



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

April 11, 2016

Mr. Cedric L. Deal
Director,
U.S. Army
Warrenton Training Center
P.O. Box 700
Warrenton, VA 20188

Location: Fauquier County
Registration No. 40902

Dear Mr. Deal:

Attached is a Title V Federal Operating Permit to operate the air emission units at your facility pursuant to 9 VAC 5 Chapter 80, Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. Please read all conditions carefully.

In evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on December 14, 2015. DEQ solicited written public comments by placing a newspaper advertisement in the *Fauquier Times* on January 27, 2016. The 30-day comment period (provided for in 9 VAC 5-80-270) expired on February 29, 2016, with no public comments having been received by this office.

This approval to operate does not relieve U.S. Army Warrenton Training Center of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Mr. Cedric L. Deal
April 11, 2016
Page 2

Additionally, 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 to court by filing a Notice of Appeal with:

David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Jonathan Carney at (703) 583-3863.

Sincerely,



James B. LaFratta
Regional Air Permit Manager

TAF/JBL/JWC/16-04-11TV.docx

Attachment: Permit

cc: Ms. Sara Heald, Warrenton Training Center, Station B (pdf copy via email)
Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
File



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193-1453

(703) 583-3800 Fax (703) 583-3821

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Thomas A. Faha
Regional Director

**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, of 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 9 VAC 5-80-50 through 9 VAC 5-80-300 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: Warrenton Training Center – Station B
Facility Name: Warrenton Training Center – Station B
Facility Location: Bear Wallow Road Warrenton, Virginia
Registration Number: 40902
Permit Number: NRO40902

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 10 through 42)

April 11, 2016
Effective Date

April 10, 2021
Expiration Date

Thomas A. Faha
Thomas A. Faha
Regional Director

April 11, 2016
Signature Date

Permit consists of 42 pages
Permit Conditions, 1-86
Appendix A

Table of Contents

FACILITY INFORMATION.....3

EMISSION UNITS4

FUEL BURNING EQUIPMENT REQUIREMENTS - (EMISSION UNIT ID# EG-POD1THROUGH EG-POD5, EG-10, EG-11F, EG-25, GEN-36A, GEN-36B, GEN-36C, EG-42, EG-47A, EG47B, EG-51A, EG-51B, EG-52A THROUGH EG-52E, EG-53, EG-60, GEN-1 THROUGH GEN-10, EG-70K, EG-80, EG-89, BOIL-35A)9

 Limitations.....9

 Monitoring.....18

 Testing.....19

 Recordkeeping.....20

 Reporting.....23

 General.....26

FACILITY WIDE CONDITIONS26

INSIGNIFICANT EMISSION UNITS28

PERMIT SHIELD & INAPPLICABLE REQUIREMENTS32

GENERAL CONDITIONS33

Facility Information

Permittee

U.S. Army
Warrenton Training Center – Station B
P.O. Box 700
Warrenton, VA 20188

Responsible Official

Mr. Cedric L. Deal
Director

Facility

Warrenton Training Center – Station B
Route 690, 7471 Bear Wallow Rd.
Warrenton, VA 20186

Contact Person

Ms. Sara Heald
Chief, Environmental Safety Office
(540) 428-7452

County-Plant Identification Number: 51-061-00072

Facility Description: NAICS 928110 - Warrenton Training Center – Station B is a military communications training center. The center operates fuel burning equipment such as emergency and non-emergency diesel engine-generators, fuel oil fired boilers and various insignificant emissions units. Nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), sulfur dioxide, and particulate matter (PM) are emitted from the fuel burning equipment.

The facility is a Title V major source of NO_x. This source is located in an attainment area for all pollutants, and is a PSD minor source. The facility is currently permitted under a minor New Source Review (mNSR) Permit issued on October 5, 2015, revised April 6, 2016 (“4/6/2016 mNSR Permit”).

Emission Units

Equipment to be operated consists of:

Fuel Burning Equipment							
Emission Unit ID (Year of Manufacture)	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG-10 (2010)	EU05	Cummins 12GSAA-6707C (SIIC**)	12 ekW (14 hp) Output	--	--	--	4/6/2016 mNSR Permit
EG-11F (2010)	EU06	Caterpillar 3516C	2,000 ekW (2,937 hp) Output	--	--	--	4/6/2016 mNSR Permit
EG-25 (2004)	EU07	John Deere 6068TF250F/25 8	105 ekW (190 hp) Output	--	--	--	4/6/2016 mNSR Permit
EG-42 (2004)	EU11	Volvo D250 9.6A60	260 ekW (394 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-47A (1978)	EU12	Detroit Diesel 10337005	50 ekW (67 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-47B (2013)	EU13	KOMATSU SA6D170 AE	598 ekW (799 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-51A (2007)	EU14	Kubota D1703	15 ekW(27 bhp) Output	--	--	--	4/6/2016 mNSR Permit

Fuel Burning Equipment							
Emission Unit ID (Year of Manufacture)	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG-51B (2003)	EU15	Volvo D250 9.6A60	260 ekW (394 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-52A (1987)	EU16	Cummins 6BT- 5.9	80 ekW (134 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-52B (2005)	EU17	Cummins QSX150G9	400 ekW (755 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-52C (2014)	EU18	Cummins QSX150G9	450 ekW (755 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-52D (2014)	EU19	Cummins QSX150G9	450 ekW (755 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-52E (2014)	EU20	Cummins QSX150G9	450 ekW (755 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-53 (1998)	EU21	Perkins YB50495*U705 505D	90 ekW (121 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-60 (pre-2006)	EU22	Detroit Diesel 10337005	50 kW (109 bhp) Output	--	--	--	4/6/2016 mNSR Permit

Fuel Burning Equipment							
Emission Unit ID (Year of Manufacture)	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG-70K (2005)	EU33	Caterpillar 3406	350 ekW (519 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-80 (Aug. 2006)	EU34	John Deere 4045HF275H	100 ekW (157 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-89 (2010)	EU35	Caterpillar C4.4	72 ekW (90 bhp) Output	--	--	--	4/6/2016 mNSR Permit
EG-POD1 (2013)	EU01	Caterpillar 3516C	2,000 ekW (2,937 hp) Output	--	--	--	4/6/2016 mNSR Permit
EG-POD2 (2013)	EU02	Caterpillar 3516C	2,000 ekW (2,937 hp) Output	--	--	--	4/6/2016 mNSR Permit
EG-POD3 (2015)	EU03	Caterpillar 3516C	2,000 ekW (2,937 hp) Output	--	--	--	4/6/2016 mNSR Permit
EG-POD4 (2013)	EU04	Caterpillar 3516C	2,500 ekW (3,634 hp) Output	--	--	--	4/6/2016 mNSR Permit

Fuel Burning Equipment							
Emission Unit ID (Year of Manufacture)	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
EG-POD5 (2015)	EU40	Caterpillar 3516C	2,000 ekW (2,937 hp) Output	Selective Catalytic Reduction (SCR) with closed loop dosing; Direct Oxidation Catalyst (DOC); Diesel Particulate Filter (DPF)	Caterpillar Retrofit SCR System	NO _x , CO, and PM	4/6/2016 mNSR Permit
Gen-1 (2005)	EU23	Caterpillar 3516B	1,825 ekW (2,636 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-2 (2005)	EU24	Caterpillar 3516B	1,825 ekW (2,636 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-3 (2005)	EU25	Caterpillar 3516B	1,825 ekW (2,636 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-4 (2005)	EU26	Caterpillar 3516B	1,825 ekW (2,636 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-5 (2005)	EU27	Caterpillar 3516B	1,825 ekW (2,636 bhp) Output	--	--	--	4/6/2016 mNSR Permit

Fuel Burning Equipment							
Emission Unit ID (Year of Manufacture)	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Gen-6 (2005)	EU28	Caterpillar 3516B	1,825 ekW (2,636 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-7 (2010)	EU29	Caterpillar 3516C	1,825 ekW (2,690 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-8 (2010)	EU30	Caterpillar 3516C	1,825 ekW (2,690 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-9 (2010)	EU31	Caterpillar 3516C	1,825 ekW (2,690 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-10 (2010)	EU32	Caterpillar 3516C	1,825 ekW (2,690 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-36A (2007)	EU08	Cummins BTA3.9-G5	35 ekW (99 hp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-36B (2008)	EU09	Caterpillar 43054C	40 ekW (72 bhp) Output	--	--	--	4/6/2016 mNSR Permit
Gen-36C (2004)	EU10	Cummins B3/3-G1	42 ekW (56 bhp) Output	--	--	--	4/6/2016 mNSR Permit

Fuel Burning Equipment							
Emission Unit ID (Year of Manufacture)	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
BOIL-35A (2009)	EU36	Burnham V1108 #2 fuel oil fired hot water heater	1.820 MMBtu/hr (input)	--	--	--	None

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

** Spark ignition internal combustion (SIIC)

Fuel Burning Equipment Requirements – (emission unit ID# EG-POD1 through EG-POD5, EG-10, EG-11F, EG-25, Gen-36A, Gen-36B, Gen-36C, EG-42, EG-47A, EG47B, EG-51A, EG-51B, EG-52A through EG-52E, EG-53, EG-60, Gen-1 through Gen-10, EG-70K, EG-80, EG-89, BOIL-35A)

1. **Limitations** – All of the diesel engine-generators identified in this permit shall control emissions as follows:
 - a. Visible emissions, particulate emissions (PM), carbon monoxide (CO) emissions, volatile organic compound (VOC) emissions, and nitrogen oxide (NO_x) emissions shall be controlled by the use of good operating practices and performing appropriate maintenance in accordance with the manufacturer's recommendations. In addition, the permittee may only change those settings that are permitted by the manufacturer and do not increase air emissions.
 - b. Sulfur dioxide (SO₂) emissions from the diesel engine-generators shall be controlled by the use of ultra low sulfur fuels.
 - c. Each diesel engine-generator, Gen-7 through Gen-10, shall be equipped with electronic fuel injection, a turbocharger, and an aftercooler.
 - d. Nitrogen oxides (NO_x) emissions from the diesel engine-generator, EG-POD 5, shall be controlled by closed loop selective catalytic reduction (SCR). The SCR system shall be equipped with a temperature probe to monitor the catalyst bed exhaust temperature at all times when EG-POD 5 is operating. The diesel exhaust fluid (DEF) dosing enabling temperature shall be 572°F (catalyst bed exhaust temperature). The EG-POD 5 diesel engine-generator exhaust gas shall be treated with DEF when the engine is operating at or above 572°F but below 1022°F except for periods of start-up, shutdown, or malfunction. The SCR shall be considered fully operational for emission calculation purposes when DEF dosing is occurring.
 - e. Carbon monoxide (CO) from the diesel engine-generator, EG-POD5, shall be controlled by a diesel oxidation catalyst (DOC). The DOC shall be operated and maintained in accordance with manufacturer requirements. The DOC shall be provided with adequate access for inspection and shall be in operation when EG-POD5 is operating. The DOC shall be considered fully operational, for emission calculation purposes, when the average hourly catalyst bed temperature is between 536°F and 1,292°F.
 - f. Particulate matter (PM₁₀/PM_{2.5}) from the diesel engine-generator, EG-POD5, shall be controlled by a diesel particulate filter (DPF). The DPF shall be operated in accordance with manufacturer's requirements. The DPF must be installed with a backpressure monitor that notifies the operator when the high backpressure limit of the engine is approached. The DPF shall be provided with adequate access for inspection and shall be in operation when EG-POD5 is operating. The DPF shall be considered fully operational for emission calculation purposes when the inlet temperature to the DPF is 464°F.

(9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 1 of 4/6/2016 mNSR Permit)

2. **Limitations** – All of the diesel engine-generators identified in this permit shall be operated and maintained, at a minimum, according to the manufacturer's written instructions or according to 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 increase air emissions.
(9 VAC 5-80-1180 D, 40 CFR §60.4211(a)(1)(2), 40 CFR §63.6625(e), 40 CFR §63.6640(a) and Condition 3 of 4/6/2016 mNSR Permit)
3. **Limitations** –The approved fuel for use in all of the diesel engine-generators identified in this permit is diesel fuel oil that 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 35 volume percent.
(9 VAC 5-80-1180, 9 VAC 5-50-260, 40 CFR §60.4207, 40 CFR §60.4209(b), §63.6604 (b) and Condition 7 of 4/6/2016 mNSR Permit)
4. **Limitations** – The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel. Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier;
 - b. The date on which the diesel fuel was received;
 - c. The quantity of diesel fuel delivered in the shipment;
 - d. A statement that the diesel fuel conforms to the applicable fuel specification requirements of Condition 3; and
 - e. The sulfur content of the diesel fuel.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 3. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-1180 and Condition 8 of 4/6/2016 mNSR Permit)

5. **Limitations** – The hours of operation of the diesel engine-generators are limited as follows:
 - a. Each diesel engine-generator identified in the list of emission units (except EG-POD1 through EG-POD5, EG-52 C through EG-52 E, and Gen-7 through Gen-10) of this permit shall not operate more than 325 hours per year, calculated monthly as the sum of each consecutive 12 month period.
 - b. Each diesel engine-generator, EG-POD1 through EG-POD5, EG-52 C through EG-52 E, shall not operate more than 500 hours per year, calculated monthly as the sum of each consecutive 12 month period.
 - c. Each diesel engine-generator, Gen-1 through Gen-6, shall not operate more than 50 hours per year for storm avoidance purposes, calculated monthly as the sum of each

consecutive 12 month period. Operation for storm avoidance purposes is included in the 325 hours per year of operation.

- d. Each diesel engine-generator, Gen-7 through Gen-10, shall not operate more than 470 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.

(9 VAC 5-80-180 and Condition 6 of 4/6/2016 mNSR Permit)

6. Limitations – The emergency diesel engine-generators, (EG-POD1 through EG-POD5, EG-10, EG-11F, EG-25, EG-42, EG-47A, EG47B, EG-51A, EG-51B, EG-52A through EG-52E, EG-53, EG-60, EG-70K, EG-80, EG-89) shall only be operated in the following modes:

- a. In situations that arise from sudden and reasonably unforeseeable events where the primary energy or power source is disrupted or disconnected due to conditions beyond the control of an owner or operator of a facility including:
 - 1) A failure of the electrical grid;
 - 2) On-site disaster or equipment failure; or
 - 3) 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:
 - 1) 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;
 - 2) Capacity deficiency or capacity excess conditions;
 - 3) A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel;
 - 4) Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state; or
 - 5) An abnormal event external to the ISO service territory that may require ISO action.
- c. For periodic maintenance, testing, and operational training. These engines may operate up to 100 hours per year for maintenance and readiness testing of which 50 hours (of the 100) per year can be non-emergency for operational training.

(9 VAC 5-80-1110, 9 VAC 5-80-1180, 40 CFR §60.4211(f), 40 CFR §63.6640(f), and Condition 4 of 4/6/2016 mNSR Permit)

7. **Limitations** – Gen-1 through Gen-10 diesel engine-generators 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:
 - 1) A failure of the electrical grid;
 - 2) On-site disaster or equipment failure; or
 - 3) 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:
 - 1) 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;
 - 2) Capacity deficiency or capacity excess conditions;
 - 3) A fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel;
 - 4) Abnormal natural events or man-made threats that would require conservative operations to posture the system in a more reliable state; or
 - 5) An abnormal event external to the ISO service territory that may require ISO action.
 - c. For periodic maintenance, testing, and operational training; and
 - d. For Storm Avoidance purposes. The diesel engine-generators may be operated under loaded conditions for the following reasons related to severe weather:
 - 1) The National Weather Service issues a Severe Storm Warning for Fauquier County, Virginia; or
 - 2) Lightning is detected within a 20-mile radius of the building in which the diesel engine-generators are housed; or
 - 3) There are sustained wind speeds exceeding 30 miles per hour.

(9 VAC 5-80-1180 and Condition 5 of 4/6/2016 mNSR Permit)

8. **Limitations** – Emissions from the operation of each diesel engine-generator listed below shall not exceed the limits specified below:

Unit	NOx (as NO ₂) (lbs/hr)	CO (lbs/hr)	VOC (lbs/hr)	PM _{10/2.5} (lbs/hr)
Gen 1 through Gen 10	33.6	4.0	1.5	0.6
EG-70K	16.1	3.5	1.3	1.1
EG-11F	38.9	4.0	1.5	0.6
EG-POD 1 through EG-POD 3	38.9	3.5	0.9	0.3
EG-POD 4	48.1	6.2	1.1	0.4
EG-POD 5 (with controls)**	6.3	0.35	0.17	0.048
EG-POD5 (without controls)	42.26	2.33	0.85	0.19
EG-52C through EG-52E	5.5	0.9	2.7	0.2

**EG-POD5 is equipped with closed loop selective catalytic reduction (SCR), a direct oxidation catalyst (DOC), and a diesel particulate filter (DPF). The 'with control' limits only apply when these controls are operating within certain operating parameters and only apply to the specific pollutants that each control is designed to control.
 (9 VAC 5-50-260, 9 VAC 5-80-1180 and Condition 9 of 4/6/2016 mNSR Permit)

9. **Limitations** – The annual emissions from diesel engine-generators, Gen 1 through Gen 10, EG-70K, EG-11F, EG-POD 1 through EG-POD5, EG-52C through EG-52E shall not exceed the limits specified below:

Pollutant	Emissions (tons per year)
NOx (as NO ₂)	137.5
CO	17.41
VOC	5.58
PM _{10/2.5}	3.02
SO ₂	1.44

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 10.

(9 VAC 5-80-1180 and Condition 10 of 4/6/2016 mNSR Permit)

10. **Limitations** – The total annual emissions of NOx (as NO₂), CO, VOC, PM₁₀, PM_{2.5} and SO₂ from the diesel engine-generators, Gen- 1 through Gen -10, EG-70K, EG-11F, EG-POD1 through EG-POD5, EG-52C through EG-52E shall be calculated monthly as the sum of each consecutive twelve-month period. Monthly emissions (tons) for each pollutant shall be calculated using the equation below and using the emission factors for the diesel engine-generators from Appendices A (enclosed with this permit):

$$\text{Pollutant} = \Sigma(\text{Emissions Factor (lbs/hr) of each diesel engine-generator from Appendix A} * \text{monthly hours of operation of each unit})$$

Note: For EG-POD5, the controlled emissions and uncontrolled emissions need to be calculated separately. The emissions need to be calculated using the factors for each controlled pollutant for each hour that that particular pollutant's control device is fully operational. The emissions need to be calculated using the factors for each uncontrolled pollutant for each hour that that particular pollutant's control device is not fully operational. (See Appendix A footnotes for additional explanation)

(9 VAC 5-80-1180 and Condition 11 of 4/6/2016 mNSR Permit)

11. **Limitations** – Visible emissions from diesel engine-generators, EG-POD1 through EG-POD5, EG-52 C through EG-52 E, Gen-1 through Gen-10, EG-10, EG-11F, EG-89, Gen-36A, Gen-36B, EG-47B, EG-51A, EG-60, EG-70K, and EG-80 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 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 engines shall not exceed 10 percent opacity except during one 6-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity.
 (9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 12 of 4/6/2016 mNSR Permit)

12. **Limitations** – Visible emissions from emergency diesel engine-generators, EG-47A, EG-52B, EG-25, Gen-36C, EG-42, EG-51B, EG-52A, and EG-53 shall not exceed 10 percent opacity except during one 6-minute period in any one hour in which visible emissions shall not exceed 20 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.

(9 VAC 5-80-1180, 9 VAC 5-50-260 and Condition 13 of 4/6/2016 mNSR Permit)

13. **Limitations** – The EG-10 propane engine-generator shall comply with the emission standards in 40 CFR §60.4231(a) for stationary SI ICE (engine must meet the emission standards and related requirements in 40 CFR part 90)
(40 CFR §60.4233)
14. **Limitations** – The EG-10 propane engine-generator shall meet the emission standards as required in Condition 13 for the entire life of the engine.
(40 CFR §60.4232)
15. **Limitations** – The propane engine-generator, EG-10, must be certified to the emission standards specified in 40 CFR §60.4233 (a) through (c). The diesel engine-generator must be operated according to manufacturer's emission-related written instructions and records of conducted maintenance must be kept to demonstrate compliance. EG-10 shall also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as applicable. Any adjustment of the engine settings according to and consistent with the manufacturer's instructions will not be considered out of compliance.
(40 CFR §60.4243(a)(1))
16. **Limitations** – NO_x emissions from diesel engine-generator, EG-80, shall not exceed 9.2 g NO_x/kWe-hr (6.9 g NO_x/HP-hr). The EG-80 diesel engine-generator shall be operated and maintained so that the emission standards as required in §60.4205 are achieved over the entire life of the engine.
(40 CFR §60.4205 and 40 CFR §60.4206)
17. **Limitations** – Emergency diesel engine-generator, EG-80, must meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable.
(40 CFR §60.4211(a)(3))
18. **Limitations** – Compliance with emissions standards specified for diesel engine-generator, EG-80, in Condition 16 may be demonstrated by one of the following methods:
 - a. The engine must be certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
 - b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
 - c. Keeping records of engine manufacturer data indicating compliance with the standards.
 - d. Keeping records of control device vendor data indicating compliance with the standards.

- e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.

(40 CFR §60.4211(b))

19. Limitations – The following requirements apply to diesel engine-generator, Gen-36C.

- a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; Alternatively, an oil analysis program may be used in accordance with 40 CFR §63.6625(h)(i).
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(40 CFR §63.6603(a), 40 CFR §63 Table 2d)

20. Limitations – The following requirements apply to diesel engine-generators, Gen-1 through Gen-6.

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first; Alternatively, an oil analysis program may be used in accordance with 40 CFR §63.6625(h)(i).
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Compliance with the above maintenance practices may be considered compliance with the requirement to limit or reduce the concentration of CO in the exhaust of the diesel engine-generators.

(40 CFR §63.6603(a), 40 CFR §63 Subpart ZZZZ Table 2d, 40 CFR §63 Subpart ZZZZ Table 2b, 40 CFR §63 Subpart ZZZZ Table 5, 40 CFR §63.6625(h), (i))

21. Limitations – Minimize diesel engine-generators, Gen-1 through Gen-6 and Gen-36C, time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup to 40 CFR Subpart ZZZZ apply. (40 CFR §63.6625(h))

22. Limitations – The permittee shall comply with the emission standards for new compression ignition (CI) engines in 40 CFR §60.4201 for all pollutants as applicable to the diesel engine-generators, Gen-7 through Gen-10, Gen-36A, and Gen-36B. (40 CFR §60.4204)

23. **Limitations** – The permittee shall comply with the emission standards for new non-road CI engines in §60.4202 for all pollutants as applicable to diesel engine-generators, EG-POD1, EG-POD2, EG-POD3, EG-POD4, EG-POD5, EG-11F, EG-52C, EG-52D, EG-52E, EG-47B, EG-51A, and EG-89.
(40 CFR §60.4205)
24. **Limitations** – Diesel engine-generators, Gen-7 through Gen-10, EG-POD1, EG-POD2, EG-POD3, EG-POD4, EG-POD5, EG-11F, Gen-36A, Gen-36B, EG-47B, EG-51A, EG-52C, EG-52D, EG-52E, and EG-89, must be operated and maintained so that the emission standards referenced in Condition 22 and Condition 23 are achieved over the entire life of the engines.
(40 CFR §60.4206)
25. **Limitations** – The compliance requirements as applicable to the diesel engine-generators, Gen-7 through Gen-10, EG-POD1 through EG-POD5, EG-11F, Gen-36A, Gen-36B, EG-47B, EG-51A, EG-52C through EG-52E, and EG-89, are as follows:
- a. Operate and maintain each stationary compression ignition internal combustion engine and control device according to the manufacturer's emission-related written instructions;
 - b. Change only those emission-related settings that are permitted by the manufacturer; and
 - c. Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable.
 - d. Gen-7 through Gen-10, EG-POD1 through EG-POD5, EG-11F, Gen-36A, Gen-36B, EG-47B, EG-51A, EG-52C through EG-52E, and EG-89 must be certified to the emissions standards in 40 CFR §60.4204(b), or §60.4205(b) or (c) as applicable, for the same model year and maximum engine power. The engines must be installed and configured according to manufacturer's emission-related specifications, except as permitted in 40 CFR §60.4211(g).
- (40 CFR §60.4211(c))
26. **Limitations** – Conduct a performance tune-up on boiler BOIL-35A according to Condition 27 and Condition 28 and submit a signed statement in the Notification of Compliance Status report that indicates that a tune-up of the boiler was conducted.
(40 CFR §63.11214(b) and 40 CFR 63 Subpart JJJJJJ Table 2)
27. **Limitations** – Conduct a tune-up of boiler BOIL-35A every 5 years as specified in Condition 28. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The burner inspection and inspection of the system controlling the air-to-fuel ratio may be delayed to at least once every 72 months.
(40 CFR §63.11223(e))
28. **Limitations** – The boilers BOIL-35A tune-up shall consist of the following:
- a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary.

- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject.
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made. Measurements may be taken using a portable CO analyzer.
- f. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of this section.
 - 1) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.
 - 2) A description of any corrective actions taken as a part of the tune-up.
 - 3) The type and amount of fuel used over the 12 months prior to the tune-up.
- g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

(40 CFR §63.11223(b)(1-7))

29. **Monitoring** – Each diesel engine-generators, EG-POD1 through EG-POD5, EG-11F, EG-52 C through EG-52 E, Gen-1 through Gen-10, EG-70K, EG-80, Gen-36A, Gen-36B, EG-47B, EG-51A, EG-89, 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 diesel engine-generator shall be observed by the owner with a frequency of not less than once each day the engine is operated.
(9 VAC 5-80-1180 D, 40 CFR §60.4209(a), §63.6625(f), and Condition 2 of October 5, 2015 NSR permit)
30. **Monitoring** – Each monitoring device (i.e. hour meter, NO_x sensor, temperature sensor, pressure gauge) of each diesel engine-generator, EG-POD1 through EG-POD5, EG-11F, EG-52 C through EG-52 E, Gen-1 through Gen-10, EG-70K, EG-80, Gen-36A, Gen-36B, EG-47B, EG-51A, EG-89, as equipped 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 engines are operating.

(9 VAC 5-80-1180 D, 40 CFR 60.4209(a), 40 CFR §63.6625(f), and Condition 2 of 4/6/2016 mNSR Permit)

31. **Monitoring** – For diesel engine-generators, EG-10, EG-25, Gen-36C, EG-42, EG-47A, EG-51B, EG-52A, EG-52B, EG-53, and EG-60, not equipped with an hour meter the permittee shall maintain a log book that includes, at a minimum, the reference number of the engine, date of the run, engine start time, engine end time, total run time for each engine, and the reason for operation.
(9 VAC 5-80-1180 D and Condition 2 of 4/6/2016 mNSR Permit)
32. **Monitoring** – The closed loop SCR system on diesel engine-generator, EG-POD 5, shall be equipped with a device to measure and record the NO_x emissions (expressed in ppm), measured before and after the catalyst, and catalyst bed exhaust temperature at least once every fifteen minutes. The information shall be correlated to run date, engine load/kilowatt output, and engine operating hours. Total operating time and load shall be recorded for all periods when diesel engine-generator, EG-POD 5, is operational.
(9 VAC 5-80-1180 D and Condition 2 of 4/6/2016 mNSR Permit)
33. **Monitoring** – The DOC on diesel engine-generator, EG-POD 5, shall be equipped with a device to measure and record the temperature of the catalyst bed. The information shall be correlated to run date and engine operating hours.
(9 VAC 5-80-1180 D and Condition 2 of 4/6/2016 mNSR Permit)
34. **Monitoring** – The DPF on diesel engine-generator, EG-POD5, shall be equipped with a device to measure and record backpressure and exhaust inlet temperature to the DPF. The information shall be correlated to run date and engine operating hours.
(9 VAC 5-80-1180 D and Condition 2 of 4/6/2016 mNSR Permit)
35. **Stack Test** - Initial performance tests shall be conducted on the diesel engine-generator, EG-POD5 for NO_x and CO to determine compliance with the emission limits contained in Conditions 1 and 8. The tests shall be performed, reported, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Air Compliance Manager of DEQ's Northern Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the DEQ's Northern Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.
 - a. Emissions testing of each pollutant for the diesel engine-generator shall consist of three one-hour test runs under load. The average of the three runs shall be reported as the short-term emission rate for that diesel engine-generator.
 - b. Testing shall be conducted with the engine operating at greater than 90% electrical capacity, unless multiple load band testing is approved by DEQ.

- c. Recorded information shall include, but not be limited to:
- i. Generator load/kilowatt output.
 - ii. Fuel consumption and fuel sulfur content of the diesel fuel oil.
 - iii. Diesel Exhaust Fluid consumed by the SCR.
 - iv. Catalyst bed exhaust temperature for the SCR.
 - v. Catalyst bed exhaust temperature for the DOC.
 - vi. Exhaust inlet temperature and backpressure for the DPF.

(9 VAC 5-50-30, 9 VAC 5-80-1200, and Condition 14 of 4/6/2016 mNSR Permit)

36. Visible Emissions Evaluation – Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall be conducted by the permittee on the diesel engine-generator, EG-POD5. The evaluation shall be performed, reported, and compliance shall be demonstrated within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. Should conditions prevent concurrent opacity observations, the DEQ's Northern Regional Office shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. The details of the tests are to be arranged with the Air Compliance Manager of the Northern Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test result shall be submitted to the DEQ's Northern Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

- a. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average.
- b. Testing shall be conducted with the engine operating at greater than 90% electrical capacity, unless multiple load band testing is approved by DEQ.

(9 VAC 5-50-30 and 9 VAC 5-80-1200 Condition 15 of 4/6/2016 mNSR Permit)

37. Testing – The facility/permitted emission units shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using approved methods. Sampling ports shall be provided at the appropriate locations and safe sampling platforms and access shall be provided when requested.

(9 VAC 5-50-30 F, 9 VAC 5-80-1180 and Condition 16 of 4/6/2016 mNSR Permit)

38. Testing – Upon request by the DEQ, the permittee shall conduct performance testing and/or visible emission evaluations of the diesel engine-generators 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 Northern Regional Office (NRO).

(9 VAC 5-80-1200 and 9 VAC 5-50-30 G and Condition 17 of 4/6/2016 mNSR Permit)

- 39. Recordkeeping** – Starting with the model years in 40 CFR 60 Subpart IIII Appendix Table 5, if any of emergency diesel engine-generators, EG-POD1 through EG-POD5, EG-11F, EG-47B, EG-51A, EG-52C through EG-52E, and EG-89 does not meet standards applicable to non-emergency engines then records must be kept of the operation of the engine in emergency and non-emergency services that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
(40 CFR §60.4214(b))
- 40. Recordkeeping** – The permittee shall maintain records of emission data and operating parameters for all diesel engine-generators 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. Hourly average of NO_x concentration (in ppm) measured at the input and output of the SCR exhaust catalyst of EG-POD5 for each hour that EG-POD5 is operated with SCR fully operational.
 - b. Hourly average NO_x control efficiency (in %) calculated from the input and output NO_x concentrations of the SCR exhaust catalyst of EG-POD5 for each hour that EG-POD5 is operated.
 - c. Hourly average SCR catalyst bed exhaust temperature of EG-POD5 for each hour that EG-POD5 is operated.
 - d. Hourly average DOC catalyst bed exhaust temperature of EG-POD5 for each hour that EG-POD5 is operated.
 - e. Hourly average DPF inlet temperature and exhaust backpressure of EG-POD5 for each hour that EG-POD5 is operated.
 - f. Hours of operation that EG-POD5 was operated with the SCR fully operational.
 - g. Hours of operation that EG-POD5 was operated with the DOC fully operational.
 - h. Hours of operation that EG-POD5 was operated with the DPF fully operational.
 - i. Monthly logs of the hour meter monitoring device observations as required by Condition 29.
 - j. Monthly Summary Table for each diesel engine-generator to include:
 - 1) Operating hours;
 - 2) Total engine hours on a rolling twelve month basis;
 - 3) Reasons for operation; and

- 4) Startup (date and time), shutdown (date and time) and reasons for which diesel engine-generators, Gen-1 through Gen-10, have been operated for storm avoidance purposes per Condition 7.
- k. Annual emission calculations for NO_x (as NO₂), CO, VOC, PM₁₀, PM_{2.5} and SO₂ from the facility, calculated monthly as the sum of each consecutive 12-month period and using the calculation methodology as listed in Condition 10, to verify compliance with the ton/yr emissions limitations in Condition 9.
 - l. Annual hours of operation of each diesel engine-generator, calculated monthly as the sum of each consecutive 12-month period, to verify compliance with the operating limitations in permit Condition 5.
 - m. Annual hours of storm avoidance operation for each diesel engine-generator, Gen-1 through Gen-6, calculated monthly as the sum of each consecutive 12-month period, to verify compliance with the operating limitations in permit Condition 5.
 - n. All fuel supplier certifications or the results of fuel sampling in accordance with permit Condition 4.
 - o. Engine information including make, model, serial number, model year/year of manufacture, maximum engine power (bhp), and engine displacement for each diesel engine-generator listed in the equipment list of this permit.
 - p. The manufacturer's written operating instructions or procedures developed by the owner/operator that are approved by the engine manufacturer for the diesel engine-generators listed in the equipment list of this permit.
 - q. Results of all stack tests and visible emission evaluations.
 - r. Scheduled and unscheduled maintenance and operator training.
 - s. Records of changes in settings that are permitted by the manufacturer of the diesel engine-generator listed in the equipment list of this permit.
 - t. All notifications submitted to comply with 40 CFR 60 Subpart JJJJ and all documentation supporting any notification as applicable to EG-10.
 - u. Documentation from the manufacturer that the EG-10 engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
 - v. Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
 - w. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation. Compliance for the consecutive twelve-month period shall be demonstrated

monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding eleven months.

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

(9 VAC 5-80-1180, 9 VAC 5-50-50, §63.6655(e and f), 40 CFR §60.4245, 40 CFR §63.6655 and 40 CFR §63.6660)

41. Recordkeeping – The following records for boiler BOIL-35A must be kept:

- a. As required in 40 CFR §63.10(b)(2)(xiv), a copy of each notification and report submitted to comply with 40 CFR 63 Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted.
- b. Records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as follows:
 - 1) Records must identify the boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
- c. Records of the occurrence and duration of each malfunction of boiler BOIL-35A, or of the associated air pollution control and monitoring equipment.
- d. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

Records must be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. Records may be kept off site for the remaining 3 years.
(40 CFR §63.11225)

42. Reporting – an annual compliance report for diesel engine-generators, Gen-1 through Gen-6, shall be submitted to the Regional Air Compliance Manager of DEQ's NRO and shall contain the following information:

- a. Company name and address where the engine is located.
- b. Date of the report and beginning and ending dates of the reporting period.
- c. Engine site rating and model year.
- d. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

- e. Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).
- f. Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).
- g. Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- h. If there were no deviations from the fuel requirements in §63.6604 or deviation from emission limitations or operating limitations that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
- i. If there were deviations from the fuel requirements in §63.6604 or deviation from emission limitations or operating limitation that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

The first annual report must cover the calendar year 2016 from the effective date of the permit and must be submitted no later than March 31, 2017. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

(40 CFR §63.6640(b) and 40 CFR §63.6650)

43. **Reporting** – For each emergency diesel engine-generator, EG-POD1 through EG-POD5, EG-11F, EG-47B, EG-51A, EG-52C through EG-52E, and EG-89, with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), the permittee must submit an annual report according to the following requirements, a, b, and c.
- a. The report must contain the following information:
 - 1) Company name and address where the engine is located.
 - 2) Date of the report and beginning and ending dates of the reporting period.
 - 3) Engine site rating and model year.

- 4) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
 - 5) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).
 - 6) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).
 - 7) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- b. The first annual report must cover the calendar year 2016 from the effective date of the permit and must be submitted no later than March 31, 2017. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
 - c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

(40 CFR §60.4214(d))

44. Reporting – A 5-year compliance report for boilers BOIL-35A is required to be submitted to the DEQ Northern Regional Air Compliance Manager that includes the following information:

- a. Company name and address.
- b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - 1) "This facility complies with the requirements in §63.11223 to conduct a 5-year tune-up, as applicable to boilers BOIL-35A."

(40 CFR §63.11225(b))

45. **General** – The permittee shall comply with the General Provisions of 40 CFR §60 Subpart JJJJ Table 3 as applicable to diesel engine-generator, EG-10.
(40 CFR §60.4246)
46. **General** – The permittee shall comply with the General Provisions of 40 CFR §60 Subpart IIII Table 8 as applicable to diesel engine-generator, EG-80.
(40 CFR §60.4218)
47. **General** – Diesel engine-generators, Gen-1 through Gen-6 and Gen-36C, shall comply with emissions limitations, operating limitations, and other requirements of 40 CFR §63 Subpart ZZZZ apply at all times. They shall at all times be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. Compliance with this condition may be demonstrated with records of monitoring results, operation and maintenance procedures and operation and maintenance records.
(40 CFR §63.6605)
48. **General** – The permittee shall comply with the General Provisions of 40 CFR §63 Subpart ZZZZ Table 8 as applicable to diesel engine-generator Gen-36C.
(40 CFR §63.6665)
49. **General** – The permittee shall comply with the general provisions listed in 40 CFR 60 Subpart IIII Appendix Table 8 as they apply to diesel engine-generators, Gen-7 through Gen-10, EG-POD1 through EG-POD5, EG-11F, Gen-36A, Gen-36B, EG-47B, EG-51A, EG-52C through EG-52E, and EG-89.
(40 CFR §60.4218)
50. **General** – At all times boiler BOIL-35A must be operated and maintained, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
(40 CFR §63.11205)
51. **General** – The permittee shall comply with the general provisions listed in 40 CFR 63 Subpart JJJJJJ Appendix Table 8 as they apply to boiler BOIL-35A.
(40 CFR §63.11235)

Facility Wide Conditions

52. **Correspondence** – All correspondence concerning this permit shall be submitted to the following address:

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

(9 VAC 5-50-50 and Condition 18 of 4/6/2016 mNSR Permit)

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

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

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

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.

(9 VAC 5-50-20 E, 9 VAC 5-80-1180 D, and Condition 23 of 4/6/2016 mNSR Permit)

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

(9 VAC 5-20-180 J, 9 VAC 5-80-1180 D)

- 55. Notification for Facility or Control Equipment Malfunction** – The permittee shall furnish notification to the Regional Air Compliance Manager of the DEQ's NRO, of malfunctions of the affected facility that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the

equipment is again in operation, the permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO.
 (9 VAC 5-20-180 C and 9 VAC 5-80-1180)

56. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
 (9 VAC 5-20-180 I and 9 VAC 5-80-1180)

Insignificant Emission Units

57. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation ¹ (9 VAC_)	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (MMBtu/hr) (9 VAC 5-80-720C)
BOIL-1	Burnham boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	1.010
BOIL-9	Burnham boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.808
BOIL-11	Burnham boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.505
BOIL-25A	Hydrotherm boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.231
BOIL-25B	Hydrotherm boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.231
BOIL-25C	Hydrotherm boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.231
BOIL-25D	Hydrotherm boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.231
BOIL-25E	Hydrotherm boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.231
BOIL-25F	Hydrotherm boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.231

Emission Unit No.	Emission Unit Description	Citation¹ (9 VAC_)	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (MMBtu/hr) (9 VAC 5-80-720C)
BOIL-40	Weil Mclain boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.115
BOIL-41A	Propane fired Viessmann (2013)	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	2.576
BOIL-41B	Propane fired Fulton Boiler Works steam boiler (2014)	5-80-720C	NO _x , VOC, PM, SO ₂ , CO	0.335
BOIL-42	Propane fired Trane burner	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.200
BOIL-46A	Burnham boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.770
BOIL-51A	Triad boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.700
BOIL-51B	Triad boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.700
BOIL-52A	Triad boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.700
BOIL-52B	Triad boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.700
BOIL-63A	Burnham boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	1.063
BOIL-63B	Burnham boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	1.063
BOIL-64	Burnham boiler fuel oil fired	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.871
H-9A	Fuel oil fired AAON rooftop space heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.194
H-9B	Fuel oil fired AAON rooftop space heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.194

Emission Unit No.	Emission Unit Description	Citation¹ (9 VAC)	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (MMBtu/hr) (9 VAC 5-80-720C)
F-36	Fuel oil fired Armstrong furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.350
H-46A	Fuel oil fired PVi hot water heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.199
H-46B	Fuel oil fired PVi hot water heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.199
F-48A	Fuel oil fired Carrier furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.085
F-48B	Fuel oil fired Carrier furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.085
F-48C	Fuel oil fired Reznor furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.315
F-53A	Propane fired Carrier outdoor furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.090
F-53B	Propane fired Carrier outdoor furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.090
F-56A	Propane fired Dayton furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.100
F-56B	Propane fired Dayton furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.100
F-68A	Propane fired Carrier outdoor furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.060
F-68B	Propane fired Carrier outdoor furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.060

Emission Unit No.	Emission Unit Description	Citation ¹ (9 VAC_)	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (MMBtu/hr) (9 VAC 5-80-720C)
F-68C	Propane Trane indoor furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.113
F-68D	Propane Trane indoor furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.113
H-72A	Propane fired Bard heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.075
H-72B	Propane fired Bard heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.075
F-80	Propane fired Carrier furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.040
H-90A	Propane fired Master outdoor heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.375
H-90B	Propane fired Master outdoor heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.375
H-90C	Propane fired Carrier outdoor heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.150
F-96A	Propane fired Carrier furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.115
F-96B	Propane fired Carrier furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.115
F-96C	Propane fired Carrier furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.115
F-96D	Propane fired Carrier furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.115

Emission Unit No.	Emission Unit Description	Citation ¹ (9 VAC_)	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (MMBtu/hr) (9 VAC 5-80-720C)
F-96E	Propane fired Carrier furnace	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.115
H-113B	Propane fired Trane rooftop space heater	5-80-720 C	NO _x , VOC, PM, SO ₂ , CO	0.200

¹The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application

9 VAC 5-80-720 B - Insignificant due to emission levels

9 VAC 5-80-720 C - Insignificant due to size or production rate

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Permit Shield & Inapplicable Requirements

58. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60.40c through 40 CFR 60.48c.	Subpart Dc- Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No boiler is over 10 MMBtu/hr.
40 CFR 64	Compliance Assurance Monitoring (CAM)	Emission unit: - emits or has the potential to emit quantities of one or more regulated air pollutants that exceed major source thresholds; -is subject to one or more emission limitations for the regulated air pollutant(s) for which it is major before control - uses a control device to achieve compliance with one or more of these emission limitations

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

General Conditions

59. **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.
(9 VAC 5-80-110 N)
60. **Permit Expiration** - 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 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
- a. 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.
 - b. If an applicant submits a timely and complete application for an initial permit or renewal under this section, 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 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
 - c. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
 - d. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board 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 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
 - e. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

61. Recordkeeping and Reporting –

- a. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - 1) The date, place as defined in the permit, and time of sampling or measurements;
 - 2) The date(s) analyses were performed;
 - 3) The company or entity that performed the analyses;
 - 4) The analytical techniques or methods used;
 - 5) The results of such analyses; and
 - 6) The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - 1) 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
 - 2) All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - (i) Exceedance of emissions limitations or operational restrictions;
 - (ii) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, 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.
 - (iv) 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 semi-annual reporting period."

(9 VAC 5-80-110 F)

62. 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 EPA and 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 9 VAC 5-80-80 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 9 VAC 5-80-110 E, 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. The annual certification shall be submitted to EPA in electronic format only. The certification document shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five years from submittal of the certification.

(9 VAC 5-80-110 K.5)

63. Permit Deviation Reporting - The permittee shall notify the Air Compliance Manager of DEQ's 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 semi-annual compliance monitoring report pursuant to Condition 61 of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

64. 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, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Northern Regional Office by facsimile transmission, telephone or telegraph of such failure or

malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Northern Regional Office.
(9 VAC 5-20-180 C)

65. **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.
(9 VAC 5-80-110 G.1)
66. **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.
(9 VAC 5-80-110 G.2)
67. **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.
(9 VAC 5-80-110 G.3)
68. **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 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)
69. **Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)
70. **Duty to Submit Information** –
 - a. The permittee shall furnish to the Board, within a reasonable time, any information that the Board 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 Board 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 Board along with a claim of confidentiality.

- b. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 G.6 and 9 VAC 5-80-110 K.1)

- 71. **Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9 VAC 5-80-110 H, 9 VAC 5-80-340 C and 9 VAC 5-80-2340 B)

- 72. **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.

(9 VAC 5-50-90)

- 73. **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 Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

74. 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 9 VAC 5-80-140 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 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

75. Inspection and Entry Requirements - The permittee shall allow 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.

(9 VAC 5-80-110 K.2)

76. Reopening For Cause - The permit shall be reopened by the Board 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 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board 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 Board 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 Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

- 77. 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 DEQ upon request.

(9 VAC 5-80-150 E)

78. Transfer of Permits –

- a. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, 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 Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
- 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 Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.

(9 VAC 5-80-160)

79. Malfunction as an Affirmative Defense –

- a. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements stated in Condition 79.b and Condition 79.c are met.
- b. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - 1) A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - 2) The permitted facility was at the time being properly operated.
 - 3) During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - 4) The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This

notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

- c. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- d. The provisions of Condition 79.b and Condition 79.c are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

80. 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 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

81. 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.
(9 VAC 5-80-80 E)

82. 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.
(40 CFR §Part 82, Subparts A-F)

83. 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).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

84. **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. (40 CFR Part §68)

85. **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. (9 VAC 5-80-110 I)

86. **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 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- b. The permit shield described in 9 VAC 5-80-140 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 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

Appendix A
Warrenton Training Center 40902
Engine-Generators Emission Factors

	Engine Rating	NO_x (as NO₂) Emissions	CO Emissions	VOC Emissions	PM₁₀/PM_{2.5} Emissions	SO₂ Emissions
Unit	(hp)	(lbs/hr)	(lbs/hr)	(lbs/hr)	(lbs/hr)	(lbs/hr)
EG-89	90	2.79	0.60	0.23	0.20	0.18
Gen-36A	99	3.07	0.66	0.25	0.22	0.20
Gen-36B	72	2.23	0.48	0.18	0.16	0.15
Gen-36C	56	1.74	0.37	0.14	0.12	0.11
EG-42	394	12.21	2.63	0.99	0.87	0.81
EG-47B	810	25.11	5.41	2.04	1.78	1.66
EG-51A	27	0.84	0.18	0.07	0.06	0.06
EG-51B	394	12.21	2.63	0.99	0.87	0.81
EG-52B	755	23.41	5.04	1.90	1.66	1.55
EG-80	157	4.87	1.05	0.39	0.35	0.32
EG-25	190	5.89	1.27	0.48	0.42	0.39
EG-47A	67	2.08	0.45	0.17	0.15	0.14
EG-52A	134	4.15	0.90	0.34	0.29	0.27
EG-53	121	3.75	0.81	0.30	0.27	0.25
EG-60	109	3.38	0.73	0.27	0.24	0.22
EG-70K	519	16.1	3.5	1.3	1.1	1.06
Gen-1 through Gen-6	2636	33.6	4.0	1.5	0.6	0.03
Gen-7 through Gen-10	2690	33.6	4.0	1.5	0.6	0.03
EG-11F	2937	38.9	4.0	1.5	0.6	0.03
EG-10	14	0.33	0.31	0.2	0.01	0.01
EG-POD 1 and EG-POD 2	2937	38.9	3.5	0.9	0.3	3.56E-02
EG-POD 3	2937	38.9	3.5	0.9	0.3	3.56E-02
EG-POD 4	3634	48.1	6.2	1.1	0.4	4.41E-02
EG-POD 5*	2937	6.3	0.35	0.17	0.048	0.036
EG-POD 5**	2937	42.26	2.33	0.85	0.19	0.036
EG-52 C through EG52 E	755	5.5	0.9	2.7	0.2	9.16E-03

*EG-POD5 is equipped with a Selective Catalytic Reduction (SCR) System that includes SCR with closed loop dosing to control NO_x, a Direct Oxidation Catalyst (DOC) to control CO, and diesel particulate filter (DPF) to control PM. The NO_x emission factor applies when the SCR System is operating within the diesel exhaust fluid (DEF) dosing temperature range (572°F – 1022°F) and DEF dosing is occurring in accordance with manufacturer specifications. The CO emission factor applies when the DOC catalyst bed temperature is within the effective temperature range (536°F – 1292°F) specified by the manufacturer. The PM₁₀/PM_{2.5} emission factor applies when the DPF is fully operational and the exhaust backpressure has not exceeded the maximum backpressure recommended by the engine manufacturer.

**The NO_x emission factor applies when the SCR System is not operating within the DEF dosing temperature range or when there is no DEF dosing. The CO emission factor applies when the DOC catalyst bed temperature is not within the effective temperature range specified by the manufacturer. The PM₁₀/PM_{2.5} emission factor applies when the DPF is not fully operational and the exhaust backpressure exceeds the maximum backpressure recommended by the engine manufacturer.