

## Virginia Title V Operating Permit

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:	U.S. Army Garrison, Fort Belvoir
Facility Name: Facility Location:	U.S. Army Garrison, Fort Belvoir 9820 Flagler Road, STE 230 Fort Belvoir, Virginia 22060-5928
Registration Number: Permit Number:	70550 NVRO70550

March 21, 2003

Effective Date

March 21, 2008

Expiration Date

Robert G. Burnley  
Director, Department of Environmental Quality

\_\_\_\_\_  
Signature Date

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## I. Facility Information

### **Permittee**

U.S. Army Garrison, Fort Belvoir  
9820 Flagler Road, STE230  
Fort Belvoir, Virginia 22060-5928

### **Responsible Official**

Colonel Thomas W. Williams  
Garrison Commander

### **Facility**

U.S. Army Garrison, Fort Belvoir  
DIS-PWE, 9430 Jackson Loop, STE107  
Fort Belvoir, Virginia 22060-5130

### **Contact Person**

Mr. Patrick M. McLaughlin  
Environmental and Natural Resources Directorate  
(703) 806-4007

**AIRS Identification Number:** 51-059-00018

**Facility Description:** SIC Code [9711] – [National Security]

U.S. Army Garrison Fort Belvoir is a military post covering 9,237 acres in Fairfax County. Nearly 24,000 people live and work at Fort Belvoir. There are approximately 100 tenant organizations which employ about 18,000 people. The post also has a residential population of about 6,000 military personnel and family members. There are various activities in support of the tenants and the civilian staff, which are subject to the Virginia air regulations. There are four boilers with air permits, about 45 boilers subject to existing source rule and 70 others are exempt. There are about 60 diesel engine generators used mostly for emergency power. Air permits were issued for 14 generators at Defense CEETA and 10 generators used for training at the Prime Power School. A few other generators are subject to existing source rule but the rest are small and considered insignificant. Other permitted equipment include a 120 lbs/hour veterinary clinic incinerator and 1050 lbs/hour capacity classified waste incinerator at Defense CEETA. At the Davison Army Airfield, there are two firefighting trainer devices with permits to produce controlled fires using propane. The post has other operations with minor emissions that are subject to the regulations, including cold solvent cleaning and fuel storage tanks. Only 10 tanks are subject to the air regulations, with 90 other tanks considered exempt. Six loading racks, including use for gasoline transfer, are exempt since the operation does not qualify as a bulk gasoline terminal. Also, just one of three gasoline service stations are included in the permit, since the others are not only restricted to military personnel, but rather military families and retirees can use them. Other minor sources, including 10 oil-water separators, closed landfills, minor pesticide use, spray painting, printing and woodworking operations, are considered insignificant.

## II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Bldg. No.	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment – Building 1422 – Central Heating Plant</b>								
B-1a, B-2a, B-3a	BS-1a, BS-2a, BS-3a	1422	Replacement boilers, gas/No. 2 oil, at Central Heating Plant, Cleaver Brooks CB-LE-200	25.0 mil.Btu/hr, each	Low NOx emissions control technology	N/A (built-in)	NOx	9/21/98, as amended 1/24/01
<b>Fuel Burning Equipment – Building 332 – R&amp;D Heating Plant</b>								
B-4, B-5	BS-4, BS-5	332	Erie City Iron Works HSB No.2 oil/gas	32.2 mil.Btu/hr, each	-	-	-	-
B-107	BS107	332	Cleaver Brooks CB400 No. 2/gas-fired boilers	16.75 mil.Btu/hr	-	-	-	11/4/98, as amended 1/24/01
<b>Fuel Burning Equipment – Other small No. 2 Oil or No. 2 Oil/Gas-Fired Boilers</b>								
B-6, B-7	BS-6, BS-7	2117	Trane PBAL 3F-5 No. 2/gas-fired boilers	11 mil.Btu/hr, each	-	-	-	-
B-55	BS-55	773	Weil McLain BL 786 SF	1.7 mil.Btu/hr	-	-	-	-
B-56	BS-56	805	Weil McLain 588, gas/No. 2 oil	1.36 mil. Btu/hr	-	-	-	-
B-59	BS-59	1114	Weil McLain 688	1.57 mil.Btu/hr	-	-	-	-
B-65	BS-65	3233	Cleaver Brooks, gas/No. 2 oil	2.9 mil.Btu/hr	-	-	-	-
B-66	BS-66	3233	Cleaver Brooks, gas/No. 2 oil	2.9 mil.Btu/hr	-	-	-	-
B-67	BS-67	3138	Cl. Brooks CBW, gas/No. 2 oil	6.28 mil.Btu/hr	-	-	-	-
B-68	BS-68	3138	Cl. Brooks CBW, gas/No. 2 oil	6.28 mil.Btu/hr	-	-	-	-
B-71	BS-71	2470	Iron Fireman R10.9	2.41 mil.Btu/hr	-	-	-	-
B-84	BS-84	1810	Weil McLain 1188	3.39 mil.Btu/hr	-	-	-	-
B-88	BS-88	1950	Weil McLain	1.08 mil.Btu/hr	-	-	-	-
B-95	BS-95	2857	Bryan CL	1.8 mil.Btu/hr	-	-	-	-
B-96	BS-96	2800	Cleaver Brooks M4S-4500	4.5 mil.Btu/hr	-	-	-	-
B-97	BS-97	2800	Cleaver Brooks M4S-4500	4.5 mil.Btu/hr	-	-	-	-
B-98	BS-98	2800	Cleaver Brooks M4W-1500	1.5 mil.Btu/hr	-	-	-	-
B-99	BS-99	2800	PBI Industries	1.6 mil.Btu/hr	-	-	-	-
B-100	BS-100	2802	Cleaver Brooks 6000	6 mil.Btu/hr	-	-	-	-
B-101	BS-101	2802	Cleaver Brooks 6000	6 mil.Btu/hr	-	-	-	-
B-103	BS-103	2592	Cl. Brooks FLE, gas/No. 2 oil	4 mil.Btu/hr	-	-	-	-

B-104	BS-104	2592	Cl. Brooks FLE, gas/No. 2 oil	4 mil.Btu/hr	-	-	-	-
B-105	BS-105	2593	Cleaver Brooks CB-600-125	5.23 mil.Btu/hr	-	-	-	-
B-108	BS-108	2580	Cl.Brooks CB500, gas/No.2 oil	4.18 mil.Btu/hr	-	-	-	-
B-109	BS-109	2582	Weil McLain P688W, gas/No.2	1.7 mil.Btu/hr	-	-	-	-
B-111	BS-111	2593	Cl. Brooks CB800, gas/No.2	1.68 mil.Btu/hr	-	-	-	-
B-112	BS-112	2594	Peerless 0-707-FBA-WUP	1.07 mil.Btu/hr	-	-	-	-
B-135	BS-135	2444	Cleaver Brooks CB-M4W	2.5 mil.Btu/hr	-	-	-	-
B-136	BS-136	2444	Cleaver Brooks CB-M4W	2.5 mil.Btu/hr	-	-	-	-
<b>Process A – Generators</b>								
EG-13, EG-14, EG-15, EG-16, EG-17, EG-18, EG-19, EG-20, EG-21, EG-22	EGS-13, EGS-14, EGS-15, EGS-16, EGS-17, EGS-18, EGS-19, EGS-20, EGS-21, EGS-22,	2857	Caterpillar 3516 diesel-fired emergency generators at Defense CEETA	1500 kilowatts (KW), each  or 2168 brake horsepower (bhp), each	-	-	-	7/1/02
EG-29	EGS-29	193	Diesel generator,Cummins VT	500 KW	-	-	-	-
EG-38, EG-39, EG-40	EGS-38, EGS-39, EGS-40	2310	Diesel generators	1000 KW, each	-	-	-	-
EG-41	EGS-41	2444	Diesel generator, Cat. SR-4	1500 KW	-	-	-	-
EG-42 EG-43	EGS-42 EGS-43	2444	No. 2 fuel oil generators KTA50-GS/GC1	750 KW, each	-	-	-	-
EG-66 EG-67 EG-68 EG-69	EGS66 EGS67 EGS68 EGS69	2462	Diesel generators, Caterpillar SR-4 Emergency diesel generators	800 KW, each	-	-	-	7/1/02
EG-70 EG-71 EG-72 EG-73	EGS70 EGS71 EGS72 EGS73	2857	Caterpillar model 3516B (or equivalent) emergency diesel generators	1640 KW, each or 2377 bhp, each	-	-	-	-
EG-107	EGS107	2454	Diesel Generator, All-Power	About 600 KW	-	-	-	-
G-51, G-52, G-53, G-54	GS-51, GS-52, GS-53, GS-54	1132	Four EMD MP-36A Diesel generators for training	1500 KW, each  or 2170 bhp, each	-	-	-	5/31/02

G-55, G-56, G-57	GS-55, GS-56, GS-57	1132	Diesel generators for training, Two Cummins MEP-208A and One Cummins MEP-012A	750 KW, each or 1085 bhp, each	-	-	-	-
G-61	GS-61	1132	EMD model 12567E diesel gen.	750 KW	-	-	-	-
G-62, G-63, G-64	GS-62, GS-63, GS-64	1132	Three Caterpillar 3456 Diesel generators for training	920 KW, each or 1338 bhp, each	-	-	-	5/31/02
<b>Process B – Firefighting Training Equipment</b>								
FT-1		3240	Symtron Systems, Inc. Fixed Structural fire fighting trainer	36 mil.Btu/hr (propane-fired)	-	-	-	1/24/01
FT-2		3240	Symtron Systems, Inc. Mobile aircraft fire rescue trainer	11.7 mil. Btu/hr (propane-fired)	-	-	-	1/24/01
<b>Process C – Incinerators</b>								
I-2	IS-2	610	Shenandoah P25-2GT Veterinary clinic incinerator	120 lbs/hour	-	-	-	4/16/90, amended 11/4/98
I-4	IS-4	2856	Consumat C-325-ATC Classified waste incinerator	1050 lbs/hour	-	-	-	2/8/89
<b>Process D – Cold Cleaning (Degreasers)</b>								
DG			(41) cold cleaning degreasers		-	-	-	-
<b>Process E – Storage Tanks</b>								
T-03162A T-03612B		3162	Underground storage tanks	13,000 gallons, each	-	-	-	-
T-01133E		1133	Underground storage tank	25,000 gallons	-	-	-	5/31/02
T-02856B		2685	Underground storage tank	15,000 gallons	-	-	-	7/1/02
T-00332H T-00332I T-00332J		332	Underground storage tanks	25,000 gallons, each	-	-	-	-
T-01422J T-01422K T-01422L T-01422M T-01422N		1422	Underground storage tanks (residual No. 6 fuel oil)	25,000 gallons, each	-	-	-	-
T-01422P T-01422Q T-01422R T-01422S T-01422T		1422	Underground storage tanks (distillate No. 2 fuel oil)	25,000 gallons, each	-	-	-	-
T-03138H T-03138I		3138	Underground storage tanks	30,000 gallons, each	-	-	-	-

T-02117C		2117	Underground storage tank	25,000 gallons	-	-	-	-
T-02800A		2800	Underground storage tank	25,000 gallons	-	-	-	-
T-02310A		2310	Underground storage tank	25,000 gallons	-	-	-	-
T-02444C		2444	Underground storage tank	25,000 gallons	-	-	-	-
T-02462A		2462	Underground storage tank	25,000 gallons	-	-	-	-
T-02803A		2803	Underground storage tank	25,000 gallons	-	-	-	-
T-02117C		2117	Underground storage tank	25,000 gallons	-	-	-	-
T-02800A		2800	Underground storage tank	25,000 gallons	-	-	-	-
T-01124C		1124	Underground storage tanks	12,000 gallons	-	-	-	-
<b>Process F – Building 1124 - Gasoline Service Station</b>								
T-9, T-10		1124	Stage I and Stage II vapor recovery from gasoline station		-	-	-	-

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

### III. Fuel Burning Equipment Requirements- (emission units ID#B-1a, B-2a and B-3a) - Building 1422 - Central Heating Plant

#### A. Limitations

1. Emissions of nitrogen oxides (NO<sub>x</sub>) from each of boilers B-1a, B-2a, and B-3a shall be controlled by a low NO<sub>x</sub> emission control technology. NO<sub>x</sub> emissions from each boiler shall not exceed 0.05 lbs/10<sup>6</sup> Btu during the firing of natural gas, and 0.14 lbs/10<sup>6</sup> Btu during the firing of distillate oil. Each boiler shall be provided with adequate access for inspection.  
(9 VAC 5-80-110 and Condition 3 of 9/21/98 Permit, as amended on 1/24/2001)
2. The approved fuels for boilers B-1a, B-2a, and B-3a are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials. A change in the fuels may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 14 of 9/21/98 Permit, as amended on 1/24/2001)
3. Sulfur dioxide (SO<sub>2</sub>) emissions from boilers B-1a, B-2a, and B-3a shall be controlled by burning natural gas or distillate oil with maximum sulfur content not to exceed 0.5 weight percent per shipment.  
(9 VAC 5-80-110 and Conditions 4 and 15 of 9/21/98 Permit, as amended on 1/24/2001)
4. Total suspended particulate (TSP), particulate matter less than 10 microns in diameter (PM<sub>10</sub>), carbon monoxide (CO), and volatile organic compound (VOC) emissions from boilers B-1a, B-2a, and B-3a shall be controlled by firing clean burning fuels, as stipulated in Condition III.A.2, and by maintaining good combustion.  
(9 VAC 5-80-110 and Condition 5 of 9/21/98 Permit, as amended on 1/24/2001)
5. Boilers B-1a, B-2a, and B-3a shall consume no more than 501 x 10<sup>6</sup> cubic feet of natural gas, and 941,230 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12-month period. These values represent the combined total allowable throughput for all three boilers located at Building 1422.  
(9 VAC 5-80-110 and Condition 6 of 9/21/98 Permit, as amended on 1/24/2001)
6. Emissions resulting from the operation of each boiler, B-1a, B-2a and B-3a, shall not exceed the limits specified below:

Total Suspended Particulate	0.024 lbs/10 <sup>6</sup> Btu	(9 VAC 5-50-260)
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PM-10	0.024 lbs/10 <sup>6</sup> Btu	(9 VAC 5-50-260)
Sulfur Dioxide	0.52 lbs/10 <sup>6</sup> Btu	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	0.05 lbs/10 <sup>6</sup> Btu (gas firing) 0.14 lbs/10 <sup>6</sup> Btu (No. 2 oil firing)	(9 VAC 5-50-260) (9 VAC 5-50-260)
Carbon Monoxide	0.098 lbs/10 <sup>6</sup> Btu	(9 VAC 5-50-260)
Volatile Organic Compounds	0.03 lbs/10 <sup>6</sup> Btu	(9 VAC 5-50-260)

(9 VAC 5-80-110 and Condition 8 of 9/21/98 Permit, as amended on 1/24/2001)

7. Emissions from the combined operation of boilers B-1a, B-2a, and B-3a shall not exceed the limits specified below:

Total Suspended Particulate	2.1 lbs/hr	4.1 tons/yr	(9 VAC 5-50-260)
PM-10	2.1 lbs/hr	4.1 tons/yr	(9 VAC 5-50-260)
Sulfur Dioxide	45.6 lbs/hr	33.5 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	12.4 lbs/hr	22.0 tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	8.6 lbs/hr	25.6 tons/yr	(9 VAC 5-50-260)
Volatile Organic Compounds	2.7 lbs/hr	6.1 tons/yr	(9 VAC 5-50-260)

Records of DEQ-approved emission factors, equations and throughput data shall be maintained to calculate annual emissions for each consecutive 12 month period.

(9 VAC 5-80-110 and Condition 9 of 9/21/98 Permit, as amended on 1/24/2001)

8. Visible emissions from the boiler B-1a stack, the boiler B-2a stack, and the boiler B-3a stack shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity. This condition applies at all times except during start-up, shutdown, or malfunction.

(9 VAC 5-80-110 and Condition 10 of 9/21/98 Permit, as amended on 1/24/2001)

9. Boiler B-1a, B-2a, and B-3a emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.  
(9 VAC 5-80-110 and Condition 16 of 9/21/98 Permit, as amended on 1/24/2001)

## **B. Monitoring and Recordkeeping**

1. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of distillate oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
  - e. The sulfur content of the oil.

(9 VAC 5-80-110 and Condition 15 of 9/21/98 Permit, as amended on 1/24/2001)
2. 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 Air Compliance Manager, Northern Virginia Regional Office. These records shall include, but are not limited to:
  - a. The monthly throughput of natural gas and the daily and monthly throughput of distillate oil for boilers B-1a, B-2a, and B-3a. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
  - b. All fuel supplier certifications.
  - c. DEQ-approved emission factors and equations used to calculate emissions from the boilers.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-80-110, Condition 18 of 9/21/98 Permit, as amended on 1/24/2001 and 40 CFR Part 60 Subpart Dc)

3. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations, at minimum. A record of completed service and maintenance work shall be maintained on file for the most recent five year period. All records required by this condition shall be kept on site and made available for inspection by the DEQ.  
(9 VAC 5-80-110 and Condition 16 of 9/21/98 Permit, as amended on 1/24/2001)
4. Visible emission observations shall be used by the permittee to assist in determining whether the emission units are operating properly. Each boiler, B-1a, B-2a, and B-3a, shall be observed during each calendar week it operates for normal visible emissions exhaust from the stack, excluding condensed water vapor. The results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)
5. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then
  - a. Corrective action shall be taken to return the emission unit to proper operation.
  - b. The visible emission observation shall be repeated to confirm proper operation.
  - c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)
6. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:
  - a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.
  - b. Document the maintenance and repairs performed on the unit.

- c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.
- d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit(s) shall be available on site for inspection by the DEQ and be current for the most recent five years.  
(9 VAC 5-80-110)

**C. Testing**

- 1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Test ports will be provided at the appropriate locations.  
(9 VAC 5-80-110 and Condition 13 of 9/21/98 Permit, as amended on 1/24/2001)
- 2. When testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO <sub>x</sub>	EPA Method 7, 7E
SO <sub>2</sub>	EPA Method 6, 6C
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17, 201a
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

**D. Reporting**

- 1. The permittee shall submit fuel quality reports to the Air Compliance Manager, Northern Virginia Regional Office within 30 days after the end of each semi-annual period. If no shipments of distillate oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no oil was received during the semi-annual period. If distillate oil was received during the semi-annual period, the reports shall include:

- a. The dates included in the semi-annual period,
- b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in Condition III.B.1 for each shipment of distillate oil, and
- c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.

(9 VAC 5-80-110, Condition 19 of 9/21/98 Permit, as amended on 1/24/2001, as amended on 1/24/2001 and 40 CFR Part 60 Subpart Dc)

#### **IV. Fuel Burning Equipment Requirements – (emission units ID# B-4, B-5) Building 332 – R&D Heating Plant – (Existing Larger Boilers)**

##### **A. Limitations**

1. Emissions from the operation of each of the two Erie City Iron Works boilers (B-4, B-5) shall not exceed the limits specified below:

Total Suspended Particulate/PM-10	0.3 lbs/10 <sup>6</sup> Btu	(9 VAC 5-40-900 A. 2.)
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Sulfur Dioxide	1.06 lbs/10 <sup>6</sup> Btu	(9 VAC 5-40-930 A. 2.)
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(9 VAC 5-80-110)

2. Visible emissions from each of the boiler stacks shall not exceed twenty percent opacity, except for one six-minute period in any one hour of not more than sixty percent opacity. Failure to meet the requirements of this condition because of the presence of water vapor shall not be a violation of this condition.  
(9 VAC 5-40-940)
3. No owner or other person shall cause or permit to be discharged from any affected facility any nitrogen oxide emissions in excess of that resultant from using reasonably available control technology (RACT).  
(9 VAC 5-40-310 and 9 VAC 5-80-110)

## B. Monitoring and Recordkeeping

1. For the two Erie City Iron Works boilers, application of reasonably available control technology (RACT) for NO<sub>x</sub> emissions shall be the performance of an evaluation and adjustment of the combustion process at least semi-annually as to appropriately minimize the formation of NO<sub>x</sub> emissions. The evaluation and adjustment shall utilize a combustion analyzer and include, at a minimum, the following:
  - a. Development of a plan providing the schedule and procedure for the semi-annual evaluation and adjustment. The plan shall be approved by DEQ and updated as necessary.
  - b. Check condition of stack, clean, and perform minor repairs as necessary.
  - c. Inspect, clean, and adjust each oil burner nozzle assembly and conduct operational test of the boiler. Check automatic combustion control devices for proper operation. Perform adjustments and minor repairs as necessary to ensure efficient operation while minimizing all types of emissions to the air. For each unit, compliance with applicable portions of 9 VAC 5 Chapter 40, Article 8 (Emission Standards for Fuel Burning Equipment) and consistent CO and NO<sub>x</sub> concentrations among the semi-annual (or more frequent) evaluations shall be considered sufficient to demonstrate compliance with the portion of this condition requiring minimizing all types of emissions to the air, unless credible evidence to the contrary is presented.
  - d. Documentation of each evaluation and adjustment conducted on the combustion process. This documentation shall include, at a minimum: (a) the date of the evaluation and adjustment; (b) identity of service company and technicians; and, (c) final NO<sub>x</sub>, CO, and excess oxygen emission rates and the type of combustion analyzer used to determine these emissions.

(9 VAC 5-80-110 and Condition 3 of 5/16/2000 Permit)

2. Each of the boilers shall be operated and maintained in accordance with the manufacturer's specifications and good air pollution control practices. A copy of all relevant operation, maintenance, and specification documentation as provided by the manufacturer for each unit and device shall be maintained on the premises of the facility. Each unit shall be operated and maintained in adherence with this documentation to the degree appropriate and practicable with the intention of minimizing NO<sub>x</sub> emissions.

(9 VAC 5-80-110 and Condition 4 of 5/16/2000 Permit)

3. For each boiler, a record of each fuel shipment, including certified fuel type, quantity, sulfur content and nitrogen content as provided by the supplier shall be

maintained. For natural gas-fired units, a monthly record of fuel usage shall be maintained. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.  
(9 VAC 5-80-110 and Condition 5 of 5/16/2000 Permit)

4. Visible emission observations shall be used by the permittee to assist in determining whether the emission units are operating properly. Each boiler, B-4 and B-5, shall be observed during each calendar week it operates for normal visible emissions exhaust from the stack, excluding condensed water vapor. The results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)

5. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then
  - a. Corrective action shall be taken to return the emission unit to proper operation.
  - b. The visible emission observation shall be repeated to confirm proper operation.
  - c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.

(9 VAC 5-80-110)

6. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:
  - a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.
  - b. Document the maintenance and repairs performed on the unit.
  - c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.

- d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit(s) shall be available on site for inspection by the DEQ and be current for the most recent five years.

(9 VAC 5-80-110)

### C. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.  
(9 VAC 5-40-30 and 9 VAC 5-80-110)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
NO <sub>x</sub>	EPA Method 7, 7E
SO <sub>2</sub>	EPA Method 6, 6C
PM/PM-10	EPA Method 5, 17, 201A
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

## V. Fuel Burning Equipment Requirements – (emission units ID# B-107) - Building 332 – R&D Heating Plant – (Summer Boiler)

### A. Limitations

1. The approved fuels for the Cleaver Brooks CB200-400-150 boiler (B-107) are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials. A change in the fuels may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 10 of 11/4/98 Permit, as amended on 1/24/2001)

2. Sulfur dioxide emissions from the Cleaver Brooks CB200-400-150 boiler (B-107) shall be controlled by burning natural gas, or distillate oil with maximum sulfur content not to exceed 0.5 weight percent per shipment.  
(9 VAC 5-80-110 and Conditions 3 and 11 of 11/14/98 Permit, as amended on 1/24/2001)
3. TSP, PM<sub>10</sub>, CO, NO<sub>x</sub> and VOC emissions from boiler B-107 shall be controlled by firing clean burning fuels, as stipulated in Condition V.A.1, and by maintaining good combustion.  
(9 VAC 5-80-110 and Condition 4 of 11/4/98 Permit, as amended on 1/24/2001)
4. Boiler B-107 shall consume no more than 56.7 x 10<sup>6</sup> cubic feet of natural gas, and 106,592 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12-month period.  
(9 VAC 5-80-110 and Condition 5 of 11/4/98 Permit, as amended on 1/24/2001)
5. Emissions from the operation of boiler B-107 shall not exceed the limits specified below:

Sulfur Dioxide	10.4 lbs/hr	3.8 tons/yr	(9 VAC 5-50-260)
Nitrogen Oxides (as NO <sub>2</sub> )	2.9 lbs/hr	3.9 tons/yr	(9 VAC 5-50-260)
Carbon Monoxide	1.6 lbs/hr	2.7 tons/yr	(9 VAC 5-50-260)

Compliance with the emission limits contained in this condition shall be determined by compliance with Condition numbers V.A.1-4, A-7, and B.2. Also, records of DEQ-approved emission factors, equations and throughput data shall be maintained to calculate annual emissions for each consecutive 12 month period.

(9 VAC 5-80-110 and Condition 7 of 11/4/98 Permit, as amended on 1/24/2001)

6. Visible emissions from boiler B-107 shall not exceed twenty percent (20%) opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity. This condition is derived from the Virginia Regulations and applies at all times except during start-up, shutdown, or malfunction. In accordance with 40 CFR Part 60, 64.43c.(c), Boiler B-107 is not subject to a visible emission standard under the New Source Performance Standard.  
(9 VAC 5-80-110 and Condition 8 of 11/4/98 Permit, as amended on 1/24/2001)
7. Boiler B-107 emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment.

Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.

(9 VAC 5-80-110 and Condition 12 of 11/4/98 Permit, as amended on 1/24/2001)

## **B. Monitoring and Recordkeeping**

1. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of distillate oil delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
  - e. The sulfur content of the oil.

(9 VAC 5-80-110 and Condition 11 of 11/4/98 Permit, as amended on 1/24/2001)

2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Air Compliance Manager, Northern Virginia Regional Office. These records shall include, but are not limited to:
  - a. The monthly throughput of natural gas and the daily and monthly throughput of distillate oil for boiler B-107. The annual throughput shall be calculated as the sum of each consecutive twelve (12) month period.
  - b. All fuel supplier certifications.
  - c. DEQ-approved emission factors and equations used to calculate emissions from the boilers.

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

(9 VAC 5-80-110, Condition 13 of 11/4/98 Permit, as amended on 1/24/2001 and 40 CFR Part 60 Subpart Dc)

3. The permittee shall maintain records of the required training including a statement of time, place, and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations, at minimum. A record of completed service and maintenance work on the boiler shall be maintained on file by the permittee for the most current five (5) year period. All records required by this condition shall be kept on site and made available for inspection by the DEQ.  
(9 VAC 5-80-110 and Condition 12 of 11/4/98 Permit, as amended on 1/24/2001)
4. Visible emission observations shall be used by the permittee to assist in determining whether the emission units are operating properly. The boiler, emission unit B-107, shall be observed during each calendar week it operates for normal visible emissions exhaust from the stack, excluding condensed water vapor. The results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)
5. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then
  - a. Corrective action shall be taken to return the emission unit to proper operation.
  - b. The visible emission observation shall be repeated to confirm proper operation.
  - c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)
6. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:
  - a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.
  - b. Document the maintenance and repairs performed on the unit.

- c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.
- d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit(s) shall be available on site for inspection by the DEQ and be current for the most recent five years.

(9 VAC 5-80-110)

### C. Testing

- 1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Test ports will be provided at the appropriate locations.  
(9 VAC 5-80-110 and Condition 9 of 11/4/98 Permit, as amended on 1/24/2001)
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO <sub>x</sub>	EPA Method 7, 7E
SO <sub>2</sub>	EPA Method 6, 6C
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17, 201a
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

### D. Reporting

- 1. The permittee shall submit fuel quality reports to the Air Compliance Manager, Northern Virginia Regional Office, within 30 days after the end of each semi-annual period. If no shipments of distillate oil were received during the semi-annual period, the semi-annual report shall consist of the dates included in the semi-annual period and a statement that no oil was received during the semi-annual period. If distillate oil was received during the semi-annual period, the report shall include:

- a. The dates included in the semi-annual period;
  - b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the semi-annual period or a semi-annual summary from each fuel supplier that includes the information specified in Condition V.B.1 for each shipment of distillate oil; and,
  - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications or summaries of fuel supplier certifications represent all of the distillate oil burned or received at the facility.
- (9 VAC 5-80-110 and Condition 14 of 11/4/98 Permit, as amended on 1/24/2001 and 40 CFR Part 60 Subpart Dc)

## **VI. Fuel Burning Equipment Requirements – (Other small No. 2 oil or No. 2 oil/gas-fired boilers)**

### **A. Limitations**

1. Emissions from the operation of each of the small No. 2 oil or gas/No. 2 oil-fired boilers shall not exceed the limits specified below:  
  

Total Suspended Particulate/PM-10	0.3 lbs/10 <sup>6</sup> Btu	(9 VAC 5-40-900 A. 2.)
Sulfur Dioxide	1.06 lbs/10 <sup>6</sup> Btu	(9 VAC 5-40-930 A. 2.)

(9 VAC 5-80-110)
2. Visible emissions from each of the boiler stacks shall not exceed twenty percent opacity, except for one six-minute period in any one hour of not more than thirty percent opacity. Failure to meet the requirements of this condition because of the presence of water vapor shall not be a violation of this condition.  
(9 VAC 5-50-80)
3. No owner or other person shall cause or permit to be discharged from any affected facility any nitrogen oxide emissions in excess of that resultant from using reasonably available control technology (RACT).  
(9 VAC 5-40-310 and 9 VAC 5-80-110)
4. The addition or routine replacement of natural gas or fossil fuel-fired boilers, between 1 to 10 million Btu/hour heat input, may not require an air permit but is subject to registration update and the limits stated in Conditions VI.B.1 and 2.  
(9 VAC 5-80-11, 9 VAC 5-20-160, 9 VAC 5-40-900 and 9 VAC 5-40-930)

## B. Monitoring and Recordkeeping

1. For the small oil-fired boilers, application of RACT for NO<sub>x</sub> shall be the operation and maintenance of the unit in accordance with manufacturer's specifications and good air pollution control practices. A copy of all relevant operation, maintenance, and specification documentation as provided by the manufacturer for each unit and device shall be maintained on the premises of the facility. Each unit shall be operated and maintained in adherence with that documentation to the degree appropriate and practicable with the intention of minimizing NO<sub>x</sub> emissions.  
(9 VAC 5-80-110 and Condition 6 of the 5/16/2000 Permit)
2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. For the boilers, a record shall be maintained on the fuel shipments, including fuel type and sulfur content as provided by the supplier. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-40-50 and 9 VAC 5-20-160)
3. Visible emission observations shall be used by the permittee to assist in determining whether certain emission units are operating properly. Specifically, the emission units to be observed are boilers B-6 and B-7, each with heat input capacity greater than 10 million Btu/hour. Each emission unit shall be observed during each calendar week it operates for normal visible emissions exhaust from the stack, excluding condensed water vapor. The results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)
4. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then
  - a. Corrective action shall be taken to return the emission unit to proper operation.
  - b. The visible emission observation shall be repeated to confirm proper operation.
  - c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.

(9 VAC 5-80-110)

5. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:
  - a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.
  - b. Document the maintenance and repairs performed on the unit.
  - c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.
  - d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit(s) shall be available on site for inspection by the DEQ and be current for the most recent five years.

(9 VAC 5-80-110)

## **VII. Process Equipment Requirements - (emission units ID #EG13 - EG22, and EG70 – EG73) - Defense CEETA Generators**

### **A. Limitations**

1. The use of the electric generating equipment shall be limited to the production of electricity for emergency purposes only. Specifically, the electrical generators are limited to providing power at the location during interruption of service from the normal power supplier, periodic maintenance, testing, and operational training.  
(9 VAC 5-80-110 and Condition 3 of 7/1/2002 Permit)
2. **Nitrogen Oxides** emissions from the ten Caterpillar model 3516 diesel engine-driven emergency generators (EG13-22) shall be controlled by fuel injection set at 4 degrees retarded timing. The permittee shall keep records on site to provide certification that the injection timing for each engine has been properly set. All engines shall be provided with adequate access for inspection.  
(9 VAC 5-80-110 and Condition 4 of 7/1/2002 Permit)

3. The four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators and ten Caterpillar model 3516 diesel engine-driven emergency generators (EG70-73 and EG13-22) shall not operate more than 1,400 hours/yr, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 5 of 7/1/2002 Permit)
4. The approved fuel for the four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators and ten Caterpillar model 3516 diesel engine-driven emergency generators (EG70-73 and EG13-22) is diesel fuel oil. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 6 of 7/1/2002 Permit)
5. The fuel shall meet the American Society for Testing and Materials (ASTM) specifications for numbers 1 or 2 diesel fuel oil. The maximum sulfur content per shipment of fuel shall not exceed 0.5% by weight.  
(9 VAC 5-80-110 and Condition 7 of 7/1/2002 Permit)
6. Hourly emissions from the operation of each of the ten Caterpillar model 3516 diesel engine-driven emergency generators (EG13-22) shall not exceed the limits specified below:

Nitrogen Oxides (as NO <sub>2</sub> )	51.2 lbs/hr
Sulfur Dioxide	8.8 lbs/hr
Carbon Monoxide	12.4 lbs/hr
Volatile Organic Compounds	1.5 lbs/hr
Particulate Matter	1.7 lbs/hr

The emission limits are derived from manufacturer guaranteed (“not to exceed”) emission rates. Compliance may be determined as stated in Condition VII.A.10 or by stack testing, upon request of the Department and using EPA-approved test methods as specified in Conditions VII.C.2 and 3.  
(9 VAC 5-80-110 and Condition 9 of 7/1/2002 Permit)

7. Hourly emissions from the operation of each of the four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators (EG70-73) shall not exceed the limits specified below:

Nitrogen Oxides (as NO <sub>2</sub> )	34.2 lbs/hr
Sulfur Dioxide	9.6 lbs/hr
Carbon Monoxide	2.9 lbs/hr
Volatile Organic Compounds	1.2 lbs/hr
Particulate Matter	0.8 lbs/hr

The emission limits are derived from manufacturer guaranteed (“not to exceed”) emission rates. Compliance may be determined as stated in Condition VII.A.10

or by stack testing, upon request of the Department and using EPA-approved test methods as specified in Conditions VII.C.2 and 3.  
(9 VAC 5-80-110 and Condition 10 of 7/1/2002 Permit)

8. Total emissions from the diesel engine-driven emergency generators at Defense CEETA facility shall not exceed the limits specified below:

Nitrogen Oxides (as NO <sub>2</sub> )	32.4 tons/yr
Sulfur Dioxide	6.3 tons/yr
Carbon Monoxide	6.8 tons/yr
Volatile Organic Compounds	1.0 tons/yr
Particulate Matter	1.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers VII.A.3 and VII.B.2. Also, records of DEQ-approved emission factors, equations and throughput data shall be maintained to calculate annual emissions for each consecutive 12 month period.

(9 VAC 5-80-110 and Condition 11 of 7/1/2002 Permit)

9. Visible emissions from the four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators and ten Caterpillar model 3516 diesel engine-driven emergency generators (EG70-73 and EG13-22) shall not exceed twenty percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A).  
(9 VAC 5-80-110 and Condition 12 of 7/1/2002 Permit)
10. Diesel engine emissions shall be controlled by proper operation and maintenance. Operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.  
(9 VAC 5-80-110, and Condition 22 of 7/1/2002 Permit)

## **B. Monitoring and Recordkeeping**

1. The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel oil. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier;

- b. The date on which the fuel was received;
- c. The volume of fuel delivered in the shipment;
- d. A statement that the fuel complies with the American Society for Testing and Materials (ASTM) specifications for numbers 1 or 2 diesel fuel oil,
- e. The sulfur content of the diesel fuel oil.

(9 VAC 5-80-110 and Condition 8 of 7/1/2002 Permit)

2. 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, Northern Virginia Regional Office](#). These records shall include, but are not limited to:

- a. Annual hours of operation of each diesel engine generator set, calculated monthly as the sum of each consecutive 12 month period.
- b. All fuel supplier certifications.
- c. Scheduled and unscheduled maintenance, and operator training.
- d. DEQ-approved emission factors and equations used to calculate emissions from the engines.

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

(9 VAC 5-80-110 and Condition 15 of 7/1/2002 Permit)

3. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the engines. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.

(9 VAC 5-80-110 and Condition 22 of 7/1/2002 Permit)

4. Visible emission observations shall be used by the permittee to assist in determining whether the emission units are operating properly. Each diesel engine-driven generator, EG13 - EG20, EG64 - EG65, and EG70 - EG73, shall be observed during its scheduled maintenance/test run for normal visible emissions exhaust from the stack, excluding condensed water vapor. The

results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.

(9 VAC 5-80-110)

5. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then
  - a. Corrective action shall be taken to return the emission unit to proper operation.
  - b. The visible emission observation shall be repeated to confirm proper operation.
  - c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.

(9 VAC 5-80-110)

6. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:
  - a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.
  - b. Document the maintenance and repairs performed on the unit.
  - c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.
  - d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit(s) shall be available on site for inspection by the DEQ and be current for the most recent five years.

(9 VAC 5-80-110)

### C. Testing

1. Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, [Method 9](#), shall be conducted by the permittee on two of the [four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators \(EG70-73\)](#). The equipment shall be operating at greater than 80% of rated capacity. Each test shall consist of ten sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. If the emissions exceed the opacity limit, later testing shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the [Air Compliance Manager, Northern Virginia Regional Office](#). The permittee shall submit a test protocol at least 30 days prior to testing. The evaluation shall be performed 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. Two copies of the test result shall be submitted to the [Air Compliance Manager, Northern Virginia Regional Office](#) within 45 days after test completion and shall conform to the test report format enclosed with this permit.  
(9 VAC 5-80-110 and Condition 13 of 7/1/2002 Permit)
2. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Test ports shall be provided at the appropriate locations in accordance with the requirements of EPA Reference Method 1 (ref. 40 CFR Part 60, Appendix A).  
(9 VAC 5-80-110 and Condition 14 of 7/1/2002 Permit)
3. If testing is conducted in addition to the monitoring and initial visible emissions evaluation (VEE) specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO <sub>x</sub>	EPA Method 7, 7E
SO <sub>2</sub>	EPA Method 6, 6C
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17, 201a
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

## D. Reporting

1. The permittee shall furnish written notification to the Air Compliance Manager, Northern Virginia Regional Office:
  - a. The actual date on which modification of the four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators (EG70-73) commenced within 30 days after such date.
  - b. The anticipated start-up date of the [four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators \(EG70-73\)](#) postmarked not more than 60 days nor less than 30 days prior to such date.
  - c. The actual start-up date of the [four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators \(EG70-73\)](#) within 15 days after such date, also indicating the exact make and model of the equipment.
  - d. The anticipated date of the visible emissions evaluation, to be conducted on two of the [four Caterpillar model 3516B or equivalent diesel engine-driven emergency generators \(EG70-73\)](#), postmarked at least 30 days prior to such date.

(9 VAC 5-80-110 and Condition 17 of 7/1/2002 Permit)

## VIII. Process Equipment Requirements - (emission units ID# G51-G57, G61 and G62-G64) – Prime Power School Generators

### A. Limitations

1. The [two Cummins model MEP-208A and one Cummins model MEP-012A diesel engine-driven generators \(G55-G57\)](#) shall not operate more than 525 hours/yr total, calculated [monthly as the sum of each consecutive 12 month period](#).  
(9 VAC 5-80-110 and Condition 3 of 5/31/2002 Permit)
2. The [three Caterpillar 3456 diesel engine-driven generators \(G62-G64\)](#) shall not operate more than 720 hours/yr total, calculated [monthly as the sum of each consecutive 12 month period](#).  
(9 VAC 5-80-110 and Condition 4 of 5/31/2002 Permit)
3. The approved fuel for the [two Cummins model MEP-208A and one Cummins model MEP-012A diesel engine-driven generators and three Caterpillar 3456 diesel engine-driven generators \(G55-G57 and G62-G64\)](#) is diesel fuel. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 5 of 5/31/2002 Permit)

4. The fuel shall meet the ASTM D975 specifications for diesel fuel, with maximum sulfur content per shipment not to exceed 0.5% by weight.  
(9 VAC 5-80-110 and Condition 6 of 5/31/2002 Permit)
5. Hourly emissions from the operation of each of the **two Cummins model MEP-208A and one Cummins model MEP-012A diesel engine-driven generators (G55-G57)** shall not exceed the limits specified below:

Nitrogen Oxides (as NO <sub>2</sub> )	26.0 lbs/hr
Sulfur Dioxide	4.4 lbs/hr
Carbon Monoxide	6.0 lbs/hr

These emissions are derived from the estimated emission factors and maximum design capacity of the equipment. Compliance with these emission limits may be determined by source testing.

(9 VAC 5-80-110 and Condition 8 of 5/31/2002 Permit)

6. Total annual emissions from the operation of the **two Cummins model MEP-208A and one Cummins model MEP-012A diesel engine-driven generators (G55-G57)** shall not exceed the limits specified below:

Nitrogen Oxides (as NO <sub>2</sub> )	6.8 tons/yr
Sulfur Dioxide	1.2 tons/yr
Carbon Monoxide	1.6 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number VIII.A.1.

Also, records of DEQ-approved emission factors, equations and throughput data shall be maintained to calculate annual emissions for each consecutive 12 month period.

(9 VAC 5-80-110 and Condition 9 of 5/31/2002 Permit)

7. Hourly emissions from the operation of each of the **three Caterpillar 3456 diesel engine-driven generators (G62-G64)** shall not exceed the limits specified below:

Nitrogen Oxides (as NO <sub>2</sub> )	16.7 lbs/hr
Sulfur Dioxide	5.4 lbs/hr

These emissions are derived from the estimated emission factors and maximum design capacity of the equipment. Compliance with these emission limits may be determined by source testing.

(9 VAC 5-80-110 and Condition 10 of 5/31/2002 Permit)

8. Total annual emissions from the operation of the **three Caterpillar 3456 diesel engine-driven generators (G62-G64)** shall not exceed the limits specified below:

Nitrogen Oxides (as NO <sub>2</sub> )	6.0 tons/yr
Sulfur Dioxide	2.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number VIII.A.2. Also, records of DEQ-approved emission factors, equations and throughput data shall be maintained to calculate annual emissions for each consecutive 12 month period.

(9 VAC 5-80-110 and Condition 11 of 5/31/2002 Permit)

9. Visible emissions from the **two Cummins model MEP-208A and one Cummins model MEP-012A diesel engine-driven generators and three Caterpillar 3456 diesel engine-driven generators (G55-G57 and G62-G64)** shall not exceed **20%** opacity except during one six-minute period in any one hour in which visible emissions shall not exceed **30%** opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A).  
(9 VAC 5-80-110 and Condition 12 of 5/31/2002 Permit)

10. Diesel engine emissions shall be controlled by proper operation and maintenance. Operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.  
(9 VAC 5-80-110, and Condition 22 of 5/31/2002 Permit)

## **B. Monitoring and Recordkeeping**

1. 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 volume of diesel fuel delivered in the shipment;
  - d. A statement that the diesel fuel complies with the ASTM specifications;
  - e. The sulfur content of the diesel fuel.

(9 VAC 5-80-110 and Condition 7 of 5/31/2002 Permit)

2. 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, Northern Virginia Regional Office](#). These records shall include, but are not limited to:
  - a. Annual hours of operation of each diesel engine-driven generator, calculated monthly as the sum of each consecutive 12 month period.
  - b. All fuel supplier certifications.
  - c. Scheduled and unscheduled maintenance.
  - d. DEQ-approved emission factors and equations used to calculate emissions from the engines.

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

(9 VAC 5-80-110 and Condition 18 of 5/31/2002 Permit)

3. The permittee shall have available good written operating procedures and a maintenance schedule for the engines. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.  
(9 VAC 5-80-110 and Condition 22 of 5/31/2002 Permit)
4. Visible emission observations shall be used by the permittee to assist in determining whether the emission units are operating properly. Each diesel engine-driven generator, G51-G57, G61 and G62-G64, shall be observed during its scheduled maintenance/test run for normal visible emissions exhaust from the stack, excluding condensed water vapor. The results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)
5. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then
  - a. Corrective action shall be taken to return the emission unit to proper operation.
  - b. The visible emission observation shall be repeated to confirm proper operation.

- c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.

(9 VAC 5-80-110)

6. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:
  - a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.
  - b. Document the maintenance and repairs performed on the unit.
  - c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.
  - d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit(s) shall be available on site for inspection by the DEQ and be current for the most recent five years.

(9 VAC 5-80-110)

### **C. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Test ports shall be provided at the appropriate locations in accordance with the requirements of EPA Reference Method 1 (ref. 40 CFR Part 60, Appendix A).  
(9 VAC 5-80-110 and Condition 14 of 5/31/2002 Permit)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO <sub>x</sub>	EPA Method 7, 7E
SO <sub>2</sub>	EPA Method 6, 6C
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17, 201a
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

**IX. Process Equipment Requirements – (emission units ID#EG38-EG43, EG66-EG69, EG-29 and EG-107) – Other Large Emergency Generators**

**A. Limitations**

1. The diesel engine-driven generators (EG38-EG43, EG66-EG69, EG-29 and EG-107) are to be used only for providing power at Fort Belvoir during interruption of service from the normal power supplier or to meet conditioned power requirements, and for periodic testing.  
(9 VAC 5-80-110)
2. Operation of each emergency generator (EG38-EG43, EG66-EG69, EG-29 and EG-107) shall not exceed 500 hours per year per unit. A record must be kept of the operating hours of each generator set.  
(9 VAC 5-80-110 and 7/2/97 Permit)
3. Visible emissions from each of the generator stacks shall not exceed twenty percent (20%) opacity, except for one six-minute period in any one hour of not more than thirty percent (30%) opacity.  
(9 VAC 5-50-80 and 9 VAC 5-80-110)

**B. Monitoring and Recordkeeping**

1. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. For the generators, a record shall be maintained on the number of hours of operation for each generator or the fuel shipments, including certified fuel type, quantity and sulfur content. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.  
(9 VAC 5-40-50 and 9 VAC 5-20-160)

2. Visible emission observations shall be used by the permittee to assist in determining whether the emission units are operating properly. Specifically, the diesel engine-driven generators with greater than 645 horsepower (or about 500 kilowatts) output capacity, shall be observed during their scheduled maintenance/test runs for normal visible emissions exhaust from the stack, excluding condensed water vapor. The results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)
3. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then
  - a. Corrective action shall be taken to return the emission unit to proper operation.
  - b. The visible emission observation shall be repeated to confirm proper operation.
  - c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)
4. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:
  - a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.
  - b. Document the maintenance and repairs performed on the unit.
  - c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.
  - d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit(s) shall be available on site for inspection by the DEQ and be current for the most recent five years.  
(9 VAC 5-80-110)

## X. Process Equipment Requirements –(emission units ID#FT-1, FT-2)

### A. Limitations

1. The approved fuel for the Mobile Aircraft Rescue Firefighter Training Facility, Symtron Systems, Inc. and Fixed Structural Fire Fighting Training Facility, Symtron Systems, Inc. (FT-2 and FT-1) is propane. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Condition 3 of 1/24/2001 Permit)
2. The Fixed Structural Fire Fighting Training Facility, Symtron Systems, Inc. (FT-1) shall consume no more than 330,970 gal/yr of propane, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 4 of 1/24/2001 Permit)
3. The Mobile Aircraft Rescue Firefighter Training Facility, Symtron Systems, Inc. (FT-2) shall consume no more than 107,580 gal/yr of propane, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Condition 5 of 1/24/2001 Permit)
4. Emissions from the operation of the Fixed Structural Fire Fighting Training Facility, Symtron Systems, Inc. (FT-1) shall not exceed the limits specified below:

Particulate Matter	1.1	lb/MMBtu	40.4 lbs/hr	18.8 tons/yr
PM-10	1.1	lb/MMBtu	40.4 lbs/hr	18.8 tons/yr
Volatile Organic Compounds	0.5	lb/MMBtu	18.4 lbs/hr	7.7 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	0.07	lb/MMBtu	2.5 lbs/hr	1.0 tons/yr
Carbon Monoxide	0.4	lb/MMBtu	13.5 lbs/hr	5.6 tons/yr

These emissions are derived from the manufacturer supplied emissions data and estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with the annual emission limits may be determined as stated in Condition number X.A.2. Also, records of DEQ-approved emission

factors, equations and throughput data shall be maintained to calculate annual emissions for each consecutive 12 month period.

(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 6 of 1/24/2001 Permit)

5. Emissions from the operation of the [Mobile Aircraft Rescue Firefighter Training Facility, Symtron Systems, Inc. \(FT-2\)](#) shall not exceed the limits specified below:

Particulate Matter	1.1 lb/MMBtu	13.1 lbs/hr	5.5tons/yr
PM-10	1.1 lb/MMBtu	13.1 lbs/hr	5.5tons/yr
Volatile Organic Compounds	0.5 lb/MMBtu	6.0 lbs/hr	2.5tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	0.07 lb/MMBtu	0.8 lbs/hr	0.3tons/yr
Carbon Monoxide	0.4 lb/MMBtu	4.4 lbs/hr	1.8tons/yr

These emissions are derived from the manufacturer supplied emissions data and the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition number X.A.3. Also, records of DEQ-approved emission factors, equations and throughput data shall be maintained to calculate annual emissions for each consecutive 12 month period.

(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 7 of 1/24/2001 Permit)

## B. Monitoring and Recordkeeping

1. 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, Northern Virginia Regional Office](#). These records shall include, but are not limited to:
  - a. Monthly propane fuel meter readings for each firefighter training equipment.
  - b. The yearly consumption of liquid propane, based on the fuel meter readings from each firefighting training equipment, calculated monthly as the sum of each consecutive 12 month period.
  - c. DEQ-approved emission factors and equations used to calculate emission from the firefighter training equipment.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.  
(9 VAC 5-80-110 and Condition 8 of 1/24/2001 Permit, amended 12/16/2002)

**C. Testing**

1. The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods.  
(9 VAC 5-80-110 and Condition 9 of 1/24/2001 Permit)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO <sub>x</sub>	EPA Method 7, 7E
SO <sub>2</sub>	EPA Method 6, 6C
CO	EPA Method 10
PM/PM-10	EPA Method 5, 17, 201a
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

**XI. Process Equipment Requirements – (emission unit ID#I-2)  
Veterinary Clinic Incinerator**

**A. Limitations**

1. Particulate emissions and opacity from the incinerator stack shall be controlled by an afterburner. The afterburner chamber shall be provided with adequate access for inspection.  
(9 VAC 5-80-110 and Specific Condition 4 of 4/16/90 Permit, amended 11/4/98)
2. The incinerator shall be charged with no more than 120 pounds per hour of animal waste. The charge rate shall be determined by dividing the mass loaded into the incinerator by the burn down time. No other type of waste shall be burned in the incinerator  
(9 VAC 5-80-110 and Specific Condition 5 of 4/16/90 Permit, amended 11/4/98)

3. The primary and secondary chambers shall be provided with sensors to measure the temperatures in each chamber. The minimum temperatures of 1,200 °F and 1,600 °F shall be maintained in the primary and secondary chambers respectively when the unit is burning wastes.  
(9 VAC 5-80-110 and Specific Condition 7 of 4/16/90 Permit, amended 11/4/98)
4. The approved fuel for the incinerator is LP (liquefied petroleum) gas. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110 and Specific Condition 10 of 4/16/90 Permit, amended 11/4/98)
5. Emissions from the operation of the incinerator shall not exceed the limits specified below:  
  
Total Suspended  
Particulates/PM<sub>10</sub> 0.08 grains per dry cubic foot at standard conditions  
corrected to 12 percent carbon dioxide  
[without auxiliary fuel carbon dioxide  
contribution]  
(9 VAC 5-80-110 and Specific Condition 6 of 4/16/90 Permit, amended 11/4/98)
6. Visible emissions from the incinerator shall not exceed five percent (5%) opacity.  
(9 VAC 5-80-110 and Specific Condition 8 of 4/16/90 Permit, amended 11/4/98)

## **B. Monitoring and Recordkeeping**

1. The permittee shall retain records of all emissions data and operating parameters required by the terms of this permit, to include approximate weight of waste burned, start and finish times, and dates of operation. These records shall be maintained by the source for the most current five year period.  
(9 VAC 5-80-110 and General Condition 4 of 4/16/90 Permit, amended 11/4/98)
2. The permittee shall develop, maintain, and have available to all operators good written operating procedures for the incinerator. A maintenance schedule for all such equipment shall be established and made available to the Air Compliance Manager, Northern Virginia Regional Office for review. Records of service and maintenance shall be maintained on file by the source for the most current five (5) year period.  
(9 VAC 5-80-110 and General Condition 5 of 4/16/90 Permit, amended 11/4/98)
3. Visible emission observations shall be used by the permittee to assist in determining whether the emission unit is operating properly. The veterinary incinerator, emission unit I-2, shall be observed during each week it operates for normal visible emissions exhaust from the stack, excluding condensed water

vapor. The results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.  
(9 VAC 5-80-110)

4. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then
  - a. Corrective action shall be taken to return the emission unit to proper operation.
  - b. The visible emission observation shall be repeated to confirm proper operation.
  - c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.

(9 VAC 5-80-110)

5. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:
  - a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.
  - b. Document the maintenance and repairs performed on the unit.
  - c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.
  - d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit shall be available on site for inspection by the DEQ and be current for the most recent five years.  
(9 VAC 5-80-110)

**C. Testing**

1. The permitted facility shall be designed and constructed to allow emissions testing using appropriate methods upon reasonable notice at any time.  
(9 VAC 5-80-110 and General Condition 3 of 4/16/90 Permit, amended 11/4/98)
2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Method 5, 17, 201a
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

**D. Reporting**

1. If, for any reason, the permitted facility or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Air Compliance Manager, Northern Virginia Regional Office within 4 business hours of the occurrence. The feed of animal waste shall be stopped immediately when the incinerator malfunctions and shall not be restarted until the incinerator is repaired and the Air Compliance Manager, Northern Virginia Regional Office is notified of the schedule for restarting the waste feed.  
(9 VAC 5-80-110 and General Condition 6 of 4/16/90 Permit, amended 11/4/98)

**XII. Process Equipment Requirements – (emission unit ID#I-4)  
Defense CEETA Classified Waste Incinerator**

**A. Limitations**

1. The incinerator shall not operate more than 2,600 hours per year, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110 and Specific Condition 4 of 2/8/89 Permit)
2. The daily incineration of Type 0 waste is limited to 10,000 pounds of paper and 500 pounds of magnetic tape. The yearly incineration of Type 0 waste shall not exceed 1,350 tons, calculated monthly as the sum of each consecutive twelve (12) month period.  
(9 VAC 5-80-110 and Specific Condition 5 of 2/8/89 Permit)

3. The waste magnetic tape shall be mixed with waste paper when charged into the incinerator on the ratio of 5 percent and 95 percent by weight, respectively.  
(9 VAC 5-80-110 and Specific Condition 6 of 2/8/89 Permit)
4. Particulate emissions from the operation of the incinerator shall not exceed 0.08 grains per dry standard cubic foot, corrected to 12 percent CO<sub>2</sub> without the CO<sub>2</sub> contribution from the fuel.  
(9 VAC 5-80-110 and Specific Condition 7 of 2/8/89 Permit)
5. The approved auxiliary fuels for the incinerator are natural gas and No. 2 (diesel) fuel oil. A change in the fuels may require a permit to modify and operate.  
(9 VAC 5-80-110 and Specific Condition 8 of 2/8/89 Permit)
6. In order to verify continuing compliance, visible emissions from the incinerator shall not exceed five percent opacity during all periods of operation. Failure to achieve and maintain this opacity limitation will be cause for requiring the submission of a control program.  
(9 VAC 5-80-110 and Specific Condition 9 of 2/8/89 Permit)
7. Incinerator emissions shall also be controlled by proper operation and maintenance. Incinerator operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instruction, at minimum.  
(9 VAC 5-80-110 and General Condition 6 of 2/8/89 Permit)

## **B. Monitoring and Recordkeeping**

1. The permittee shall retain records of all emissions data and operating parameters required to be monitored by the terms of this permit, to include weight and type of waste burned, start and finish times, and dates of operation. These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9 VAC 5-80-110 and General Condition 5 of 2/8/89 Permit)
2. All operators shall be trained and certified in the proper operation of all such equipment. U.S. Army, Fort Belvoir shall maintain records of all such equipment. U.S. Army, Fort Belvoir shall maintain records of the required training and certification. Certification of training shall consist of a statement of time, place and nature of training provided.  
(9 VAC 5-80-110 and General Condition 6 of 2/8/89 Permit)
3. The U.S. Army, Fort Belvoir shall develop, maintain, and have available to all operators good written operating procedures for the incinerator. A maintenance

schedule for the equipment shall be established and made available to the Department of Environmental Quality for review. Records of service and maintenance shall be maintained on file by the source for a period of five (5) years.

(9 VAC 5-80-110 and General Condition 7 of 2/8/89 Permit)

4. A record of completed service and maintenance work on the emission units shall be maintained on site by the permittee for the most current five (5) year period. All records required by this condition shall be kept on site and made available for inspection by the DEQ.

(9 VAC 5-80-110 and General Condition 7 of 2/8/89 Permit)

5. Visible emission observations shall be used by the permittee to assist in determining whether the emission unit is operating properly. The classified waste incinerator, emission unit I-4, shall be observed during each week it operates for normal visible emissions exhaust from the stack, excluding condensed water vapor. The results of the observations shall be recorded and records kept on site, available for review and be current for the most recent five years.

(9 VAC 5-80-110)

6. Whenever any emission unit appears to be exceeding the normal visible emissions, the permittee shall check the emission unit operating parameters, and if the parameters are not within normal range, then

- a. Corrective action shall be taken to return the emission unit to proper operation.

- b. The visible emission observation shall be repeated to confirm proper operation.

- c. A record of observations and the corrective actions shall be retained on site, available for review and be current for the most recent five years.

(9 VAC 5-80-110)

7. If initial corrective action does not appear to adequately reduce visible emissions, then a visible emissions evaluation shall be conducted by certified personnel for at least 60 minutes in accordance with EPA Reference Method 9 (40 CFR Part 60, Appendix A) to demonstrate compliance with the opacity limit. If exceedance of the opacity limit is determined by the evaluation, then the permittee shall proceed as following:

- a. Remove the emission unit from service and make necessary repairs and adjustments to bring the operation into compliance with the permit limit.

- b. Document the maintenance and repairs performed on the unit.
- c. Repeat the visible emissions evaluation to demonstrate compliance with the opacity limit before the emission unit is returned to service.
- d. In the event that the emission unit still cannot meet the opacity standard in the permit, appropriate action will be agreed upon and implemented by U.S. Army Fort Belvoir and DEQ before the emission unit can be returned to service.

The results of the visible emissions evaluation for the emission unit shall be available on site for inspection by the DEQ and be current for the most recent five years.

(9 VAC 5-80-110)

### C. Testing

- 1. The permitted equipment shall be designed and installed so as to allow emissions testing using the methods prescribed upon reasonable notice at any time.  
(9 VAC 5-80-110 and General Condition 4 of 2/8/89 Permit)
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
PM/PM-10	EPA Method 5, 17, 201a
Visible Emissions	EPA Method 9

(9 VAC 5-80-110)

### D. Reporting

- 1. If, for any reason, the permittee does not comply or will not be able to comply with the emission limitations or other conditions specified in this permit, the permittee shall provide in writing to the Air Compliance Manager, Northern Virginia Regional Office the following information as soon as possible but no later than five (5) days after such conditions become known to the permittee:
  - a. Description of noncompliance;

- b. Cause of noncompliance;
- c. Anticipated time the noncompliance is expected to continue or, if corrected, the actual duration of noncompliance;
- d. Steps taken by the permittee to minimize or eliminate the noncompliance; and
- e. Steps taken by the permittee to prevent recurrence of the noncompliance.

Submittal of this report does not constitute a waiver of the emission limitations or other conditions of this permit nor does it in any way restrict the DEQ authority to enforce the permit conditions pursuant to Section 113 of the Clean Air Act.  
(9 VAC 5-80-110 and General Condition 10 of 2/8/89 Permit)

### **XIII. Process Equipment Requirements – (emission units ID#DG)**

#### **A. Limitations**

1. No owner or other person shall use or permit the use of any open top (cold cleaner) degreaser unless such degreaser is equipped with a control method that will remove, destroy, or prevent the discharge into the atmosphere of at least 85% by weight of volatile organic compound emissions.  
(9 VAC 5-40-3280.C.1)
2. Covers or enclosed remote reservoirs should be provided. Covers should be designed to be easily operated with one hand. The operation of certain covers may be of a type which is spring loaded, counterbalanced, or operated by a power system. Enclosed remote reservoirs should be designed such that they provide reduction effectiveness equivalent to a cover.  
(9 VAC 5-40-3290.C.1.a)
3. External or internal drainage facilities should be provided to collect and return the solvent to a closed container or a solvent cleaning machine. If solvent volatility is greater than 0.6 psi measured at 100°F, then the drainage should be internal, so that parts are enclosed under cover while draining. The drainage facilities may be external for applications where an internal type cannot fit into the cleaning system.  
(9 VAC 5-40-3290.C.1.b)
4. A permanent label summarizing the operating procedures should be placed in a conspicuous location on or near the degreaser. The operation procedures for the degreaser unit shall be clearly displayed by a permanent sign or label, which is located in a conspicuous location on, or near the unit.  
(9 VAC 5-40-3290.C.1.c)

5. If used, the solvent spray should be a solid, fluid stream (not a fine, atomized or shower type spray) and at a pressure which does not cause excessive splashing.  
(9 VAC 5-40-3290.C.1.d)
6. Operating requirements are as follows:
  - a. Waste solvent should not be disposed of or transferred to another party, such that greater than 20% of the waste (by weight) can evaporate into the atmosphere. Store waste solvent only in closed containers.
  - b. The degreaser cover (if one is required) should be closed whenever not handling parts in the cleaner.
  - c. Cleaned parts should drain for at least 15 seconds or until dripping ceases.  
(9 VAC 5-40-3290.C.2.a-c)
7. Disposal of waste solvent shall be by reclamation or incineration.  
(9 VAC 5-40-3290.D.1-2)
8. Routine replacement or addition of parts washers (non-halogenated cold cleaners/ degreasers) shall not require an air permit if the total uncontrolled emission rate is less than 7 tons per year, 40 pounds per day and 8 pounds per hour. However, the change is subject to registration update and the limits stated in above Conditions XIII.A.1 through A.7.  
(9 VAC 5-80-11, 9 VAC 5-20-160 and 9 VAC 5-40-3290C)

## **B. Monitoring**

1. The cold cleaner degreaser unit shall be inspected quarterly for condition and functionality.  
(9 VAC 5-40-3290.C.1 and 2, 9 VAC 5-80.110.E.2)

## **C. Recordkeeping**

1. The owner of a stationary source shall keep records as necessary to determine its emissions. Such records shall be retained on site for inspection by the DEQ. These records shall be kept for the most recent five (5) years.  
(9 VAC 5-40-50.E and 9 VAC 5-80-110.F)
2. A log shall be kept of all inspections and servicing of the degreaser units.  
(9 VAC 5-40-50.E and 9 VAC 5-80-110.F)

**XIV. Process Equipment Requirements – (emission units ID# T-03162A-B, T-01133E, T-02856B, T-00332H-J, T-01422J-T, T-03138H-I, T-02117C, T-02800A, T-02310A, T-02444C, T-02462A, T-02803A and T-01124C) Non-gasoline Storage Tanks**

**A. Limitations**

1. The permittee is authorized to store the specified materials in the following underground storage vessel:

Tank No.	Building Number	Tank Capacity (gallons)	Tank Contents (material stored)	Comments
T-03162A T-03612B	3162	13,000 gallons, each	JP-8 jet fuel	near Davison Army Airfield
T-01133E	1133	25,000 gallons	Diesel	Permit 5/31/02
T-02856B	2856	15,000 gallons	Diesel	Permit 7/1/02
T-00332H T-00332I T-00332J	332	25,000 gallons, each	Distillate No. 2 fuel (heating oil)	R&D Heating Plant
T-01422J T-01422K T-01422L T-01422M T-01422N T-01422O	1422	25,000 gallons, each	Residual No. 6 fuel (heating oil)	Central Heating Plant (old boilers removed)
T-01422P T-01422Q T-01422R T-01422S T-01422T	1422	25,000 gallons, each	Distillate No. 2 fuel (heating oil)	Central Heating Plant (new boilers)
T-03138H T-03138I	3138	30,000 gallons, each	Distillate No. 2 fuel (heating oil)	near Davison Army Airfield
T-02117C	2117	25,000 gallons	Distillate No. 2 fuel	
T-02800A	2800	15,000 gallons	Distillate No. 2 fuel	
T-02310A	2310	25,000 gallons	Diesel	
T-02444C	2444	25,000 gallons	Diesel	
T-02462A	2462	25,000 gallons	Diesel	
T-02803A	2803	25,000 gallons	Diesel	
T-01124C	1124	12,000 gallons	Used Oil	

A change in the materials stored may require a permit to modify and operate. (9 VAC 5-80-110 and 9 VAC 5-50-410)

## **B. Recordkeeping**

1. The permittee shall keep readily accessible records showing the dimensions of the storage vessels (T-03162A, T-03612B, T-01133E and T-2856B) and an analysis showing the capacity of the storage vessels, in accordance with the requirements of 40 CFR Part 60 Subpart Kb. These records shall be kept for the life of the storage vessels and shall be available on site for inspection by the DEQ.  
(9 VAC 5-80-110, 9 VAC 5-50-410, Condition 19 of 5/31/2002 Permit for T-01133E and Condition 16 of 7/1/2002 Permit for T-02856B)

## **XV. Process Equipment Requirements – (emission units ID#T-9, T-10) Storage Tanks at Gasoline Dispensing Facility – Building 1124**

### **A. Limitations**

1. The gasoline dispensing facility at Building 1124, which is exclusively used by base military personnel, shall be subject to the requirements of Stage I and Stage II vapor control systems if the average monthly throughput of gasoline exceeds 10,000 gallons.  
(9 VAC 5-40-5220 E.3.)
2. For service stations subject to Stage I vapor control systems, no owner or other person shall transfer or permit the transfer of gasoline from any tank truck into any stationary storage tank unless such tank is equipped with a vapor control system that will remove, destroy or prevent the discharge into the atmosphere of at least 90% by weight of volatile organic compound emissions.  
(9 VAC 5-40-5220 E.1.)
3. Achievement of the Stage I emission standard by use of the following methods will be acceptable to the board.
  - a. A submerged fill pipe;
  - b. A vapor control system with the vapor recovery portion consisting of one of the following:
    - 1) A vapor tight return line from the storage container to the tank truck which shall be connected before gasoline is transferred into the container;
    - 2) Any adsorption system or condensation system; or
    - 3) Any system of equal or greater control efficiency to the above systems, provided such system is approved by the board.

- c. A vapor control system with the vapor balance portion meeting the following criteria:
- 1) There should be no leaks in the tank truck's pressure vacuum relief valves and hatch covers, nor truck tanks, storage tanks and associated vapor return lines during loading or unloading operations;
  - 2) The pressure relief valves on storage containers and tank trucks should be set to release at no less than 0.7 pounds per square inch (psi) or the highest possible pressure (in accordance with the following National Fire Prevention Association Standards: NFPA 385, Standard for Tank Vehicles for Flammable and Combustible Liquids Code; NFPA 30A, Automotive and Marine Service Station Code (see 9 VAC 5-50-21);
  - 3) Pressure in the vapor collection lines should not exceed tank truck pressure relief valve settings; and
  - 4) All loading and vapor lines should be equipped with fittings which make vapor tight connections and which close when disconnected.  
(9 VAC 5-40-5230 E)
4. For service stations subject to the Stage II vapor control systems, no owner or other person shall transfer or permit the transfer of gasoline into the fuel tank of any motor vehicle at any affected gasoline dispensing facility unless the transfer is made using a certified Stage II vapor recovery system that is designed, operated, and maintained such that the vapor recovery system removes, destroys or prevents the discharge into the atmosphere of at least 95% by weight of volatile organic compound emissions.  
(9 VAC 5-40-5220 F.1.)
5. Stage II vapor recovery systems shall be limited to those certified systems approved under the provisions of AQP-9, Procedures for Implementation of Regulations Covering Stage II Vapor Recovery Systems for Gasoline Dispensing Facilities (see 9 VAC 5-20-121), which utilize coaxial hoses and vapor check valves in the nozzle or remote vapor check valves which do not impede the performance of the functional tests required in subdivision F 6 b of 9 VAC 5-40-5220.  
(9 VAC 5-40-F.1.)

## XVI. Facility Wide Conditions

### A. Limitations

1. All facility equipment which do not have more stringent visible emission limits stated in this permit, shall not exceed twenty percent (20%) opacity; except during one six-minute period in any one hour in which visible emissions shall not exceed thirty percent (30%) opacity for new sources (constructed after March 17, 1972 or reconstructed after December 10, 1976) and sixty percent (60%) for existing sources.  
 (9 VAC 5-80-110, 9 VAC 5-40-80 and 9 VAC 5-50-80)
2. At all times, including periods of startup, shutdown, 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 5-80-110, 9 VAC 5-40-20E and 9 VAC 5-50-20E)

## XVII. 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	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
WW-1	Woodworking Activities	9 VAC 5-80-720B	Particulate Matter	40,200 lbs wood/yr
PA-1	Pesticide Application Activities	9 VAC 5-80-720B	VOC (minor toxics)	2362.4 lbs (in 1999)
SP-1	Spray Painting Activities	9 VAC 5-80-720B	VOC (minor toxics)	About 700 gal/yr
PR-1	Printing Activities	9 VAC 5-80-720B	VOC (minor toxics)	0.687 tons ink(1999)
LF-1	Sanitary Landfills (closed)	9 VAC 5-80-720B	Non-methane organic compounds (NMOC)	942,615 total tons waste in place
R-1, R-2	Jet fuel loading rack	9 VAC 5-80-720B	VOC	6300 gal/hr, each
R-3	Gasoline loading rack	9 VAC 5-80-720B	VOC	9600 gal/hr gasoline
R-4	Diesel fuel loading rack	9 VAC 5-80-720B	VOC	9600 gal/hr diesel
R-5	Waste oil loading rack	9 VAC 5-80-720B	VOC	2400 gal/hr waste oil
R-6	Hazardous waste oil loading rack	9 VAC 5-80-720B	VOC	24 gal/hr hazardous waste oil
S-1	Misc. waste oil/inactive	9 VAC 5-80-720B	VOC	3000 gal/hr
S-2 to S-4	Mixed aviation fuel and hydraulic oil separators	9 VAC 5-80-720B	VOC	About 2000 gal/hr
S-5	Vehicle wash/grease rack stormwater	9 VAC 5-80-720B	VOC	600 gal/hr

S-6	Miscellaneous waste water	9 VAC 5-80-720B	VOC	-
S-7	Miscellaneous waste oils	9 VAC 5-80-720B	VOC	12000 gal/hr
S-8	Stormwater separator	9 VAC 5-80-720B	VOC	Inactive
S-9	Auto fuel/hydraulic oil	9 VAC 5-80-720B	VOC	-
S-10	Stormwater separators	9 VAC 5-80-720B	VOC	Inactive
B-8	Bldg. 20, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.52 mil. Btu/hr
B-9	Bldg. 20, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.1 mil. Btu/hr
B-10	Bldg. 182, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.4 mil. Btu/hr
B-11	Bldg. 182, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.36 mil. Btu/hr
B-12	Bldg. 187, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.88 mil. Btu/hr
B-13	Bldg. 202, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.52 mil. Btu/hr
B-14	Bldg. 203, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.05 mil. Btu/hr
B-15	Bldg. 204, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.08 mil. Btu/hr
B-16	Bldg. 205, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.12 mil. Btu/hr
B-17	Bldg. 206, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.08 mil. Btu/hr
B-18	Bldg. 207, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.01 mil. Btu/hr
B-19	Bldg. 208, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.17 mil. Btu/hr
B-20	Bldg. 209, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.08 mil. Btu/hr
B-21	Bldg. 210, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.7 mil. Btu/hr
B-22	Bldg. 211, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.16 mil. Btu/hr
B-23	Bldg. 212, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.16 mil. Btu/hr
B-24	Bldg. 213, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.16 mil. Btu/hr
B-25	Bldg. 214, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	4.76 mil. Btu/hr
B-26	Bldg. 214, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	4.76 mil. Btu/hr
B-27	Bldg. 219, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.6 mil. Btu/hr
B-28	Bldg. 219, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.6 mil. Btu/hr
B-29	Bldg. 220, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	4 mil. Btu/hr
B-30	Bldg. 220, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	4 mil. Btu/hr
B-31	Bldg. 222, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.55 mil. Btu/hr
B-32	Bldg. 231, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	5.59 mil. Btu/hr
B-33	Bldg. 238, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.05 mil. Btu/hr
B-34	Bldg. 240, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.94 mil. Btu/hr
B-35	Bldg. 247, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	4.28 mil. Btu/hr
B-36	Bldg. 247, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	4.28 mil. Btu/hr
B-37	Bldg. 257, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.7 mil. Btu/hr
B-38	Bldg. 305, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.5 mil. Btu/hr
B-39	Bldg. 305, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.5 mil. Btu/hr
B-40	Bldg. 337, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.16 mil. Btu/hr
B-42	Bldg. 358, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.02 mil. Btu/hr
B-43	Bldg. 361, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.6 mil. Btu/hr
B-44	Bldg. 367, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.6 mil. Btu/hr
B-45	Bldg. 367, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.6 mil. Btu/hr
B-48	Bldg. 392, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.7 mil. Btu/hr
B-49	Bldg. 470, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.93 mil. Btu/hr
B-50	Bldg. 470, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.93 mil. Btu/hr
B-51	Bldg. 701, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.72 mil. Btu/hr
B-52	Bldg. 707, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.8 mil. Btu/hr
B-53	Bldg. 707, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.8 mil. Btu/hr
B-58	Bldg. 1101, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	0.77 mil. Btu/hr
B-59	Bldg. 1114, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	0.75 mil. Btu/hr
B-61	Bldg. 1116, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.63 mil. Btu/hr

B-62	Bldg. 1132, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.1 mil. Btu/hr
B-63	Bldg. 1146, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.28 mil. Btu/hr
B-64	Bldg. 1200, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	5.8 mil. Btu/hr
B-70	Bldg. 3121, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.05 mil. Btu/hr
B-72	Bldg. 1442, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.08 mil. Btu/hr
B-73	Bldg. 1462, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	2.69 mil. Btu/hr
B-74	Bldg. 1726, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	5.25 mil. Btu/hr
B-75	Bldg. 1726, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	5.25 mil. Btu/hr
B-76	Bldg. 1726, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.7 mil. Btu/hr
B-77	Bldg. 1731, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	8.39 mil. Btu/hr
B-78	Bldg. 1731, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	8.39 mil. Btu/hr
B-79	Bldg. 1731, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.5 mil. Btu/hr
B-80	Bldg. 1736, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.78 mil. Btu/hr
B-81	Bldg. 1736, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.78 mil. Btu/hr
B-82	Bldg. 1736, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.9 mil. Btu/hr
B-83	Bldg. 1809, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.97 mil. Btu/hr
B-85	Bldg. 1812, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1 mil. Btu/hr
B-86	Bldg. 1822, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	7.20 mil. Btu/hr
B-87	Bldg. 1822, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	7.20 mil. Btu/hr
B-92	Bldg. 2302, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.24 mil. Btu/hr
B-106	Bldg. 4001, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.19 mil. Btu/hr
B-110	Bldg. 2591, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	0.64 mil. Btu/hr
B-114	Bldg. 2593, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	0.8 mil. Btu/hr
B-116	Bldg. 371, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.01 mil. Btu/hr
B-117	Bldg. 386, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.23 mil. Btu/hr
B-118	Bldg. 399, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.89 mil. Btu/hr
B-119	Bldg. 712, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.7 mil. Btu/hr
B-120	Bldg. 766, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.23 mil. Btu/hr
B-121	Bldg. 1468, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.38 mil. Btu/hr
B-122	Bldg. 399, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.75 mil. Btu/hr
B-123	Bldg. 1462, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	1.75 mil. Btu/hr
B-124 thru B-135	Bldgs. 505, 506, 191, 1471, 1809, 3123 gas	9 VAC 5-80-720C	NOx, VOC, CO, PM	3.55 mil. Btu/hr total
B-136	Bldg. 950, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3 mil. Btu/hr
B-137	Bldg. 950, gas boiler	9 VAC 5-80-720C	NOx, VOC, CO, PM	3 mil. Btu/hr
EG-1	Bldg. 3065, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	100 KW
EG-2	Bldg. 3065, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	100 KW
EG-3	Bldg. 3065, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	100 KW
EG-4	Bldg. 3065, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	100 KW
EG-5	Bldg. T 1423, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	100 KW
EG-11	Bldg. 1434, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	150 KW
EG-12	Bldg. 1434, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	150 KW
EG-23	Portable unit, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	320 KW
EG-24	Portable unit, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	275 KW
EG-25	Portable unit, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	180 KW
EG-26	Portable unit, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	100 KW
EG-27	Portable unit, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	80 KW
EG-28	Bldg. 0097, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	350 KW
EG-31	Bldg. 687, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	150 KW
EG-32	Bldg. 808, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	350 KW
EG-33	Bldg. 808, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	350 KW
EG-34	Bldg. 1131, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	125 KW

EG-35	Bldg. 1157, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	100 KW
EG-36	Bldg. 2119, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	150 KW
EG-37	Bldg. 2310, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	100 KW
EG-45	Bldg. 2593, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	400 KW
EG-47	Bldg. 3136, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	125 KW
EG-48	Bldg. 3165, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	200 KW
EG-79	Bldg. 361, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	200 KW
EG-80	Bldg. 361, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	190 KW
EG-81 thru EG-106	Emergency diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	Less than 200 KW, each
EG-108 thru EG-112	Emergency diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	Less than 200 KW, each
EG-113	Bldg. 3165, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	200 KW
EG-114 thru EG-116	Emergency diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	Less than 200 KW, each
EG-117	Bldg. 3239, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	416 KW
EG-118 thru EG-120	Emergency diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	Less than 200 KW, each
EG-121	Bldg. 246, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	250 KW
EG-122	Emergency diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	30 KW
EG-123	Portable unit, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	200 KW
EG-124	Portable unit, diesel gen.	9 VAC 5-80-720C	NOx, VOC, CO, PM	135 KW
AST-1109-2	Gasoline tank	9 VAC 5-80-720B	VOC	500 gallons
AST-1134-2	Diesel fuel tank	9 VAC 5-80-720B	VOC	600 gallons
AST-1157-1	Diesel fuel tank	9 VAC 5-80-720B	VOC	275 gallons
AST-1493-1	Gasoline tank	9 VAC 5-80-720B	VOC	500 gallons
AST-1493-2	Gasoline tank	9 VAC 5-80-720B	VOC	275 gallons
AST-1493-3	Gasoline tank	9 VAC 5-80-720B	VOC	200 gallons
AST1822B-1	Diesel fuel tank	9 VAC 5-80-720B	VOC	275 gallons
AST-224-1	Varsol tank	9 VAC 5-80-720B	VOC	275 gallons
AST-2590-1	Diesel fuel tank	9 VAC 5-80-720B	VOC	475 gallons
AST-2906-1	Gasoline tank	9 VAC 5-80-720B	VOC	500 gallons
AST-2906-2	Gasoline tank	9 VAC 5-80-720B	VOC	500 gallons
AST-2909-1	Gasoline tank	9 VAC 5-80-720B	VOC	550 gallons
AST-2909-2	Gasoline tank	9 VAC 5-80-720B	VOC	400 gallons
AST-322-3	Jet fuel tank	9 VAC 5-80-720B	VOC	600 gallons
AST-324-1	Jet fuel tank	9 VAC 5-80-720B	VOC	600 gallons
AST-324-2	Jet fuel tank	9 VAC 5-80-720B	VOC	600 gallons
AST-324-3	Diesel fuel tank	9 VAC 5-80-720B	VOC	150 gallons
AST-324-4	Diesel fuel tank	9 VAC 5-80-720B	VOC	150 gallons
AST-324-5	Diesel fuel tank	9 VAC 5-80-720B	VOC	150 gallons
AST-324-6	Diesel fuel tank	9 VAC 5-80-720B	VOC	150 gallons
AST-326-1	Diesel fuel tank	9 VAC 5-80-720B	VOC	600 gallons
AST-3293-1	Diesel fuel tank	9 VAC 5-80-720B	VOC	500 gallons
AST-348-1	Jet fuel tank	9 VAC 5-80-720B	VOC	600 gallons
AST-394-1	Diesel fuel tank	9 VAC 5-80-720B	VOC	200 gallons
AST-400-1	Diesel fuel tank	9 VAC 5-80-720B	VOC	500 gallons

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.

## XVIII. 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 Subpart E (§60.50 - §60.54)	Standards of Performance for Incinerators	Incinerators of more than 50 tons per day charging rate
40 CFR 60 Subpart AAAA (§60.1000 - §60.1465), and 40 CFR 60 Subpart BBB (§60.1500 - §60.1940)	Standards of Performance for Small Municipal Waste Combustion Units	Municipal waste combustion units charging at least 35 tons of waste per day
40 CFR 60 Subpart CCCC (§60.2000 - §60.2265), and 40 CFR 60 Subpart DDDD (§60.2500 - §60.2875)	Standards of Performance for Commercial and Industrial Solid Waste Incineration Units	Incineration of commercial and industrial solid waste (not applicable to federal facilities)
40 CFR 60 Subpart XX (§60.500 - §60.504)	Standards of Performance for Bulk Gasoline Terminals	Loading racks at bulk gasoline terminals that deliver liquid product into gasoline tank trucks (facility not a terminal)
40 CFR Part 63 Subpart T (§63.460 - §63.469) and 9 VAC 5 Chapter 60	Halogenated Solvent Cleaning (MACT)	Halogenated cleaning solvent (not used in the cold cleaning degreasers)

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 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)

## **XIX. General Conditions**

### **A. 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)

### **B. 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 a timely and complete renewal application consistent with 9 VAC 5-80-80 has been submitted to the Department by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. 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.
2. 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.
3. 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.
4. 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.
5. 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 to 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)

### C. Recordkeeping and Reporting

1. 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.
  - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

2. 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.

(9 VAC 5-80-110 F)

3. 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:

- 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.
- b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

(3) 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 semi-annual reporting period.”

(9 VAC 5-80-110 F)

#### **D. 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** of each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. 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. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. 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.
6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)  
U. S. Environmental Protection Agency, Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029.

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

#### **E. Permit Deviation Reporting**

The permittee shall notify the Air Compliance Manager, Northern Virginia 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 General Condition XIX.C.3. of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

#### **F. 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, notify the Air Compliance Manager, Northern Virginia Regional Office, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks 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 Air Compliance Manager, Northern Virginia Regional Office.

(9 VAC 5-20-180 C)

#### **G. 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)

## **H. 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 grounds 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)

## **I. 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)

## **J. Permit Action for Cause**

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.  
(9 VAC 5-80-110 G & L, 9 VAC 5-80-240 and 9 VAC 5-80-260)
2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
  - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is the potential of, a resulting emissions increase;
  - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
  - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emission cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
  - d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;

- e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
- f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
- g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and by 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

#### **K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9 VAC 5-80-110 G.5)

#### **L. Duty to Submit Information**

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

#### **M. 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. 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.  
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

## **N. 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:

1. 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;
2. 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;
3. 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 other similar operations;
4. 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
5. The prompt removal of spilled or traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

## **O. Startup, Shutdown, and Malfunction**

At all times, including periods of startup, shutdown, 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)

## **P. 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)

## **Q. 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:

1. 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.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. 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)

## **R. 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 or more years. Such a reopening shall be completed not 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.

1. 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.

2. 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.
3. 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)

#### **S. 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)

#### **T. Transfer of Permits**

1. 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.  
(9 VAC 5-80-160)
2. 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.  
(9 VAC 5-80-160)
3. 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)

#### **U. Malfunction as an Affirmative Defense**

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
2. 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:

- a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. 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.
  - d. 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.
3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
  4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

#### **V. 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 of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-260)

#### **W. 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)

#### **X. Stratospheric Ozone Protection**

If the permittee handles or emits one or more Class I or II substance 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)

#### **Y. 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 under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

#### **Z. 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)

#### **AA. 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:

1. All terms and conditions required under 9 VAC 5-80-110 except subsection N shall be included to determine compliance.
2. 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.
3. 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)

**BB. General Conformity Requirements**

The permittee shall comply with the General Conformity requirements of 40 CFR Part 93, Subpart B and 9 VAC Chapter 160.  
(40 CFR 93, Subpart B, 9 VAC Chapter 160)

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