub>x</sub> Urea Table (Urea Load Map) for each engine-generator set, (Ref. Nos. EG-6, EG-7, and EG-8), equipped with SCR to verify that the SCR is operating as specified by the manufacturer. Each NO<sub>x</sub> Urea Table shall include the engine load, SCR outlet temperature, NO<sub>x</sub> concentration before and after the catalyst, the urea consumption rate, and the catalyst efficiency.
  - g. All fuel supplier certifications per Condition 7.
  - h. Fuel sampling analyses if needed, per Condition 8 indicating the sulfur content of the diesel fuel oil.
  - i. All VEE, emission stack test reports, portable analyzer calibrations, and annual performance assessment results for each engine-generator.
  - j. A copy of the maintenance schedule and records of scheduled and unscheduled maintenance in accordance with Condition 72.
  - k. Operator training in accordance with Condition 72.
  - l. 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. The records shall be maintained in a form suitable for inspection and maintained for at least two years (unless a longer period is specified in the applicable emission standard) following the date of the occurrence.
  - m. Records of the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer and the air pollution control device manufacturer.

- n. Records of changes in settings that are permitted by the manufacturer of the engine-generator sets and the air pollution control device manufacturer.
- o. Records of the portable analyzer test results, annual calibration testing, calibration gas certifications, and any corrective action records Continuous Compliance records as required by Condition 32.c.ii.
- p. Annual calibration testing, calibration gas certifications, and any corrective action records as required by Condition 33.

Compliance for the consecutive twelve-month period referenced in Subsections b, c, and e above shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years, unless otherwise noted.

(9VAC5-80-110 and Conditions 17, 18, and 24 of September 4, 2024 Permit Document)

37. **Emergency Engines – Recordkeeping – (EG-1, EG-2, EG-3, EG-4 EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)** – The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the DEQ NRO. These records shall include, but are not limited to:

- a. Visible emission evaluations and performance evaluations.
- b. Records of visual observations, including corrective actions or EPA Method 9 observations if opacity is observed.

The records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and 9VAC5-80-110 E & K)

38. **Emergency Engines – Recordkeeping – (EG-6, EG-7, EG-8)** – The total annual emissions of each regulated pollutant from the engine-generator sets (Ref. Nos. EG-6, EG-7, EG-8) shall be calculated monthly as the sum of each consecutive twelve-month period.

- a. Emissions Calculations: Monthly emissions in tons for each pollutant shall be calculated using the following equation and the appropriate emission factors listed below:

$NO_x^* = [(Total\ monthly\ hours\ of\ uncontrolled\ operation\ of\ the\ engine-generator\ sets\ x\ uncontrolled\ lb/hr) + (Total\ monthly\ hours\ of\ controlled\ operation\ of\ the\ engine-generator\ sets\ x\ controlled\ lb/hr)] \div 2000$

$CO = (Total\ monthly\ hours\ of\ operation\ of\ the\ engine-generator\ sets\ x\ lb/hr) \div 2000$

$VOC = (Total\ monthly\ hours\ of\ operation\ of\ the\ engine-generator\ sets\ x\ lb/hr) \div 2000$

b. Engine Factors:

Engine-generator (Ref. #'s EG-6, EG-7, and EG-8) emission factors:

	without SCR	with SCR
$NO_x$ (as $NO_2$ )	22.41 lb/hr	3.74 lb/hr
CO	5.18 lb/hr	
VOC	0.74 lb/hr	

\*Upon DEQ verification of the initial performance test, the facility has the option of using a lower  $NO_x$  (as  $NO_2$ ) emission rate (average of three one-hour test runs x 120 percent), by undergoing a permit amendment to incorporate the new lower rate.  
 (9VAC5-80-110 and Condition 12 of September 4, 2024 Permit Document)

## Reporting

39. **Emergency Engines – Reporting – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19) – All correspondence concerning this permit should be submitted to the following address:**

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

(9VAC5-80-110 and Condition 31 of 5/23/2024 Permit Document)

**MACT Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-9, EG-10, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-20, EG-21, EG-22, EG-32, EG-33)**

40. **MACT Subpart ZZZZ – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-9, EG-10, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-20,**

**EG-21, EG-22, EG-32, EG-33)** – The permittee must be in compliance with emission limitations and other requirements in Subpart ZZZZ that apply to the source at all times. The permittee shall operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times. Determination of whether such operation and maintenance procedures are being used will be based on information available to DEQ which may include, but it not limited to monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.  
(9VAC5-80-110 and 40 CFR 63.6605)

### **Emission Standards**

41. **MACT Subpart ZZZZ – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33) – Emission Standards** – The permittee must comply with 40 CFR 63, Subpart ZZZZ by complying with the applicable requirements of 40 CFR 60, Subpart IIII. No other requirements of Subpart ZZZZ apply to the stationary internal combustion engines.  
(9VAC5-80-110 and 40 CFR 63.6590(c))
42. **MACT Subpart ZZZZ – (EG-9, EG-10, EG-20, EG-21) – Emission Standards** – The permittee must comply with 40 CFR 63, Subpart ZZZZ by complying with the applicable requirements of 40 CFR 60, Subpart JJJJ. No other requirements of Subpart ZZZZ apply to SI internal combustion engines.  
(9VAC5-80-110 and 40 CFR 63.6590(c))

### **NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)**

43. **NSPS Subpart IIII** – For engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17 EG-18, EG-19, EG-22, EG-32, and EG-33, the permittee shall comply with the applicable requirements of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60 Subpart IIII.  
(9VAC5-80-110 and 40 CFR 60.4200)

### **Emission Standards**

44. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)**– For engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17 EG-18, EG-19, EG-22, EG-32, and EG-33, the permittee shall

comply with the emissions standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power.  
(9VAC5-80-110 and 40 CFR 60.4205(b))

45. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32 & EG-33) –** The permittee shall operate and maintain engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33 so that the emissions standards as required in 40 CFR 60.4204 and 40 CFR 60.4205 are achieved over the entire life of the engine.  
(9VAC5-80-110 and 40 CFR 60.4206)

### **Fuel Requirements**

46. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32 & EG-33) –** For engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33, the permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel.  
(9VAC5-80-110 and 40 CFR 60.4207(b))

### **Other Requirements**

47. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33) –** The permittee shall install a non-resettable hour meter prior to startup of engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33, unless the permittee maintains records demonstrating that the engines meet the standards applicable to non-emergency engines.  
(9VAC5-80-110 and 40 CFR 60.4209(a))

### **Compliance Requirements**

48. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32 & EG-33) –** For engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33, the permittee shall comply with the requirements of 40 CFR 60.4211(a) (1) through (3), except as permitted in 40 CFR 60.4211(g).  
(9VAC5-80-110 and 40 CFR 60.4211(a))
49. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33) –** For engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-

14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33, the permittee shall comply by purchasing, installing and configuring an engine certified to the emissions standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, National Fire Protection Association nameplate) engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g).

(9VAC5-80-110 and 40 CFR 60.4211(c))

50. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)** – The permittee shall operate engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33, according to the requirements of 40 CFR 60.4211(f) (1), (2) and (3). To be considered an emergency engine under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4211(f) (1) through (3), is prohibited. If an engine is not operated according to the requirements in 40 CFR 60.4211(f) (1) through (3), the engine will not be considered an emergency engine under 40 CFR 60 Subpart IIII and must meet all requirements for non-emergency engines. Operation for non-emergency purposes may require a permit to modify and operate pursuant to 9VAC5-80 Article 6.

(9VAC5-80-110 and 40 CFR 60.4211(f))

51. **NSPS Subpart IIII– (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)** – For engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33, if the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance according to 40 CFR 60.4211(g) (1) through (3).

(9VAC5-80-110 and 40 CFR 60.4211(g))

## Reports and Records

52. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)** – Unless the permittee can demonstrate that engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33 meet the Subpart IIII standards applicable to non-emergency engines, the permittee shall keep records as described in 40 CFR 60.4214(b).

(9VAC5-80-110 and 40 CFR 60.4214(b))

53. **NSPS Subpart IIII – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)** – For

engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33, the permittee shall submit an annual report according to the requirements of 40 CFR 60.4214(d) (1) through (3) as applicable.  
(9VAC5-80-110 and 40 CFR 60.4214(d))

### **General Provisions**

54. **NSPS Subpart III – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, EG-33)** – For engines EG-1, EG-2, EG-3, EG-4, EG-5, EG-6, EG-7, EG-8, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-22, EG-32, and EG-33, the permittee shall comply with the applicable General Provisions (40 CFR 60 Subpart A) as indicated in Table 8 to 40 CFR 60 Subpart III.  
(9VAC5-80-110 and 40 CFR 60.4218)

### **NSPS Subpart JJJJ – Stationary Spark Ignition (SI) Internal Combustion Engines – (EG-9, EG-10, EG-20, EG-21)**

55. **NSPS Subpart JJJJ** – For engines EG-9, EG-10, EG-20, and EG-21, the permittee shall comply with the applicable requirements of Standards of Performance for Stationary Spark Ignition Internal Combustion Engines 40 CFR 60 Subpart JJJJ.  
(9VAC5-80-110 and 40 CFR 60.4230)

### **Emission Standards**

56. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, and EG-21)** – For engines EG-9, EG-10, EG-20, and EG-21, the permittee shall comply with the emission standards in Table 1 to 40 CFR 60 Subpart JJJJ. The permittee shall comply with the applicable emission standards over the entire life of the engines.  
(9VAC5-80-110, 40 CFR 60.4233(e), (h), and 40 CFR 60.4234)

### **Other Requirements**

57. **NSPS Subpart JJJJ – (EG-20 and EG-21)** – If engines EG-20 and EG-21 do not meet the standards in 40 CFR 60 Subpart JJJJ applicable to non-emergency engines, the permittee shall install a non-resettable hour meter.  
(9VAC5-80-110 and 40 CFR 60.4237(a))
58. **NSPS Subpart JJJJ – (EG-9 and EG-10)** – The permittee shall install a non-resettable hour meter on engines EG-9 and EG-10, unless the permittee maintains records demonstrating that the engines meet the standards applicable to non-emergency engines.  
(9VAC5-80-110 and 40 CFR 60.4237(b))

## Compliance Requirements

59. **NSPS Subpart JJJJ – (EG-9 and EG-10)** – For engines EG-9 and EG-10, the permittee shall demonstrate compliance according to the method specified in 40 CFR 60.4243(b) (1). (9VAC5-80-110 and 40 CFR 60.4243(b))
60. **NSPS Subpart JJJJ – (EG-20 and EG-21)** – For engines EG-20 and EG-21, the permittee shall demonstrate compliance according to the methods specified in 40 CFR 60.4243(b)(2)(ii). (9VAC5-80-110 and 40 CFR 60.4243(b))
61. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, and EG-21)** – The permittee shall operate engines EG-9, EG-10, EG-20, and EG-21 according to the requirements in 40 CFR 60.4243(d) (1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart JJJJ, any operation other than emergency operation, maintenance and testing and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4243(d) (1) through (d) (3), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4243(d) (1), (2) or (3), the engine will not be considered an emergency engine under 40 CFR 60 Subpart JJJJ and shall meet all requirements for non-emergency engines. Operation for non-emergency purposes may require a permit to modify and operate pursuant to 9VAC5-80 Article 6. (9VAC5-80-110 and 40 CFR 60.4243(d))
62. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, EG-21)** – If propane is used in engines EG-9, EG-10, EG-20, and EG-21 for more than 100 hours per year (each) and the engine is not certified to the emission standards when using propane, the permittee is required to conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233. (9VAC5-80-110 and 40 CFR 60.4243(e))
63. **NSPS Subpart JJJJ – (EG-9 and EG-10)** – If engines EG-9 and EG-10 are a non-certified engine or, if certified, the permittee does not operate and maintain the engines and control device according to the manufacturer's written emission-related instructions, the permittee is required to perform initial performance testing as indicated in 40 CFR 60.4243, but the permittee is not required to conduct subsequent performance testing unless the stationary engine undergoes rebuild, major repair or maintenance. Engine rebuilding means to overhaul an engine or to otherwise perform extensive service on the engine (or on a portion of the engine or engine system). For the purpose of 40 CFR 60.4243(f), perform extensive service means to disassemble the engine (or portion of the engine or engine system), inspect and/or replace many of the parts, and reassemble the engine (or portion of the engine or engine system) in such a manner that significantly increases the service life of the resultant engine. (9VAC5-80-110 and 40 CFR 60.4243(f))



## Testing Requirements

64. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, and EG-21)** – If the permittee conducts performance tests on engines EG-9, EG-10, EG-20, and EG-21, it shall follow the procedures in 40 CFR 60.4244(a) through (f).  
(9VAC5-80-110 and 40 CFR 60.4244)

## Reports and Records

65. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, EG-21)** – The permittee may operate engines EG-9, EG-10, EG-20, and EG-21 using propane for a maximum of 100 hours per year (each) as an alternative fuel solely during emergency operations but shall keep records of such use.  
(9VAC5-80-110 and 40 CFR 60.4243(e))
66. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, EG-21)** – For engines EG-9, EG-10, EG-20, and EG-21, the permittee shall keep records of the information specified in 40 CFR 60.4245(a) (1) through (4).  
(9VAC5-80-110 and 40 CFR 60.4245(a))
67. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, EG-21)** – If engines EG-9, EG-10, EG-20 and EG-21 do not meet the standards applicable to non-emergency engines, the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.  
(9VAC5-80-110 and 40 CFR 60.4245(b))
68. **NSPS Subpart JJJJ – (EG-20 and EG-21)** – For Engines EG-20 and EG-21, the permittee shall submit an initial notification as required in 40 CFR 60.7(a) (1). The notification must include the information in 40 CFR 60.4245(c) (1) through (5).  
(9VAC5-80-110 and 40 CFR 60.4245(c))
69. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, and EG-21)** – If engines EG-9, EG-10, EG-20, and EG-21 operate for the purposes specified in 40 CFR 60.4243(d) (3) (i), the permittee shall submit an annual report according to the requirements in 40 CFR 60.4245(e) (1) through (3), except for 40 CFR 60.4245(e) (1) (v) and (vi)).  
(9VAC5-80-110 and 40 CFR 60.4245(e))

## General Provisions

70. **NSPS Subpart JJJJ – (EG-9, EG-10, EG-20, and EG-21)** – For engines EG-9, EG-10, EG-20, and EG-21, the permittee shall comply with the General Provisions (40 CFR 60.1 through 60.19) as applicable according to Table 3 to 40 CFR 60 Subpart JJJJ.  
(9VAC5-80-110 and 40 CFR 60.4246)

## General Conditions

71. **General Conditions - Maintenance/Operating Procedures** – (EG-1, EG-2, EG-3, EG-4, EG-5, EG-11, EG-12, EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19) – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

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

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.  
(9VAC5-80-110 and Condition 39 of 5/4/2023 Permit Document)

72. **General Conditions – Maintenance/Operating Procedures** - At all times, including periods of startup, 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 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 the engine generator sets (Ref. #'s EG-6, EG-7, EG-8) and their air pollution control equipment:

- 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.

(9VAC5-80-110 and Condition 27 of the 9/4/2024 Permit Document)

73. **General Conditions – Federal Enforceability** – All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.  
(9VAC5-80-110)

74. **General Conditions – Permit Expiration**

- a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
- b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- c. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the DEQ takes final action on the application under 9VAC5-80-150.
- d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
- e. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the DEQ fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

- f. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application.

(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

75. **General Conditions – Recordkeeping and Reporting** – All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

76. **General Conditions – Recordkeeping and Reporting** – Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9VAC5-80-110)

77. **General Conditions – Recordkeeping and Reporting** – The permittee shall submit the results of monitoring contained in any applicable requirement to the DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

- i. Exceedances of emissions limitations or operational restrictions;
  - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring or periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
  - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semiannual reporting period."

(9VAC5-80-110)

78. **General Conditions – Annual Compliance Certification** – Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to the Environmental Protection Agency (EPA) and the DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a) (3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9VAC5-80-110, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and

- g. One copy of the annual compliance certification shall be submitted to the EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3\_APD\_Permits@epa.gov

(9VAC5-80-110)

79. **General Conditions – Permit Deviation Reporting** – The permittee shall notify the Northern Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semiannual compliance monitoring report pursuant to Condition 77 of this permit.  
(9VAC5-80-110 F(2))
80. **General Conditions – Failure/Malfunction Reporting** – In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Northern Regional Office of such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Northern Regional Office.  
(9VAC5-80-110 and 9VAC5-20-180)
81. **General Conditions – Severability** – The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.  
(9VAC5-80-110)
82. **General Conditions – Duty to Comply** – The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.  
(9VAC5-80-110)
83. **General Conditions – Need to Halt or Reduce Activity not a Defense** – It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt

or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9VAC5-80-110)

84. **General Conditions – Permit Modification** – A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.  
(9VAC80-110, 9VAC5-80-190, and 9VAC5-80-260)
85. **General Conditions – Property Rights** – The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9VAC5-80-110)
86. **General Conditions – Duty to Submit Information** – The permittee shall furnish to the DEQ, within a reasonable time, any information that the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality.  
(9VAC5-80-110)
87. **General Conditions – Duty to Submit Information** – Any document (including reports) required in a permit condition to be submitted to the DEQ shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.  
(9VAC5-80-110)
88. **General Conditions – Duty to Pay Permit Fees** – The owner of any source for which a permit was issued under 9VAC5-80-50 through 9VAC5-80-300 shall pay annual emissions fees, as applicable, consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 and annual maintenance fees, as applicable, consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350.  
(9VAC5-80-110, 9VAC5-80-310 et seq., and 9VAC5-80-2310 et seq.)
89. **General Conditions – Fugitive Dust Emission Standards** – During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-80-110 and 9VAC5-50-90)

- 90. **General Conditions – Startup, Shutdown, and Malfunction** – At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the DEQ, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9VAC5-80-110 and 9VAC5-50-20 E)

- 91. **General Conditions – Alternative Operating Scenarios** – Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.

(9VAC5-80-110)

- 92. **General Conditions – Inspection and Entry Requirements** – The permittee shall allow the DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:



- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110)

93. **General Conditions – Reopening for Cause** – The permit shall be reopened by the DEQ if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the DEQ or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the DEQ determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the DEQ if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

94. **General Conditions – Permit Availability** – Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to the DEQ upon request.  
(9VAC5-80-110 and 9VAC5-80-150)

**95. General Conditions – Transfer of Permits**

- a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the DEQ of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the DEQ of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-110 and 9VAC5-80-160)

- 96. General Conditions – Permit Revocation or Termination for Cause** – A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The DEQ may suspend, under such conditions and for such period of time as the DEQ may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9VAC5-80-110, 9VAC5-80-190 C, and 9VAC5-80-260)

- 97. General Conditions – Duty to Supplement or Correct Application** – Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9VAC5-80-110 and 9VAC5-80-80 E)

- 98. General Conditions – Stratospheric Ozone Protection** – If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(9VAC5-80-110 and 40 CFR Part 82)

- 99. General Conditions – Asbestos Requirements** – The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following:

Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).  
(9VAC5-60-70 and 9VAC5-80-110)

100. **General Conditions – Accidental Release Prevention** – If the permittee has more or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(9VAC5-80-110 and 40 CFR Part 68)
101. **General Conditions – Changes to Permits for Emissions Trading** – No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9VAC5-80-110)
102. **General Conditions – Emissions Trading** – Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
  - b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
  - c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.
- (9VAC5-80-110)
103. **General Conditions – Permit Copy** – The permittee shall keep a copy of this permit on the premises of the facility to which it applies.  
(9VAC5-80-110 and Condition 44 of 5/4/2023 Permit Document)
104. **General Conditions – Permit Copy** – The permittee shall keep a copy of this permit on the premises of the facility to which it applies.  
(9VAC5-80-110 and Condition 32 of the 9/4/2024 Permit Document)

## Appendix A: Table 1 Monitoring Data

Facility: \_\_\_\_\_

Registration No.: \_\_\_\_\_

Date: \_\_\_\_\_

Unit Ref #              Engine Run Time

Date & Time	Run Time with SCR (minutes)	Run Time without SCR (minutes)	SCR Outlet Temperature (Degrees F)	Engine Generator Load/Electrical Output (kW)	NO <sub>x</sub> Emission Rate, lb/hr) (as NO <sub>2</sub> )
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1/1/2008 0:00

1/1/2008 0:15

1/1/2008 0:30

1/1/2008 0:45

1/1/2008 1:00

1/1/2008 1:15

1/1/2008 1:30

1/1/2008 1:45

1/1/2008 2:00

1/1/2008 2:15

1/1/2008 2:30

1/1/2008 2:45

etc.