



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY

L. Preston Bryant, Jr  
Secretary of Natural Resources

West Central Regional Office  
3019 Peters Creek Road, Roanoke, Virginia 24019  
Telephone (540) 562-6700, Fax (540) 562-6725  
www.deq.virginia.gov

David K. Paylor  
Director

Steven A. Dietrich  
Regional Director

January 17, 2008

Mr. Jan Stromberg  
V.P. & General Manager  
Volvo Trucks North America  
P.O. Box 1126  
Dublin VA 24084

Location: Pulaski Co.  
Registration No: 20765  
County-Plant ID No: 51-155-0041

Dear Mr. Stromberg:

Attached is a permit to continue to operate the Volvo Trucks North America, Inc. plant referenced above pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

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

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete and solicited written public comments by placing a newspaper advertisement in The Roanoke Times on November 18, 2007. The thirty-day comment period (provided for in 9 VAC 5-80-270) expired on December 19, 2007 with no comments received in this office from either the general public or EPA.

This approval to operate does not relieve Volvo Trucks North America, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

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

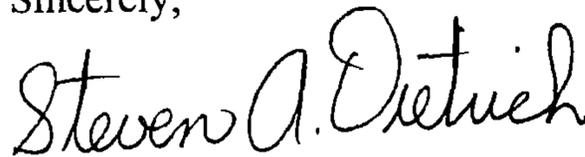
Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

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

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

If you have any questions concerning this permit, please call Tim Overstreet or Lillian Alexander at 540/562-6700.

Sincerely,



Steven A. Dietrich, P.E.  
Regional Director

SAD/LJA

Attachment: Final Title 5 Permit and Statement of Basis

cc: Monica Harvey (electronic file submission)  
Sharon McCauley, U.S. EPA, Region III (electronic file submission)  
Lillian Alexander (cover only)  
Frank Adams w/ attachments -> Tim Overstreet  
Michael J. Scanlan, Ph. D. (cover only)  
Stephen L. Pierett, Volvo Trucks North America, Inc. (cover only)



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## Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

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

Permittee Name:	Volvo Trucks North America, Inc.
Facility Name:	Volvo Trucks North America, Inc.
Facility Location:	4881 Cougar Trail Road, Dublin, Virginia
Registration Number:	20765
County-Plant number:	155-0041
Permit Number:	WCRO-20765

Renewal Effective Date: **January 17, 2008**

Expiration Date: **January 16, 2013**

A handwritten signature in cursive script that reads "Steven A. Dietrich".

Steven A. Dietrich, P.E.  
Regional Director

Signature Date: January 17, 2007

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Permit Document 42 pages plus appendix

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**Appendix A – CAM Monitoring Specifications**

## **I. Facility Information**

### **Permittee**

Volvo Trucks North America, Inc.  
7900 National Service Road  
Greensboro, NC 27402

### **Responsible Official**

Jan Stromberg  
Vice President and General Manager

### **Facility**

Volvo Trucks North America, Inc.  
P. O. Box 1126  
Dublin, VA 24084

### **Contact Person**

Stephen L. Pierett  
Environmental Manager  
540-674-4181

**Registration Number:** 20765

**AIRS Identification Number:** 51-155-0041

**Facility Description:** SIC Code 3711, NAICS Code 336120 – Volvo Trucks North America, Inc. is a producer of heavy duty trucks located in Pulaski County at 4881 Cougar Trail Road near Dublin, Virginia. Volvo presently produces heavy duty trucks with assembly and painting performed at the facility.

The facility is a Title V major source of Volatile Organic Compounds, nitrogen oxides, carbon monoxide, and Hazardous Air Pollutants. This source is located in an attainment area for all pollutants, and is a PSD major source for VOCs. The only NSPS requirement which presently applies to this facility is NSPS Dc for the Phosphate Heater. The facility is subject to MACT MMMM (Miscellaneous Metal Parts Coating) and MACT PPPP (Miscellaneous Plastic Parts Coating). Final compliance certification dates for these MACTs will not occur until after this permit renewal. References to the March 7, 2007 NSR permit should be interpreted as referring to that permit as amended August 21, 2007.

## II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment</b>							
1FBE-001	XXX.1	North Chasis Oven (Direct Fired)	3.0 MMBTU/hr				3/7/07
1FBE-002	NN.1	South Chasis Oven (Direct Fired)	3.0 MMBTU/hr				3/7/07
1FBE-003	WW.W.1	North Chasis Air Make-Up Unit	7.56 MMBTU/hr				3/7/07
1FBE-004	MM.1-MM.6	South Chasis Air Make-Up Heater	5.44 MMBTU/hr				3/7/07
2FBE-001/ 6FBE-001	BBB.1	Phosphate Solution/Washer Heater	25.2 MMBTU/hr				3/7/07
3FBE-001	EEE.1	E-Coat Oven w/ incinerator	5** MMBTU/hr	incinerator	3PC-01	VOC, Odor	3/7/07
5FBE-001	GGG.5	Primer Oven Zone 1 Burner	3.43 MMBTU/hr				3/7/07
5FBE-002	GGG.6	Primer Oven Zone 2 Burner	2.63 MMBTU/hr				3/7/07
5FBE-003	GGG.7	Primer Oven Zone 3 Burner	2.63 MMBTU/hr				3/7/07
8FBE-001	PPP.3	Multi-Tone Oven - Zone 1 Burner (Booth #1)	3.43 MMBTU/hr				3/7/07
8FBE-002	PPP.4	Multi-Tone Oven - Zone 2 Burner (Booth #1)	2.63 MMBTU/hr				3/7/07
8FBE-004	BFE.1	Basecoat Oven - Zone 1 Burner (Booth #2)	3.0 MMBTU/hr				3/7/07
8FBE-005	BFE.2	Basecoat Oven - Zone 2 Burner (Booth #2)	5.0 MMBTU/hr				3/7/07
8FBE-006	BFE.3	Basecoat Oven - Zone 3A Burner (Booth #2)	3.0 MMBTU/hr				3/7/07
8FBE-007	BFE.4	Basecoat Oven - Zone 3B Burner (Booth #2)	3.0 MMBTU/hr				3/7/07
8FBE-008	PPX.3	Basecoat Oven - RTO Incinerator Exhaust (Booth #2)	5** MMBTU/hr	RTO	8PC-05	VOC	3/7/07

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
9FBE-001	SSS.3	Clearcoat Oven Zone 1	3.43 MMBTU/hr				3/7/07
9FBE-002	SSS.4	Clearcoat Oven Zone 2	2.6 MMBTU/hr				3/7/07
9FBE-003	SSS.6	Clearcoat Oven Zone 3	4.2 MMBTU/hr				3/7/07
12FBE-001	SSS.1&2, MMM.1, GGG.1&2	Central Air Make-Up Heater	56.2 MMBTU/hr				3/7/07
13FBE-001	P.1 - P.6	Truck Repair Oven Exhaust (001)	2.39 MMBTU/hr				3/7/07
13FBE-002	P.5 & P.6	Supply Air Heater - 13PE-001	6.48 MMBTU/hr				3/7/07
13FBE-003	O.1&2	Air Make-Up Heater - 13PE-002	3.89 MMBTU/hr				3/7/07
13FBE-003A	O.3	Air Make-Up Heater - 13PE-002A	3.89 MMBTU/hr				3/7/07
13FBE-005	Q.1 - Q.4	Air Make-Up Heater - 13PE004	4.68 MMBTU/hr				3/7/07
13FBE-005A	Q.5	Air Make-Up Heater - 13PE004A	4.68 MMBTU/hr				3/7/07
13FBE-006	(indoor vent)	PC Building Heater	0.5 MMBTU/hr				3/7/07
14FBE-001	BBB.2	Burnham Industries Boiler - Humidity Control for 8PE-002	6.3 MMBTU/hr				3/7/07
15FBE-001	PPP.1&2	Make-Up Air Unit for Multi-Tone/ Basecoat Booth #1 (8PE-001)	23.5 MMBTU/hr				3/7/07
16FBE-001	PPX.3, (PPX.4)	Make-Up Air Unit for Multi-Tone/ Basecoat Booth #2 (8PE-002)	12.2 MMBTU/hr				3/7/07
<b>Heavy Truck Manufacturing Process</b>							
1PE-001	MM.1-7	South Chassis Paint Booth		Water Curtain	1PC-01	PM10, TSP	3/7/07
1PE-001A	NN.1	South Chassis Curing Oven					3/7/07
1PE-001B	OO.1	South Chassis Oven Cooler					3/7/07
1PE-002	WWW.1	North Chassis Paint Booth		Venturi Scrubber	1PC-02	PM10, TSP	3/7/07
1PE-002A	XXX.1	North Chassis Curing Oven					3/7/07
1PE-002B	YYY.1	North Chassis Oven Cooler					3/7/07
2PE-001	AAA.1&2,	Phosphate System					3/7/07
3PE-001	No stack	E-Coat Process					3/7/07
3PE-001A	CCC.1	E-Coat Tunnel					3/7/07
3PE-001B	EEE.1	E-Coat Oven					3/7/07

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
3PE-001C	DDD.1	E-Coat Oven Cooler					3/7/07
3PE-001D	FFF.2	E-Coat Scuff Station					3/7/07
4PE-001	(no stack)	Seam Sealer/Bracket Attach					3/7/07
4PE-001A	(no stack)	Cab Wipe/Prime Tack-Off					3/7/07
5PE-001	GGG.1	Primer Process – Robotic Zone		Venturi Scrubber <sup>1</sup>	5PC-01	PM10, TSP	3/7/07
5PE-001A	GGG.2	Primer Process – Manual Zone		Venturi Scrubber <sup>1</sup>	5PC-01	PM10, TSP	3/7/07
5PE-001B	GGG.8	Primer Oven Exhaust					3/7/07
5PE-001C	GGG.3	Primer Oven Cooler					3/7/07
6PE-001	JJJ.1	Prep Booth/Sand Booth					3/7/07
6PE-001A	WWE.1	Washing Process					3/7/07
6PE-001B	LLL.1	Dry-Off Area					
7PE-001	MMM.1	Specialty/Touch-Up Painting – Waterborne & High Solids		Venturi Scrubber <sup>1</sup>	7PC-01	PM10, TSP	3/7/07
8PE-001	PPP.1&2	Multi-Tone Booth # 1 Waterborne & High Solids Coating		Venturi Scrubber <sup>1</sup>	8PC-01	PM10, TSP	3/7/07
8PE-001A	PPP.5	Multi-Tone Oven # 1					3/7/07
8PE-001B	PPP.6	Multi-Tone Cooler # 1					3/7/07
8PE-002	PPX.3 (PPX.4 bypass)	Basecoat Booth # 2 Waterborne & High Solids Coating		Venturi Scrubber <sup>1</sup> , Incinerator	8PC-04, 8PC-05	PM10, TSP, VOC	3/7/07
8PE-002A	BOE.1	Basecoat Oven # 2					3/7/07
8PE-002B	QQQ.4	Basecoat Cooler # 2					3/7/07
8PE-002C	RRR.1	Basecoat Booth # 2 Demask Station					3/7/07
9PE-001	SSS.1&2	Clearcoat Spray Booth		Venturi Scrubber <sup>1</sup>	9PC-01	PM10, TSP	3/7/07
9PE-001A	SSS.5	Clearcoat Curing Oven					3/7/07
9PE-001B	TTT.3	Clearcoat Cooler # 1					3/7/07
9PE-001C	TTT.5	Clearcoat Cooler # 2					3/7/07
10PE-001, 10PE-002	UUU.1	Spot Repair (BC/CC)		Dry filters	10PC-01, 10PC-02	PM10, TSP	3/7/07
11PE-001	VVV.1	Inspection & Repair Booth		Dry Filter	11PC-01	PM10, TSP	3/7/07
13PE-001	P.1-4	PC Booth # 1: Cab Touch-Up		Water Curtain	13PC-01	PM10, TSP	3/7/07

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
13PE-001A	P.5 & P.6	PC Booth #1 Oven					3/7/07
13PE-002	O.1&2	PC Booth # 2: Cab Touch-Up		Dry Filter	13PC-02	PM10, TSP	3/7/07
13PE-002A	O.3	PC Booth #2 Oven					3/7/07
13PE-004	Q.1-4	PC Booth # 4: Truck Touch-Up		Dry Filter	13PC-04	PM10, TSP	3/7/07
13PE-004A	Q.5	PC Booth #4 Oven					3/7/07

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

\*\* Based on maximum heat input burners

'Based on process considerations, some booths may operate two Venturi scrubbers in parallel

### III. Fuel Burning Equipment Requirements

#### A. Limitations

1. **Fuel** - The approved fuels for the all stationary fuel burning equipment, including central air system, ovens, incinerators, and make-up heaters are natural gas and propane. A change in the fuel may require a permit to modify and operate.  
(9 VAC 5-80-110, 9 VAC 5-80-1180 and Condition 15 of the 3/7/07 Permit)
2. **Fuel Throughput** - The facility as a whole shall consume no more than  $1,927 \times 10^6$  standard cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12 month period.  
(9 VAC 5-80-110, 9 VAC 5-80-1180 and Condition 16 of the 3/7/07 Permit)
3. **Emission Limits** - Emissions from the combined operation of all stationary fuel burning equipment, including the central air system and all incinerators, ovens, and make-up heaters shall not exceed the limits specified below:

PM-10	7.0 tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	91.6 tons/yr
Carbon Monoxide	77.0 tons/yr
Volatile Organic Compounds	5.0 tons/yr

Annual emissions calculated monthly as the sum of the previous consecutive twelve month period.

These limits are included chiefly for emission inventory purposes and based on USEPA emission factors and fuel throughputs (when fuel burning equipment is operating properly, compliance with the 1,927 million scf/yr maximum natural gas usage limit shall be deemed compliance with these limits).

(9 VAC 5-80-110, 9VAC 5-50-260, and Condition 23 of 2/26/03 Permit)

4. **Visible Emission Limit** - Visible Emissions from all stationary fuel burning equipment, including the central air system and all incinerators, ovens, and make-up heaters shall not exceed five (5) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed ten (10) percent opacity.  
(9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 25 of the 3/7/07 Permit)

5. **Requirements by Reference** - Permittee is subject to all applicable provisions of 40 CFR 60.40c to 60.48c [NSPS Dc] for the Phosphate System washing heater, 6FBE-001. At the time of issuance of this permit, applicable requirements concern only proper notifications at the time of the start up of the phosphate system washing heater.  
(9 VAC 5-80-110, 9 VAC 5-50-400, 9 VAC 5-50-410 and Condition 17 of the 3/7/07 Permit)
6. **Operation and Maintenance** – Boiler (6FBE-001, 14FBE-001), HVAC System (12FBE-001,002, & 003), and Air Make-Up Unit (13FBE-001 through 006, 15FBE-001, & 16FBE-001) 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, 9 VAC 5-50-20, and 9 VAC 5-80-1180)
7. **Operation & Maintenance Procedures** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the boilers (6FBE-001 & 14FBE-001):
  - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the boilers (6FBE-001 & 14FBE-001).
  - b. Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the boilers (6FBE-001 & 14FBE-001) and maintain records of inspection results.
  - c. Have available written operating procedures for the boilers (6FBE-001 & 14FBE-001). These procedures shall be based on the manufacturer's recommendations, at a minimum, if such recommendations exist.
  - d. Train operators in the proper operation of the boilers (6FBE-001 & 14FBE-001) and familiarize the operators with the written operating procedures.Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.  
(9 VAC 5-80-110, 9 VAC 5-40-20 E, 9 VAC 5-50-20 E and Condition 34 of the 3/7/07 Permit)

## **B. Monitoring**

1. **Operation and Maintenance** – The Phosphate Heater and Burnham Boiler (6FBE-001, 14FBE-001) shall be inspected at least monthly to insure proper operation and maintenance.  
(9 VAC 5-80-110, 9 VAC 5-40-20 E, and 9 VAC 5-50-20 E)

### **C. Recordkeeping**

**On Site Records** - The permittee shall develop a database record keeping system, or equivalent methodology acceptable to the Department, to 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, West Central Regional Office. These records shall include, but are not limited to:

1. The monthly and annual consumption of natural gas and propane for the total plant. The annual consumption shall be calculated monthly as the sum of each consecutive twelve (12) month period.
2. The monthly and annual consumption of natural gas and propane for the Phosphate System washing heater (2FBE-001). The annual consumption shall be calculated monthly as the sum of each consecutive twelve (12) month period.
3. Monthly and annual emissions from combustion of natural gas and propane of nitrogen oxides, carbon monoxide, volatile organic compounds and PM-10, for the total plant. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.

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 5-50-50, 9 VAC 5-80-110, and Condition 29 of the 3/7/07 Permit)

### **D. Testing**

1. **Testing/Monitoring Ports** - 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 5-50-30, 9 VAC 5-80-110, and Condition 12 of the 3/7/07 Permit)

### **E. Reporting**

The reporting requirements for this section are satisfied by the recordkeeping requirements in this section, the recordkeeping and reporting requirements of the Facility Wide Section, and the General Conditions section.

#### IV. Process Equipment Requirements

##### A. Limitations

1. **Emission Controls and Control Requirements** - Particulate emissions from paint spray booths shall be controlled as tabulated below, or DEQ approved equivalent, to achieve the designated concentrations:

<u>Paint/Coating Process</u>	<u>Control Equipment</u>	<u>Maximum Emission</u>
Chassis 1PE-001	Water Wash Spray Booth with dry filters	0.005 gr/scf
Chassis 1PE-002	Venturi Wet Scrubber* with dry filters	0.003 gr/scf
Cab Prime 5PE-001	Venturi Wet Scrubber*	0.003 gr/scf
Special Projects 7PE-001	Venturi Wet Scrubber*	0.003 gr/scf
Cab Multi-Tone 8PE-001	Venturi Wet Scrubber*	0.003 gr/scf
Cab Basecoat 8PE-002	Venturi Wet Scrubber*	0.003 gr/scf
Cab Clearcoat 9PE-001	Venturi Wet Scrubber*	0.003 gr/scf
Spot Repair (BC/CC) 10PE-001	Dry Filter	0.005 gr/scf
Spot Repair (BC/CC) 10PE-002	Dry Filter	0.005 gr/scf
Inspection & Repair 11PE-001	Dry Filter	0.005 gr/scf
P-C Cab Repair/Touch-Up13PE-001	Water Wash Spray Booth	0.005 gr/scf
P-C Cab Repair/Touch-Up13PE-002	Cartridge Filter	0.005 gr/scf
P-C Cab Repair/Touch-Up13PE-004	Dry Filter or equivalent	0.005 gr/scf

The over-spray particulate controls for the paint spray booths shall be provided with adequate access for inspection.

\* Some booths operate parallel scrubbers with the option of shutting down the manual zone if no manual spraying is in operation. When two scrubbers are in use, the monitoring requirements should be applied to both scrubbers but annual mass emission limits should be applied to the booth discharge through both scrubbers.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 2 of the 3/7/07 Permit)

2. **Emission Controls** - Volatile organic compound (VOC) emissions from the following painting/coating processes shall be controlled by the use of waterborne, high-solids coatings, zero-VOC solvent borne coatings, or DEQ approved equivalent:

- Chassis 1PE-001
- Clearcoat 9PE-001
- Chasis 1PE-002
- Inspection & Repair 10PE-001&002

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 3 of the 3/7/07 Permit)

3. **Emission Controls** - Volatile organic compound (VOC) emissions from the cab prime process 5PE-001 shall be controlled by the use of waterborne coatings or DEQ approved equivalent.  
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 4 of the 3/7/07 Permit)
4. **Emission Controls** - Volatile organic compound (VOC) emissions from the electrodeposition (E-coat immersion) process 3PE-001 shall be controlled by the use of electrodeposited waterborne coatings.  
(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 5 of the 3/7/07 Permit)
5. **Emission Controls and Control Efficiency** - Volatile organic compound (VOC) emissions from the Cab Basecoat Spray Booth 8PE-002 shall be controlled by air recirculation to concentrate VOCs inside the booth followed by a thermal VOC fume incinerator with a minimum incinerator VOC destruction efficiency of 95%. The air recirculation system and incinerator shall be provided with adequate access for inspection. During operation of this painting process, the minimum incinerator chamber temperature shall be maintained at 1400°F with a minimum 0.5 second retention time, or maintained at a minimum operating temperature determined by emissions testing necessary to achieve an overall 95 percent destruction of volatile organic compounds entering the incinerator.  
  
[Note: for purposes of estimating VOC emissions from Basecoat, use of control efficiencies derived from the most recent performance testing demonstrating compliance are an acceptable method, rather than using the minimum efficiencies cited above.]  
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 6 of the 3/7/07 Permit)
6. **Emission Controls** - Volatile organic compound emissions from painting/coating operations in spray booths not controlled by VOC incineration (spray booths other than Basecoat 8PE-002), are limited to 3.5 lbs/gal of coating as applied as a monthly facility-wide average and as a consecutive twelve (12) month average for the overall painting/coating facility.  
(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-180, 9 VAC 5-50-260, and Condition 7 of the 3/7/07 Permit)
7. **Emission Controls** – Organic Hazardous Air Pollutant emissions from painting/coating operations are limited to the more stringent of:
  - a. 2.6 lbs/gal of coating solids as applied, or
  - b. 0.16 lbs VHAP/lb of coating solids as applied,  
as an annual facility-wide average, calculated monthly as a rolling twelve (12) month average, for the overall painting/coating facility.\*

\*The facility has chosen to demonstrate compliance with MACTs MMMM and PPPP by demonstrating emissions levels which meet the MACT requirements on the basis of monthly and annualized averages. This choice does not preclude the facility from electing to demonstrate compliance by another methodology in the future, provided the appropriate amendments are made to the required permits.

(9 VAC 5-80-110, 9 VAC 5-60-90, 9 VAC 5-60-100, and Condition 8 of the 3/7/07 Permit)

8. **Emission Controls** - Reasonable precautions shall be taken to minimize volatile organic compound (VOC) emissions from cleaning and purging operations. Reasonable precautions may include the following:

- a. The use of capture or control devices or both.
- b. The use of detergents, high pressure water, or other non-volatile cleaning methods.
- c. The minimization of the quantity of the volatile organic compounds used to clean lines.
- d. The adjustment of production schedules to minimize coatings changes thereby reducing the need for frequent cleaning or purging of the system.

(9 VAC 5-80-110, 9 VAC 5-40-20, and Condition 9 of the 3/7/07 Permit)

9. **Alternative Emission Controls** - The 8PE-002 incinerator may be bypassed for maintenance of the control equipment without cessation of operations in the Basecoat 8PE-002 Spray Booth provided that:

- a. The exact dates and times when emissions commence and cease being routed through the bypass are documented.
- b. The VOC emissions during the bypass period are tabulated and recorded as uncontrolled emissions.
- c. The differential air pressure reading for the venturi scrubber particulate control device is recorded at least once per hour while paint operations are ongoing.
- d. The emissions from the bypassed operation do not violate any other conditions of this permit.
- e. The Air Compliance Manager, West Central Regional Office, is notified within two weeks of the bypass that this action has occurred, the duration or anticipated duration of the action, and the reason for the action.

(9 VAC 5-80-110 and Condition 10 of the 3/7/07 Permit)

10. **Requirements by Reference** - Permittee is subject to all applicable provisions of 40 CFR 63.3880 et seq. [MACT Subpart MMMM] for the following process areas: 1PE-001, 1PE-002, 3PE-001, 5PE-001, 7PE-001, 8PE-001, 8PE-002, 9PE-001, 10PE-001, 10PE-002, 13PE-001, 13PE-002, and 13PE-004\*. [\* see Condition 11 below]  
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 18 the 3/7/07 Permit)

11. **Requirements by Reference** - Permittee is subject to all applicable provisions of 40 CFR 63.4480 et seq. [MACT Subpart PPPP] for the following process areas: 7PE-001, 8PE-001, 8PE-002, 9PE-001, 10PE-001, 10PE-002, 13PE-001, 13PE-002, and 13PE-004\*.  
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 19 the 3/7/07 Permit)

\* For process areas that may be subject to both MACT MMMM and MACT PPPP, the regulations allow the facility to designate which MACT is the predominant operation of the process area and comply only with one MACT, either MMMM or PPPP. For process areas listed in both Conditions 9 and 10, above, compliance with either MMMM or PPPP shall be considered compliance with both conditions if the appropriate predominant activity is demonstrated. Volvo proposes to demonstrate compliance with MACT PPPP for any plastic or metal as a demonstration of compliance for both MACTs based on MACT PPPP being more stringent than MACT MMMM.

12. **Throughput** - The volatile organic compound consumption for painting/coating shall not exceed 1,400 tons per year, calculated monthly as the sum of the previous consecutive twelve month period.  
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 13 the 3/7/07 Permit)

13. **Throughput** - The volatile organic compound consumption for painting/coating shall not exceed 233.3 tons per month.  
(9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 14 of the 3/7/07 Permit)

14. **Emission Limits** - Emissions from the operation of the 8PE-001 Cab Multi-Tone Spray Booth shall not exceed the limits specified below:

Volatile Organic Compounds 43.7 tons/yr

Annual emissions calculated monthly as the sum of the previous consecutive twelve month period.

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-80-1615, and Condition 20 of the 3/7/07 Permit)

15. **Emission Limits** - Emissions from the operation of truck painting/coating shall not exceed the limits specified below:

Volatile Organic Compounds 532.5 tons/yr

Annual emissions calculated monthly as the sum of the previous consecutive twelve month period.

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-80-1615, and Condition 21 of the 3/7/07 Permit)

16. **Emission Limits** – Particulate emissions from the operation of truck painting/coating shall not exceed the limits specified below:

Chassis Spray Combined 1PE-001&002	8.5 tons/yr
Cab Prime Spray 5PE-001	4.4 tons/yr
Specialty/Touch-Up Spray 7PE-001	1.0 tons/yr
Cab Multi-Tone Spray 8PE-001	13.3 tons/yr
Cab Basecoat Spray 8PE-002	3.1 tons/yr
Cab Clearcoat Spray 9PE-001	7.3 tons/yr
Spot Repair Booths Combined 10PE-001 & 10PE-002	7.7 tons/yr
Inspection & Repair 11PE-001	3.0 tons/yr
P-C Building Spray Combined 13PE-001, 002, & 004	8.8 tons/yr

Annual emissions calculated monthly as the sum of the previous consecutive twelve month period.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 23 of the 3/7/07 Permit)

17. **Visible Emission Limit** - Visible emissions from the facility's spray booths shall not exceed five (5) percent opacity, except for one six minute period in any one hour of not more than ten (10) percent, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). The opacity standard shall apply at all times, except during periods of malfunction, start up, and shut down.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 25 of the 3/7/07 Permit)

## **B. Monitoring**

1. **Monitoring Devices** - The VOC fume incinerator controlling the Basecoat Booth (8PE-002) shall be equipped with automatic thermostats to maintain the required chamber temperature and with a continuous temperature sensor at or near the chamber exit to monitor, indicate, and record the chamber temperature.  
(9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 6 of the 3/7/07 Permit)
2. **Monitoring Devices** - The Chassis 1PE-002, Cab Prime 5PE-001, Special Projects 7PE-001, Cab Multi-Tone 8PE-001, Cab Basecoat 8PE-002, and Cab Clearcoat 9PE-001 spray booths shall be equipped with differential pressure gauges to continuously measure the differential pressure across the Venturi wet scrubbers. The Chassis 1PE-001 spray booth shall be equipped with a differential pressure gauge to continuously measure the differential pressure across the water curtain. The 8PE-002 spray booth shall be equipped with differential pressure gauges to continuously measure the differential pressure between the spray booth and the building air outside the booth and to measure the differential pressure across the recirculation air filters. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the

manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the spray booth is operating.

(9 VAC 5-80-1180, 9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 11 of the 3/7/07 Permit)

3. **Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the CAM subject control devices controlling the CAM-affected units listed in the table below, as detailed in the unit-by-unit listings in Appendix A:

Control Device (Capture Monitor)	Pollutant	Emission Unit
Regenerative Thermal Oxidizer	VOC	Basecoat Booth 8PE-002
(Differential Pressure Monitor)	VOC	Basecoat Booth 8PE-002
Venturi Scrubber	PM	Basecoat Booth 8PE-002
Water Curtain	PM	South Chasis Booth 1PE-001
Venturi Scrubber	PM	North Chasis Booth 1PE-002
Venturi Scrubber	PM	Primer Robotic Zone 5PE-001
Venturi Scrubber	PM	Multi-Tone Booth 8PE-001
Venturi Scrubber	PM	Clearcoat Booth 9PE-001

(9 VAC 5-80-110 and 40 CFR 64.6 (c))

4. **Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. Details of the monitoring shall be specified in a Compliance Assurance Monitoring plan developed by the permittee and approved by VDEQ.

(9 VAC 5-80-110 and 40 CFR 64.6 (c))

5. **Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(9 VAC 5-80-110 and 40 CFR 64.7 (b))

6. **Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the CAM-affected units are operating during production periods. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.

(9 VAC 5-80-110 and 40 CFR 64.7 (c))

7. **Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of a CAM-affected unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distributed control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.  
(9 VAC 5-80-110 and 40 CFR 64.7 (d)(1))
8. **Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control devices, associated capture system, and the process.  
(9 VAC 5-80-110 and 40 CFR 64.7(d)(2))
9. **Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Air Compliance Manager, West Central Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.  
(9 VAC 5-80-110 and 40 CFR 64.7(e))
10. **Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for any CAM-affected unit for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) for that unit in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

- a. Improved preventative maintenance practices;
- b. Process operation changes;
- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring.

(9 VAC 5-80-110 and 40 CFR 64.8(a) and (b))

### **C. Recordkeeping**

**On Site Records** - The permittee shall develop a data base record keeping system, or equivalent methodology acceptable to the Department, to maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. VOC emissions should not include the amount of VOC that is not emitted due to VOC incineration emissions controls, VOC returned to vendor, VOC removed for off-site disposal, etc. Separate records shall be kept for each operational area, such as a spray booth and associated ovens, cooling areas, flash-off areas, etc. (Note: The PC area may be treated as a single operational area where emission records for booths 13PE-001, 002, & 004 and emissions from operations outside the booths may be combined as a single data record.) The content and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:

1. A record of the VOC content of each material used in the truck assembly and coating operation based on a certified product data sheet from the material vendor or testing of the material using an EPA approved testing methodology such as 40 CFR part 60, Appendix A EPA Reference Method 24 or equivalent.
2. Monthly and annual consumption of VOC for each operational area, including separate tabulations for 8PE-001 and 8PE-002. Annual consumption and throughput shall be calculated monthly as the sum of the previous consecutive 12 month period.
3. Monthly and annual consumption of VOC for overall truck painting/coating. Annual consumption and throughput shall be calculated monthly as the sum of the previous consecutive 12 month period.
4. Monthly and annual consumption of gallons of paints/coatings for each operational area, including separate tabulations for 8PE-001 and 8PE-002, and for overall truck painting/coating. The waterborne/ exempt solvent paints/coatings shall be reported on both bases of with water and exempt solvent and less water and exempt solvents. Annual consumption shall be calculated monthly as the sum of the previous consecutive 12 month period.
5. Monthly and annual throughput of skids for overall painting/coating. Annual throughput shall be calculated monthly as the sum of the previous consecutive 12 month period.

6. Monthly and annual emissions of VOC from overall truck painting/coating. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.
7. Average monthly and annual VOC emissions in pounds/gallon as an average from overall truck painting/coating, except for spray booths controlled by VOC fume incineration, accounting for waterborne/exempt solvent paints/coatings on the bases of both "with water and exempt solvents" and "less water and exempt solvents." Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.
8. Average monthly and annual organic HAP emissions in pounds/gallon of solids or pounds VHAP/pound coating solids as an average from overall truck painting/coating (except that spray booth 8PE-002, controlled by VOC fume incineration may be otherwise documented to demonstrate MACT compliance). Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.
9. Records of the differential pressure readings for the Venturi scrubbers controlling particulate emissions from the following spray booths: Chassis 1PE-002, Cab Prime 5PE-001, Special Projects 7PE-001, Cab Multi-Tone 8PE-001, Cab Basecoat 8PE-002, and Cab Clearcoat 9PE-001; for the water curtain controlling particulate emissions from the Chassis 1PE-001 spray booth; for the recirculation filters in the 8PE-002 spray booth; and differential pressure readings between the factory floor and the Cab Basecoat 8PE-002 spray booth. Readings shall be recorded at least once per shift during process operations.
10. Records of the temperature of the regenerative thermal oxidizer controlling VOC emissions from Cab Basecoat spray booth 8PE-002. One-hour averages of the continuously monitored temperature shall be recorded at least once per hour during process operations.
11. **Compliance Assurance Monitoring (CAM) Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

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 5-50-50, 9 VAC 5-80-110, 40 CFR 64.9(b), and/or Condition 29 of the 3/7/07 Permit)

#### D. Testing

1. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations or in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B).  
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 12 of the 3/7/07 Permit)
  
2. **Stack Tests** – At least once during the term of this permit and additionally upon request by the DEQ, the permittee shall conduct performance tests for the VOC and HAP destruction efficiency of the incinerator controlling VOC and HAP emissions from the Basecoat 8PE-002 spray booth to demonstrate compliance with the emission limits and control efficiency requirements contained in this permit. Requested tests shall be performed, and demonstrate compliance, within 60 days after notice by the Air Compliance Manager, West Central Regional Office, that the Department has reason to believe that the facility or a portion of the facility is not in compliance with the emission limits of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 of State Regulations, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests shall be arranged with the Air Compliance Manager, West Central Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Air Compliance Manager, West Central Regional Office within 45 days after test completion and shall conform to the test report format enclosed with The New Source Review permit.  
(9 VAC 5-50-30 G, 9 VAC 5-80-110, and Condition 26 of the 3/7/07 Permit)
  
3. **Stack Tests** - At least once during the term of this permit and additionally upon request by the DEQ (on a booth specific basis), the permittee shall conduct performance tests for the particulate emissions from spraying or coating in each spray booth to demonstrate compliance with the emission limits and control requirements contained in this permit. Requested tests shall be performed, and demonstrate compliance, within 60 days after notice by the Air Compliance Manager, West Central Regional Office, that the Department has reason to believe that the facility or a portion of the facility is not in compliance with the emission limits of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 of State Regulations, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests shall be arranged with the Air Compliance Manager, West Central Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Air Compliance Manager, West Central Regional Office within 45 days after test completion and shall conform to the test report format enclosed with the New Source Review permit.  
(9 VAC 5-50-30 G, 9 VAC 5-80-110, and Condition 27 of the 3/7/07 Permit)

4. **Visible Emissions Evaluation** - Upon request by the DEQ, the permittee shall conduct visible emission evaluations in accordance with 40 CFR, Part 60, Appendix A, Method 9 on any spray operation stack(s) to demonstrate compliance with the visible emission limits contained in this permit. Each test shall consist of three (3) sets of twenty-four (24) consecutive observations (at fifteen (15) second intervals) to yield a six (6) minute average. The details of the tests are to be arranged with Air Compliance Manager, West Central Regional Office. The tests shall be performed, and demonstrate compliance, within 60 days after notice by the Air Compliance Manager, West Central Regional Office, that the Department has reason to believe that the facility or a portion of the facility is not in compliance with the emission limits of this permit. Two (2) copies of the test results shall be submitted to the Air Compliance Manager, West Central Regional Office within 45 days after test completion and shall conform to the test report format enclosed with the New Source Review permit.

(9 VAC 5-50-30 G, 9 VAC 5-80-110, and Condition 28 of the 3/7/07 Permit)

#### **E. Reporting**

1. **Compliance Assurance Monitoring (CAM) Reporting** - the permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition C.3 of this permit to the Air Compliance Manager, West Central Regional Office. Such reports shall include at a minimum:
  - a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9 VAC 5-80-110 and 40 CFR 64.9(a))

Other reporting requirements for this section are satisfied by the recordkeeping requirements in this section, the recordkeeping and reporting requirements of the Facility Wide Section, and the General Conditions section.

## V. Facility Wide Conditions

### A. Limitations

1. **Plantwide Emission Limits** - Total emissions from the facility, including all truck painting/ coating and all miscellaneous sources, shall not exceed the limits specified below:

Volatile Organic Compounds 532.5 tons/yr

Annual emissions calculated monthly as the sum of the previous consecutive twelve month period.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 24 of the 3/7/07 Permit)

2. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.  
(9 VAC 5-80-110, 9 VAC 5-20-180 I, and Condition 36 of the 3/7/07 Permit)

3. **Maintenance/Operating Procedures** - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

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

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

(9 VAC 5-80-110, 9 VAC 5-50-20 E, 9 VAC 5-80-110, and Condition 34 of the 3/7/07 Permit)

## **B. Monitoring**

1. Visible Emissions - Each emissions unit with a visible emissions requirement in this permit shall be observed visually at least once each calendar week in which the emissions unit operates. The visual observations shall be conducted using 40 CFR 60 Appendix A Method 22 techniques (condensed water vapor/steam is not a visible emission) for at least a brief time to only identify the presence of visible emissions. Each emissions unit in the Method 22 technique observation having visible emissions shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is taken that achieves no visible emissions. 40 CFR 60 Appendix A Method 9 requires the observer to have a Method 9 certification that is current at the time of the VEE. If any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE shall be conducted on these emissions for at least three (3) six-minute periods (at least 18 minutes). All visible emission observations, VEE results, and corrective actions taken shall be recorded.

(9 VAC 5-80-110)

## **C. Recordkeeping**

**On Site Records** - The permittee shall develop a data base record keeping system, or equivalent methodology acceptable to the Department, to maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. VOC emissions should not include the amount of VOC that is not emitted due to VOC incineration emissions controls, VOC returned to vendor, VOC removed for off-site disposal, etc. The content of and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include, but are not limited to:

1. A record of the VOC content of each material used in the truck assembly and coating operation based on a certified product data sheet from the material vendor or testing of the material using an EPA approved testing methodology such as 40 CFR part 60, Appendix A EPA Reference Method 24 or equivalent.
2. Monthly and annual consumption of VOC from all miscellaneous VOC sources other than truck painting/coating for the total plant. Annual consumption shall be calculated monthly as the sum of the previous consecutive 12 month period.
3. Monthly and annual consumption of all VOC combined for the total plant. Annual consumption shall be calculated monthly as the sum of the previous consecutive 12 month period.
4. Monthly and annual VOC emissions from all miscellaneous VOC sources for the total plant. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.

5. Monthly and annual emissions of VOC from the total plant (painting/coating and all other miscellaneous sources). Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.
6. Monthly and annual emissions from the total plant of all Hazardous Air Pollutants emitted from production related activities including, but not limited to, total glycol ethers (excluding non-HAP glycol ethers), methyl isobutyl ketone, xylene, toluene, methanol, ethylbenzene, hexamethylene 1,6 diisocyanate, formaldehyde, lead from lead chromate, chromium from lead chromate, and antimony. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.
7. Results of all stack tests, visible emission evaluations and performance evaluations, used to demonstrate compliance with this permit.
8. Scheduled and unscheduled maintenance, and operator training.
9. Weekly records of required opacity evaluations including all Method 22 evaluations, all Method 9 evaluations, all malfunction adjustments associated with opacity observations, and a record of any spray booths which did not operate during the weekly evaluation period.
10. The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.

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 5-50-50, 9 VAC 5-20-180, 9 VAC 5-80-110 and/or Conditions 29 and 35 of the 3/7/07 Permit)

#### **D. Testing**

1. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations or in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B).  
(9 VAC 5-50-30, 9 VAC 5-80-110, and Condition 12 of the 3/7/07 Permit)

## E. Reporting

1. **Notification for Control Equipment Maintenance** - The permittee shall furnish notification to the Air Compliance Manager, West Central Regional Office of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:
  - a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
  - b. The expected length of time that the air pollution control equipment will be out of service;
  - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
  - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-110, 9 VAC 5-20-180 B, and Condition 31 of the 3/7/07 Permit)

2. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Air Compliance Manager, West Central Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or electronic mail. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Air Compliance Manager, West Central Regional Office.

(9 VAC 5-80-110, 9 VAC 5-20-180 C, and Condition 32 of the 3/7/07 Permit)

3. **Reports for Facility or Control Equipment Malfunction** - Within 30 days of a failure or malfunction that is expected to exist for 30 days or more, and semi-monthly thereafter until the failure or malfunction is corrected, the permittee shall furnish written reports to the Air Compliance Manager, West Central Regional Office containing the following:
  - a. Identification of the specific facility that is affected as well as its location and registration number;

- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of air pollutant emissions likely to occur during the breakdown period;
- d. Measures taken to reduce emissions to the lowest amount practicable during the breakdown period;
- e. A statement as to why the owner was unable to obtain repair parts or perform repairs that would allow compliance with the provisions of these regulations within 30 days of the malfunction or failure;
- f. An estimate, with reasons given, of the duration of the shortage of repairs or repair parts which would allow compliance with the provisions of these regulations; and
- g. Any other pertinent information as may be requested by the board.

(9 VAC 5-80-110, 9 VAC 5-20-180 D, and Condition 30 of the 3/7/07 Permit)

Other reporting requirements for this section are satisfied by the recordkeeping requirements in this section and the General Conditions section.

## VI. 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)
FBAD-1	Cleaver Brooks boiler, Model CB-60HP, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	2,500,000 BTU/hr
FBAD-2	Lochinvar water heater, CNA 726-080-0F9, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	725,000 BTU/hr
FBBIW2A, FBBIW2B	Two PVI Water Heaters, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	399,000 BTU/hr each
FBBIW1A-FBBIW1H	Eight HV Space Heating Units, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3,000,000 BTU/hr each
WELD	Portable welders for equipment maintenance	9 VAC 5-80-720A	PM, CO, SO <sub>2</sub> , NO <sub>x</sub>	NA
PW1-PW5	Five cold cleaner parts washers	9 VAC 5-80-720B	VOC	VOC < 5 tpy
PMSB-1	One small paint spray booth for test panels	9 VAC 5-80-720B	VOC	VOC < 5 tpy
PMBT1-8	Eight 175 gallon bulk tanks for paint/solvent	9 VAC 5-80-720B	VOC	VOC < 5 tpy
FBAB1A - FBAB1I	Nine Door Heaters	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	475,200 BTU/hr to 1,900,800 BTU/hr
FBAB2A-FBAB2CC	Twenty-Nine HV Space Heating Units, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	302,400 BTU/hr to 3,460,000 BTU/hr
FBAB3A, FBAB3B	Two Air Houses for space heating, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	6,804,000 BTU/hr each
FBAB4	Assembly Bldg Boiler	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3,600,000 BTU/hr
FBAB5A-FBAB5F	Six MAU Space Heating Units, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3,024,000 BTU/hr each
FBAB6A, FBAB6B	Two MAU Space Heating Units, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	1,814,400 BTU/hr each
FBSB1A, FBSB1B	Two HV Space Heating units, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3,456,000 BTU/hr total
FBWTB	Dyno Water Test Unit	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	388,800 BTU/hr
FBPC1A - FBPC1D	Four HV Space Heating units, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	8,294,400 BTU/hr total
FBPC2A-FBPC2F	Six IR Door Heaters, unvented	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	75,000 BTU/hr each
FBPC3A, FBPC3B	Two HV Unit MUA 021, 022	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	2.203 MMBTU/hr each

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
FBPC4	Old Chassis Booth MUA 023	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	5.5 MMBTU/hr
FBPC5A-FBPC5L	Eleven Dravo Door Heaters	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	475,200 BTU/hr – 1,900,800 BTU/hr
FBPC6	One ENG-A HV unit	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	2.112 MMBTU/hr
FBDF1A – FBDF1O	Fifteen IR Door Heaters (vented)	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	75,000 BTU/hr each
FBDF2A, FBDF2B	Two Building MUA	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	4.0 MMBTU/hr each
WWTP003	Batch waste water treatment plants	9 VAC 5-80-720B	VOC	VOC < 5 tpy
WWTF1A-WWTF1C	Three Building Gas Unit Heaters	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	150,000 BTU/hr each
WWTF2	One Office HVAC	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	45,000 BTU/hr
BIWW1A-BIWW1M	Thirteen IR Door Heaters (vented)	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	75,000 BTU/hr each
BIWW2A-BIWW2I	Nine Building MUA	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	2.25 MMBTU/hr each
ASW1A – ASW1CC	Twenty-Nine IR Door Heaters (vented)	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	75,000 BTU/hr each
ASW2	One HVAC Unit	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	250,000 BTU/hr
ASW3A – ASW3L	Twelve Building MUA	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	2.25 MMBTU/hr each
FBNBW1	HV Unit, n.g	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	625,000 BTU/hr
FBNBW2	HV Unit, n.g	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	842,000 BTU/hr
FBNBW3	Trane HV Unit, n.g	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	500,000 BTU/hr
FBNWB4A FBNWB4C	Three Trane HV Units, n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	250,000 BTU/hr each
FBNWB5A FBNWB5H	Eight dock heaters n.g.	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	91,200 BTU/hr each
FBNWB6A FBNWB6H	Eight MUA 002-009	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3.127 MMBTU/hr each
FBNWB7A FBNWB7H	Eight HV Units 013-020	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	5.5 MMBTU/hr each
FBNWB8A FBNWB8C	Three HV Units 010-012	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	4.59 MMBTU/hr each
FBNWB9	One HV Unit 024	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3.4 MMBTU/hr
FBNWB10 A&B	Two 40 ton HVAC Units	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	1.062 MMBTU/hr each
FBNWB11	One 60 ton HV Unit	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	885,000 BTU/hr
FBNWB12 A-D	Four PAC units	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	123,600 BTU/hr to 545,900 BTU/hr
FBNWB13 A&B	Two water heaters	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	412,000 BTU/hr each
FBNWB14 A, B & C	Three PAC Units	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	1.318 MMBTU/hr - 1.54 MMBTU/hr

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
FBNWB15 A, B & C	Three PAC Units	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	64,890 BTU/hr to 735,420 BTU/hr
FBNWB16 A-O	Fifteen Door Heaters	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	77,250 BTU/hr each
FBNWB17 A & B	Two Paint Dock Door Heaters	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	226,000 BTU/hr each
FBNWB18	One Door Heater	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	875,000 BTU/hr
FBNWB19 A & B	Two Direct Fired Burners	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	8.24 MMBTU/hr each
FBNWB20	One MUA	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	659,200 BTU/hr
FORKLIFT	Forty-Two Gas Powered Forklifts	9 VAC 5-80-720A	PM, CO, VOC, NO <sub>x</sub>	NA
PDSL001	Diesel Fuel Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
EGEN	Emergency Generator, diesel	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	150 KW (201 bhp)
GEN0001	Diesel Fuel Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-101	SCH 50 Wt Oil Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-102	Trans. Fluid Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-103	Anti-Freeze Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-104	15W40 Oil Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-105	75W90 storage tank, aluminum, heat-traced	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-106	Freon 134A Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-107	Methanol Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-108	Diesel Fuel Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-109	Anti-Freeze Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-110	80W90 Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-111	80W90 Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-112	Anti-Freeze Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-201	Purge Solvent Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-202	Paint Waste Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-301	Gasoline storage tank, 550 gal near PC bldg	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-401 – AST-408	Eight 30,000 gallon propane storage tanks	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-501	Diesel Fuel Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
AST-502	Diesel Fuel Tank	9 VAC 5-80-720B	VOC	VOC < 5 tpy
TUBEHTR1	SpaceRay Tube Heater	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	750,000 BTU/hr
6PE-001	Prep/Sand Booth	9 VAC 5-80-720B	PM	PM < 5 tpy
12FBE-002	Space Air Unit # 1-S	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	8.0 MMBTU/hr
12FBE-003	Space Air Unit # 1-N	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	9.5 MMBTU/hr

These insignificant 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.

## VII. Permit Shield & Streamlined 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 identified as being alternately satisfied by this permit:

Citation	Title of Citation	Description of Streamline
9 VAC 5-40-900	Particulate Matter Standard for Fuel Burning Equipment	Conditions III-A-1 and III-A-6 insure that equipment cannot exceed this emission standard
9 VAC 5-40-930	Sulfur Dioxide Standard for Fuel Burning Equipment	Conditions III-A-1 and III-A-6 insure that equipment cannot exceed this emission standard

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)

## **VIII. 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 effective date of this permit. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

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 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 **September 1** and **March 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 emission 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."

d. The report shall be sent to the following address:

Air Compliance Manager  
VA DEQ  
3019 Peters Creek Road  
Roanoke, VA 24019

(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 to DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. 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.
7. This annual compliance certification shall be sent to the following addresses:

Air Compliance Manager  
VA DEQ  
3019 Peters Creek Road  
Roanoke, VA 24019

U. S. Environmental Protection Agency, Region III  
Clean Air Act Title V Compliance Certification (3AP00)  
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, West Central Regional Office, within four (4) 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 IX.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 after the malfunction is discovered, notify the Air Compliance Manager, West Central Regional Office, by facsimile transmission, telephone, or electronic mail of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Air Compliance Manager, West Central 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 Modification**

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.  
(9 VAC 5-80-190 and 9 VAC 5-80-260)

**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 tracked 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 5-40-20 E and 9 VAC 5-50-20 E)

**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 years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

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 requirement 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 requirements 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.
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 5-80-190 C and 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 substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

**Y. Asbestos Requirements**

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

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

**Z. Accidental Release Prevention**

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

**AA. 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)

**BB. 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)

**IX. State-Only Enforceable Requirements**

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

1. Odor .....
2. State toxics rule .....

The New Source Review permit for this facility contains conditions required under these rules in a section designated "state only enforceable." The permit is attached as an appendix to the statement of legal and factual basis for this permit. The permittee has elected not to explicitly address such requirements in this federal operating permit.

(9 VAC 5-80-110 N and 9 VAC 5-80-300)

## Appendix A – CAM Monitoring Specifications

Summary of Instrumentation with CAM Requirements

Control Device (Capture Monitors)	Pollutant	Emission Unit
Regenerative Thermal Oxidizer	VOC	Basecoat Booth 8PE-002
(Differential Pressure Monitor)	VOC	Basecoat Booth 8PE-002
Venturi Scrubber	PM	Basecoat Booth 8PE-002
Water Curtain and Dry Filters	PM	South Chasis Booth 1PE-001
Venturi Scrubber and Dry Filters	PM	North Chasis Booth 1PE-002
Venturi Scrubbers	PM	Primer Booth 5PE-001 and 5PE-001A
Venturi Scrubber	PM	Multi-Tone Booth 8PE-001
Venturi Scrubber	PM	Clearcoat Booth 9PE-001

Detailed Specifications Follow

**Volvo Compliance Assurance Monitoring (CAM) Plan  
Executive Summary Tables**

**Basecoat Booth #2 (8PE-002) Thermal VOC Fume Incinerator**

Indicator	Indicator 1	Indicator 2	Indicator 3
<b>Measurement Approach</b>	<p><b>Continuous Temperature Sensor</b> The incinerator is equipped with a continuous temperature sensor at the chamber exit to monitor, indicate, and record the chamber temperature.</p>	<p><b>Burner Inspection</b> Perform a monthly burner inspection</p>	<p><b>Booth-to-Ambient Pressure Monitor</b> The robotic zone of the spray booth is equipped with a continuous pressure sensor to monitor, indicate, and record the pressure differential between the booth and the ambient air in the building.</p>
<b>Indicator Range</b>	<p>The minimum incinerator chamber temperature shall be maintained at or above 1480°F with a minimum 0.5 second retention time.</p>	NA	<p>The maximum booth-to-building ambient pressure differential shall not exceed + 0.3" of water.</p>
<b>QIP Threshold</b>	<p>The QIP will be reviewed and modified (if necessary) should the incinerator have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the chamber temperature falls below 1480°F.</p>	<p>An excursion would be failure to conduct a monthly burner inspection.</p>	<p>An excursion would be a booth-to-building ambient pressure differential reading of more than + 0.3" of water.</p>
<b>Performance Criteria:</b>	<p>Thermocouples are located in the incinerator chamber as an integral part of the incinerator design. The thermocouples are connected to a chamber temperature controller. Proper temperature range is a direct indicator of proper VOC destruction.</p>	NA	Proper operation of booth.
<b>Data Representativeness</b>	<p>Continuous readout of measured temperature.</p>	NA	Continuous readout of measured pressure differential.
<b>Verification of Operational Status</b>		NA	

<p><b>QA/QC Practices and Criteria</b></p>	<p>A digital temperature controller will be used to evaluate the readings of the temperature controller semi-annually. If the digital temperature reading differs from the temperature reading of the controller by more than 0.75% of full scale, the temperature controller will be recalibrated with a multimeter and calibrator to simulate the thermocouple readings at the controller.</p>	<p>NA</p>	<p>Follow specifications of meter including calibration procedures.</p>
<p><b>Monitoring Frequency and Data Collection Procedure</b></p>	<p>Temperatures are monitored continuously. One 1-hour average will be calculated and maintained on-site.</p>	<p>NA</p>	<p>Continuous readout of measured pressure differential. One 1-hour average will be calculated and maintained on-site.</p>

**South Chassis Paint Booth (1PE-001) Water Wash Spray Booth with Dry Filters**

	Indicator 1	Indicator 2
<b>Indicator</b>	<b>Pressure Drop Across Water Wash Spray Booth</b>	<b>Spray Booth Inspection</b>
<b>Measurement Approach</b>	The pressure drop is monitored with a differential pressure transducer.	Perform a monthly inspection of the wet scrubber
<b>Indicator Range</b>	The lower control limit (LCL) for the differential pressure is 0.85 inches of water and the upper control limit (UCL) is 5.0 inches of water.	NA
<b>QIP Threshold</b>	The QIP will be reviewed and modified (if necessary) should the water spray booth have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the differential pressure readings are outside of the LCL and UCL parameters.	An excursion would be failure to conduct a monthly inspection on the wet scrubber.
<b><u>Performance Criteria:</u></b>		
<b>Data Representativeness</b>	The monitoring system consists of a differential pressure transducer which compares the pressure immediately upstream of the water wash to the pressure directly downstream of the water wash. Its minimum accuracy is $\pm 2$ percent of the entire range.	NA
<b>Verification of Operational Status</b>	Database software application shows the readings and logs data	NA
<b>QA/QC Practices and Criteria</b>	Preventative maintenance and calibrations are performed every 6 months. The accuracy of the differential pressure transducer is checked against known standard traceable to N.I.S.T.	NA
<b>Monitoring Frequency and Data Collection Procedure</b>	The signal from the transducer is sampled several times per minute. 1-minute averages are computed and displayed. The PC then computes a 1-hr average using each 1-minute average and stores it.	NA

**North Chassis Paint Booth (1PE-002) Venturi Wet Scrubber with Dry Filters**

<b>Indicator 1</b>		<b>Indicator 2</b>
<b>Indicator</b>	<b>Pressure Drop Across Venturi Scrubber</b>	<b>Scrubber Inspection</b>
<b>Measurement Approach</b>	The pressure drop is monitored with a differential pressure transducer.	Perform a monthly scrubber inspection
<b>Indicator Range</b>	The lower control limit (LCL) for the differential pressure is 1.35 inches of water and the upper control limit (UCL) is 5.0 inches of water.	NA
<b>QIP Threshold</b>	The QIP will be reviewed and modified (if necessary) should the water spray booth have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the differential pressure reading is outside of the LCL and UCL parameters.	An excursion would be failure to conduct a monthly scrubber inspection.
<b>Performance Criteria:</b>		
<b>Data Representativeness</b>	The monitoring system consists of a differential pressure transducer which compares the pressure immediately upstream of the water spray to the pressure downstream of the water spray. Its minimum accuracy is $\pm 2$ percent of the entire range.	NA
<b>Verification of Operational Status</b>	Database software application shows the readings and logs data	NA
<b>QA/QC Practices and Criteria</b>	Preventative maintenance and calibrations are performed every 6 months. The accuracy of the differential pressure transducer is checked against known standard traceable to N.I.S.T.	NA
<b>Monitoring Frequency and Data Collection Procedure</b>	The signal from the transducer is sampled several times per minute. 1-minute averages are computed and displayed. The PC then computes a 1-hr average using each 1-minute average and stores it.	NA

**Cab Prime Paint Booth (SPE-001) Venturi Wet Scrubber**

	<b>Indicator 1</b>	<b>Indicator 2</b>
<p><b>Indicator</b> <b>Measurement Approach</b></p>	<p><b>Pressure Drop Across Venturi Scrubber</b> The pressure drop is monitored with a differential pressure transducer.</p>	<p><b>Scrubber Inspection</b> Perform a monthly scrubber inspection</p>
<p><b>Indicator Range</b> <b>QIP Threshold</b></p>	<p>The lower control limit (LCL) for the differential pressure is 1.35 inches of water and the upper control limit (UCL) is 5.0 inches of water.  The QIP will be reviewed and modified (if necessary) should the venturi wet scrubber have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the differential pressure reading is outside of the LCL and UCL parameters.</p>	<p>NA  An excursion would be failure to conduct a monthly scrubber inspection.</p>
<p><b>Performance Criteria:</b>  <b>Data Representativeness</b></p>	<p>The monitoring system consists of a differential pressure transducer which compares the pressure immediately upstream of the water spray to the pressure directly downstream of the water spray. Its minimum accuracy is <math>\pm 2</math> percent of the entire range.  Database software application shows the readings and logs data</p>	<p>NA  NA</p>
<p><b>Verification of Operational Status</b></p>	<p>Preventative maintenance and calibrations are performed every 6 months. The accuracy of the differential pressure transducer is checked against known standard traceable to N.I.S.T.</p>	<p>NA</p>
<p><b>QA/QC Practices and Criteria</b>  <b>Monitoring Frequency and Data Collection Procedure</b></p>	<p>The signal from the transducer is sampled several times per minute. 1-minute averages are computed and displayed. The PC then computes a 1-hr average using each 1-minute average and stores it.</p>	<p>NA  NA</p>

**Multitone Paint Booth (8PE-001) Venturi Wet Scrubber**

<b>Indicator 1</b>		<b>Indicator 2</b>
<b>Indicator Measurement Approach</b>	<b>Pressure Drop Across Venturi-Scrubber</b> The pressure drop is monitored with a differential pressure transducer.	<b>Scrubber Inspection</b> Perform a monthly scrubber inspection
<b>Indicator Range</b>	The lower control limit (LCL) for the differential pressure is 1.35 inches of water and the upper control limit (UCL) is 5.0 inches of water.	NA
<b>QIP Threshold</b>	The QIP will be reviewed and modified (if necessary) should the venturi wet scrubber have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the differential pressure reading is outside of the LCL and UCL parameters.	An excursion would be failure to conduct a monthly scrubber inspection.
<b>Performance Criteria:</b>		
<b>Data Representativeness</b>	The monitoring system consists of a differential pressure transducer which compares the pressure immediately upstream of the water spray to the pressure directly downstream of the water spray. Its minimum accuracy is $\pm 2$ percent of the entire range.	NA
<b>Verification of Operational Status</b>	Database software application shows the readings and logs data	NA
<b>QA/QC Practices and Criteria</b>	Preventative maintenance and calibrations are performed every 6 months. The accuracy of the differential pressure transducer is checked against known standard traceable to N.I.S.T.	NA
<b>Monitoring Frequency and Data Collection Procedure</b>	The signal from the transducer is sampled several times per minute. 1-minute averages are computed and displayed. The PC then computes a 1-hr average using each 1-minute average and stores it.	NA

**Basecoat Paint Booth (8PE-002) Venturi Wet Scrubber**

<b>Indicator</b>	<b>Indicator 1</b>	<b>Indicator 2</b>
<b>Measurement Approach</b>	<p><b>Pressure Drop Across Venturi Scrubber</b></p> <p>The pressure drop is monitored with a differential pressure transducer.</p>	<p><b>Scrubber Inspection</b></p> <p>Perform a monthly scrubber inspection</p>
<b>Indicator Range</b>	<p>The lower control limit (LCL) for the differential pressure is 3.0 inches of water and the upper control limit (UCL) is 10.0 inches of water.</p>	<p>NA</p>
<b>QIP Threshold</b>	<p>The QIP will be reviewed and modified (if necessary) should the venturi wet scrubber have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 1-hr average in which the differential pressure reading is outside of the LCL and UCL parameters.</p>	<p>An excursion would be failure to conduct a monthly scrubber inspection.</p>
<b><u>Performance Criteria:</u></b>		
<b>Data Representativeness</b>	<p>The monitoring system consists of a differential pressure transducer which compares the pressure immediately upstream of the water spray to the pressure directly downstream of the water spray. Its minimum accuracy is <math>\pm 2</math> percent of the entire range.</p>	<p>NA</p>
<b>Verification of Operational Status</b>	<p>Database software application shows the readings and logs data</p>	<p>NA</p>
<b>QA/QC Practices and Criteria</b>	<p>Preventative maintenance and calibrations are performed every 6 months. The accuracy of the differential pressure transducer is checked against known standard traceable to N.I.S.T.</p>	<p>NA</p>
<b>Monitoring Frequency and Data Collection Procedure</b>	<p>The signal from the transducer is sampled several times per minute. 1-minute averages are computed and displayed. The PC then computes a 1-hr average using each 1-minute average and stores it.</p>	<p>NA</p>

### Clearcoat Paint Booth (9PE-001) Venturi Wet Scrubber

Indicator 1		Indicator 2
<b>Indicator</b>	Pressure Drop Across Venturi Scrubber	Scrubber Inspection
<b>Measurement Approach</b>	The pressure drop is monitored with a differential pressure transducer.	Perform a monthly scrubber inspection
<b>Indicator Range</b>	The lower control limit (LCL) for the differential pressure is 1.35 inches of water and the upper control limit (UCL) is 5.0 inches of water.	NA
<b>QIP Threshold</b>	An excursion would be differential pressure readings outside of the LCL and UCL parameters.	An excursion would be failure to conduct a monthly scrubber inspection.
<b><u>Performance Criteria:</u></b>		
<b>Data Representativeness</b>	The monitoring system consists of a differential pressure transducer which compares the pressure immediately upstream of the water spray to the pressure directly downstream of the water spray. Its minimum accuracy is $\pm 2$ percent of the entire range.	NA
<b>Verification of Operational Status</b>	Database software application shows the readings and logs data	NA
<b>QA/QC Practices and Criteria</b>	Preventative maintenance and calibrations are performed every 6 months. The accuracy of the differential pressure transducer is checked against known standard traceable to N.I.S.T.	NA
<b>Monitoring Frequency and Data Collection Procedure</b>	The signal from the transducer is sampled several times per minute. 1-minute averages are computed and displayed. The PC then computes a 1-hr average using each 1-minute average and stores it.	NA

\*\*\*OCR\*\*\*

The following pages contain the Optical Character Recognition text of the preceding scanned images.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

L. Prestoii Bryant, Jr West Central Regional Office David K. Pavlor  
Scrciar@ Resources  
3019 Peters Creek Road, Roanoke, Virginia 24019 Director  
Telephone (540) 562-6700, Fax (540) 562-6725  
Steve A. Dietrich  
Steve.A.Dietrich@vdeq.virginia.gov Regional Director

January 17, 2008

Mr. Jan Stromberg  
V.P. & General Manager  
Volvo Trucks North America  
P.O. Box 1126  
Dublin VA 24084

Location: Pulaski Co.  
Registration No: 20765  
County-Plant ID No: 51-155-0041  
Dear Mr. Stromberg:

Attached is a permit to continue to operate the Volvo Trucks North America, Inc. plant referenced above pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

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

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete and solicited written public comments by placing a newspaper advertisement in The Roanoke Times on November 18, 2007. The thirty-day comment period (provided for in 9 VAC 5-80-270) expired on December 19, 2007 with no comments received in this office from either the general public or EPA.

This approval to operate does not relieve Volvo Trucks North America, Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

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

Mr. Jan Stromberg  
Volvo Trucks North America, Inc.  
January 17, 2008  
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Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

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

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

If you have any questions concerning this permit, please call Tim Overstreet or Lillian Alexander at 540/562-6700.

Sincerely,

Steven A. Dietrich, P.E.  
Regional Director

SADALJA

Attachment: Final Title 5 Permit and Statement of Basis

cc: Monica Harvey (electronic file submission)  
Sharon McCauley, U.S. EPA, Region III (electronic file submission)  
Lillian Alexander (cover only)  
Frank Adams w/ attachments -> Tim Overstreet  
Michael J. Scanlan, Ph. D. (cover only)  
Stephen L. Pierett, Volvo Trucks North America, Inc. (cover only)

COMMONWEALTH (of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

L. Preston Bryant, Jr

West Central Regional Office David K. Paylor-

Secretary, of Natural Resources

3019 Peters Creek Road, Roanoke, Virginia 24019

Telephone (540) 562-6700. Fax (540) 562-6725 Steven A. Dietrich

www.deq.virginia.gov Regional Director

Federal Operating Permit

Article I

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter

80, Article I of the Commonwealth of Virginia Regulations for the Control and Abatement of

Air Pollution. Until such time as this permit is reopened and revised, modified, revoked,

terminated or expires, the permittee is authorized to operate in accordance with the terms and

conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13,

10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with

the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air

Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the

Commonwealth of Virginia.

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

hereby granted to:

Permittee Name: Volvo Trucks North America, Inc.

Facility Name: Volvo Trucks North America, Inc.

Facility Location: 4881 Cougar Trail Road, Dublin, Virginia

Registration Number: 20765

County-Plant number: 155-0041

Permit Number: WCRO-20765

Renewal Effective Date: January 17, 2008

Expiration Date: January 16, 2013

@toerua

Steven A. Dietrich, P.E.

Regional Director

Signature Date: January 17, 2007

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Appendix A - CAM Monitoring Specifications

Volvo Trucks North America, Inc.  
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## 1. Facility Information

Permittee  
Volvo Trucks North America, Inc.  
7900 National Service Road  
Greensboro, NC 27402

Responsible Official  
Jan Stromberg  
Vice President and General Manager

Facility  
Volvo Trucks North America, Inc.  
P. O. Box 1126  
Dublin, VA 24084

Contact Person  
Stephen L. Pierett  
Environmental Manager  
540-674-4181

Registration Number: 20765  
AIRS Identification Number: 51-155-0041

Facility Description: SIC Code 371 1, NAICS Code 336120 - Volvo Trucks North America, Inc. is a producer of heavy duty trucks located in Pulaski County at 4881 Cougar Trail Road near Dublin, Virginia. Volvo presently produces heavy duty trucks with assembly and painting performed at the facility.

The facility is a Title V major source of Volatile Organic Compounds, nitrogen oxides, carbon monoxide, and Hazardous Air Pollutants. This source is located in an attainment area for all pollutants, and is a PSD major source for VOCs. The only NSPS requirement which presently applies to this facility is NSPS Dc for the Phosphate Heater. The facility is subject to MACT MMMM (Miscellaneous Metal Parts Coating) and MACT PPPP (Miscellaneous Plastic Parts Coating). Final compliance certification dates for these MACTs will not occur until after this permit renewal. References to the March 7, 2007 NSR permit should be interpreted as referring to that permit as amended August 21, 2007.

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#### 11. Emission Units

Equipment to be operated consists of-  
Pollution  
Control

Emission Size/Rated Pollutant Applicable

Unit ID Stack ID Emission Unit Description Capacity Device PCD ID Controlled  
Permit Date

(PCD)

Description

Fuel Burning Equipment

IFBE-001 xxx.1 North Chassis Oven (Direct Fired) 3.0 MMBTU/hr 3/7/07

IFBE-002 NN. I South Chassis Oven (Direct Fired) 3.0 MMBTU/hr 3/7/07

I FBE-003 WWW.1 North Chassis Air Make-Up Unit 7.56 MMf3TU/hr 3/7/07

I FBE-004 MM.] - MM.6 South Chassis Air Make-Up Heater 5.44 MMBTU/hr 3/7/07

2FBE-001/

6FB .E-00 I BBB. I Phosphate Solution/Washer Heater 25.2 MMBTU/hr 3/7/07

3FBE-001 EEE. I E-Coat Oven w/ incinerator 5\*\* MMBTU/hr incinerator 3PC-01- VO  
C, Odor 3/7/07

5FBE-001 GGG.5 Primer Oven Zone I Burner 3.43 MMBTU/hr 3/7/07

5FBE-002 GGG.6 Primer Oven Zone 2 Burner 2.63 MMBTU/hr 3/7/07.

5FBE-003 GGG.7 Primer Oven Zone 3 Burner 2.63 MMBTU/hr 3/7/07

Multi-Tone Oven - Zone I Burner

8FBE-00 I PPP.3 (Booth # 1) 3.43 mM[3TU/hr 3/7/07

Multi-Tone Oven - Zone 2 Burner

8FBE-002 PPPA (Booth fl) 2.63 mmBTU/hr 3/7/07

8FBE-004 BFE.1 Basecoat Oven - Zone I Burner 3.0 MMBTU/hr 3/7/07  
(Booth #2)

Basecoat Oven - Zone 2 Burner

8FBE-005 BFE.2 (Booth #2) 5.0 mmBTU/hr 3/7/07

8FBE-006 BFE.3 Basecoat Oven - Zone 3A Burner 3.0 MMB,rU/hr 3/7/07  
(Booth #2)

8FBE-007 BFEA Basecoat Oven - Zone 3B Burner 3.0 MMBTU/hr 3/7/07

(Booth #2)

8FBE-008 PPX.3 Basecoat Oven - RTO Incinerator 5\*\* MMBTU/hr RTO .8PC-05 VOC 3  
/7/07

Exhaust (Booth #2)

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Pollution

Emission Size/Rated Control Pollutaitt Appliuble

Unit ID Stack ID Emission Unit Description Capacity Device PCD ID Controlled P  
ermit Date  
(PCD)

Description

9FBE-001 SSS.3 Clearcoat Oven Zone 1 3.43 MMBTU/hr -3/7/07

9FBE-002 SSSA Clearcoat Oven Zone 2 2.6 MMBTU/hr 3/7/07

9FBE-003 SSS.6 Clearcoat Oven Zone 3 4.2 MMBTU/hr 3/7/07

SSS.1&2,

12FBE-00 I mmm. 1, Central Air Make-Up Heater 56.2 MMBTU/hr 3/7/07

GGG.1&2

13FBE-001 P.] - P.6 Truck Repair Oven Exhaust (001) 2.39 MMBTU/hr 3/7/07

13FBE-002 P.5 & P.6 Supply Air Heater - 13PE-00 1 6.48 MMBTU/hr 3/7/07

13FBE-003 0.1&2 Air Make-Up Heater - 13PE-002 3.89 MMBTU/hr 3/7/07

13FBE-003A 0.3 Air Make-Up Heater - 13PE-002A 3.89 MMBTU/hr 3/7/07

13FBE-005 Q. I - Q.4 Air Make-Up Heater - 13PE004 4.68 MMBTU/hr 3/7/07

13FBE-005A Q.5 Air Make-Up Heater - 13 PE004A 4.68 MMBTU/hr 3/7/07

13FBE-006 (indoor vent) PC Building Heater 0.5 MMBTU/hr 3/7/07

14FBE-00 I BBB.2 Burnham Ijindustries Boiler - 6.3 MMBTU/hr 3/7/07

Humidity Control for 8PE-002

15FBE-001 PPP. 1 &2 Make-Up Air Unit for Multi-Tolie/ 23.5 MMBTU/hr 3/7/07

Basecoat Booth 41 (8PE-001)

16FBE-001 PPX -3, Make-Up Air Unit for Multi-Tone/ 12.2 MMBTU/hr 3/7/07

(PPX.4) Basecoat Booth #2 (8PE-002)

Heavy Truck Manufacturing rocess

I PE-00 I MM. 1 -7 South Chasis Paint Booth Water Curtain I PC-O I PM IO, TSP  
3/7/07

IPE-OOIA NN. I South Chasis Curing Oven 3/7/07

1 PE-00 I B 00. t South Chasis Oven Cooler 3/7/07

1 PE-002 www.1 North Chasis Paint Booth Venturi Scrubberl I PC-02 PMIO, TSP 3/  
7/07

I PE-002A xxx.1 North Cbasis Curing Oven 3/7/07

IP - 2B YYY.1 North Cliasis Oven Cooler 3/7/07

2PE-00 I AAA. 1 &2, Phosphate System 3/7/07

3PE-001 No stack E-Coat Process 3/7/07

3PE-OOIA ccc. I E-Coat Tunnel 3/7/07

13PE-OOIB EEE. I E-Coat Oven

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Emission Size/Rated Pollution Control Poilitaitiit Applicable  
Stack ID Emission Unit Description Device (PCD) PCD ID  
Unit LD Capacity\* Co'ntrolled Pertilit Date  
Description

3PE-OOIC DDD. I E-Coat Oven Cooler 3/7/07  
3PE-00 I D FFF.2 E-Coat Scuff Station 3/7/07  
4PE-001 (no stack) Scam Seater/Bracket Attach 3/7/07  
4PE-OOIA (no stack) Cab Wipe/Prime Tack-Off 3/7/07  
5PE-001 GGG. I Primer Process - Robotic Zone Venturi Scrtibber' 5PC-01 PM I 0,  
TSP 3/7/07  
5PE-OOIA GGG.2 Primer Process - Manual Zone Venturi Scrubber' 5PC-01 PM IO, TS  
P 3/7/07  
5PE-OOIB GGG.8 Primer Oven Exhaust 3/7/07  
5PE-OOIC GGG.3 Primer Oven Cooler 3/7/07  
6PE-001 iii. I Prep Booth/Saiid Booth 3/7/07  
6PE-OOIA WWEA Washing Process 3/7/07  
6PE-00 I B LLL. I Dry-Off Area

7PE-001 MMMA Specialty/Touch-Up Paititing - Venturi Scrubber] 7PC-01 PM I O@ T  
SP 3/7/07  
Waterborne & Iiigh Solids

8PE-001 PPP. 1 &2 Multi-Tone Booth # I Waterborne Venturi Scrubberl 8PC-01 PM  
IO, TSP 3/7/07  
& High Solids Coating  
8PE-00 I A PPP.5 Multi-Tone Oven# 1 3/7/07  
8PE-00 I B PPP.6 Multi-Tone Cooler # 1 3/7/07  
PPX.3 Basecoat Bootli # 2 Waterborne & Venturi Scrubber', 8PC-04, PMIO.  
8PE-002 (PPX.4 3/7/07  
High Solids Coating Incinerator 8PC-05 TSP, VOC  
bypass)  
8PE-002A BOE. I Basecoat Oven 4 2 3/7/07  
8PE-002B QQQ.4 Basecoat Cooler 2 3/7/07

8PE-002C RRR. I Basecoat Booth 2 Demask 3/7/07  
Station  
9PE-001 SSS.1&2 Clearcoat Spray Booth Veituri Scrubber' 9pc-o 1 PM IO, TSP 3/  
7/07  
9PE-OOIA SSS.5 Clearcoat 'uring Oven 3/7/07  
9PE-OOIB TTT.3 Clearcoat Cooler # 1 3/7/07  
9PE-OOIC TTT.5 Clearcoat Cooler # 2 3/7/07  
1 OPE-00 1, UU`U.I Spot Repair (BC/CC) Dry filters I OPC-O I., PM IO, TSP 3/7/  
07  
IOPE-002 IOPC-02  
I I PE-001 VVV.1 Inspe-ctioii & Repair Booth Dry Filter IIPC-01 PMIO, TSP 3/7/  
07  
P. 1 -4 PC Booth # 1: Cab Touch-Up I Water CLirtaiiii 13PC-01 PM IO, TSP 3/7/07

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Pollution Control

Emission Stack ID Emission Unit Description Size/Rated Device (PCD) PCD ID Po  
llutant Applicable

Unit fd Capacity' Description Controlled Peri-n it Date

13 PE-00 I A P.5 & P.6 PC Booth# I Oven 3/7/07

13 PE-002 0.1&2 PC Booth # 2: Cab Touch-Up Dry Filter 13PC-02 PM IO, TSP 3/7/0  
7

13PE-002A 0.3 PC Booth #2 Oven 3/7/07

13PE-004 Q. 1 -4 PC Booth # 4: Truck Touch-Up Dry Filter 13PC-04 PM IO, TSP 3/  
7/07

13PE-004A Q.5 PC Booth #4 Oven 3/7/07

\*The Size/Rated capacity is provided for informational purposes only, and is n  
ot an applicable requirement.

\*\* Based on maximum heat input bumers

'Based on process considerations, some booths may operate two Venturi scrubber  
s in parallel

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## Fuel Burning Equipment Requirements

### A. Limitations

1. Fuel - The approved fuels for the all stationary fuel bumng equipment, inc ludng central air system, ovens, incinerators, and mak-e-up heaters are natural gas and propane. A change in the fuel may require a permit to modif@, and operate. (9 VAC 5-80-110, 9 VAC 5-80-1 1 80 and Condition 15 of the 3/7/07 Pen-nit)

2. Fuel Throughput - The facility as a whole shall consume DO more than 1,927 x 106 standard cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12 month period. (9 VAC 5-80-110, 9 VAC 5-80-1180 and Condition 16 of the 3/7/07 Permit)

3. Emission Limits - Emissions from the combined operation of all stationary fuel bumng equipment, including the central air system and all incinerators, ovens, and mak-e-up heaters shall not exceed the limits specified below:

PM-10 7.0 tons/yr

Nitrogen Oxides (as NO-)) 91.6 tons/yr

Carbon Monoxide 77.0 tons/yr

Volatile Organic Compounds 5.0 tons/yr

Annual emissions calculated monthly as the sum of the previous conse cutive tw elve month period.

These limits are included chiefly for emission inventory purposes and based on

USEPA emission factors and fuel throughputs (when fuel bumng equipment is operating properly, compliance. with the 1,927 million scf/yr maximum natural gas usage limit shall be deemed compliance with these limits). (9 VAC 5-80-110, 9VAC 5-50-260, and Condition 23 of 2/26/03 Pen-nit)

4. Visible Emission Limit - Visible Emissions from all stationary fuel bumng equipment, including the central air system and all incinerators, ovens, and m ake-up heaters shall not exceed five (5) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed ten (I 0) percent opacity. (9 VAC 5-50-260, 9 VAC 5-80-1 10, and Condition 25 of the 3/7/07 Permit)

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5. Requirements by Reference - Permittee is subject to all applicable provisions of 40

CFR 60.40c to.60.48c [NSPS Dc] for the Phosphate System washing heater, 6FBE-001. At the time of issuance of this pen-nit, applicable requirements concern only

proper notifications at the time of the start up of the phosphate system washing heater.

(9 VAC 5-80-110, 9 VAC 5-50-400, 9 VAC 5-50-410. and Condition 17 of the 3/7/07 Permit)

6. Operation and Maintenance - Boiler (6FBE-00 1, 14FBE-00 1), HVAC System (I 2FBE-00 1,002, & 003), and Air Make-Up Unit (I 3 FBE-00 1 through 006, 15FBE-

001, & 16FBE-001) 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, 9 VAC 5-50-20, and 9 VAC 5-80-1180)

7. Operation & Maintenance Procedures - The perrnittee shall take the following

measures in order to minimize the duration and frequency of excess emissions, with

respect to the boilers (6FBE-001 & 14FBE-001):

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the boilers (6FBE-00 I & 14FBE-00 1).

b. Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the boilers (6FBE-001 & 14FBE-001) and maintain records of inspection results.

c. Have available written operating procedures for the boilers (6FBE-001 & 14FBE-001). These procedures shall be based on the manufacturer's recommendations, at a minimum, if such recommendations exist.

d. Train operators in the proper operation of the boilers (6FBE-00 I & 14FBE-00 I)

and familiarize the operators with the written operating procedures.

Records of maintenance, inspections and training shall be maintained on site for a

period of five (5) years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110, 9 VAC 5-40-20 E, 9 VAC 5-50-20 E and Condition 34 of the 3/7/07 Permit)

#### B. Monitoring

1. Operation and Maintenance - The Phosphate Heater and Bumham Boiler (6FBE-001, 14FBE-001) shall be inspected at least monthly to insure proper operation and

maintenance.

(9 VAC 5-80-110, 9 VAC 5-40-20 E, and 9 VAC 5-50-20 E)

### C. Recordkeeping

On Site Records - The permittee shall develop a database record keeping system, or equivalent methodology acceptable to the Department., to 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, West Central Regional Office. These records shall include, but are not limited to:

1. The monthly and annual consumption of natural gas and propane for the total plant. The annual consumption shall be calculated monthly as the sum of each consecutive twelve (12) month period.
2. The monthly and annual consumption of natural gas and propane for the Phosphate System washing heater (2FBE-001). The annual consumption shall be calculated monthly as the sum of each consecutive twelve (12) month period. Monthly and -annual emissions from combustion of natural gas and propane of nitrogen oxides, carbon monoxide, volatile organic compounds and PM-10, for the total plant. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.

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 5-50-50, 9 VAC 5-80-1 10, and Condition 29 of the 3/7/07 Permit)

### D. Testing

1. Testing/Monitoring Ports - 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 5-50-30, 9 VAC 5-80-1 10, and Condition 12 of the 3/7/07 Permit)

### E. Reporting

The reporting requirements for this section are satisfied by the recordkeeping requirements in this section, the recordkeeping and reporting requirements of the Facility Wide Section, and the General Conditions section.

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#### IV. Process Equipment Requirements

##### A. Limitations

1. Emission Controls and Control Requirements - Particulate emissions from paint spray booths shall be controlled as tabulated below, or DEQ approved equivalent, to achieve the designated concentrations:

Maximum

Paint/Coating Process Control Equipment Emission

Chassis IPE-001 Water Wash Spray Booth 0.005 gr/scf

with dry filters

Chassis IPE-002 Venturi Wet Scrubber\* 0.003 gr/sef

with dry filters

Cab Prime 5PE-001 Venturi Wet Scrubber\* 0.003. gr/sef

Special Projects 7PE-001 Venturi Wet Scrubber\* 0.003 gr/sef

Cab Multi-Tone 8PE-001 Venturi Wet Scrubber\* 0.003 gr/scf

Cab Basecoat 8PE-002 Venturi Wet Scrubber\* 0.003 gr/sef

Cab Clearcoat 9PE-001 Venturi Wet Scrubber\* 0.003 gr/scf

Spot Repair (BC/CC) 1 OPE-00 1 Dry Filter .0.005 gr/scf

Spot Repair (BC/CQ I OPE-002 Dry Filter 0.005 gr/scf

Inspection & Repair I I PE-00 I Dry Filter 0.005 gr/scf

P-C Cab Repair/Touch-Upl3PE-001 Water Wash Spray Booth 0.005 gr/scf

P-C Cab Repair/Touch-Upl3PE-002 Cartridge Filter 0.005 gr/scf

P-C Cab Repair/Touch-Upl3PE-004 Dry Filter or equivalent 0.005 gr/sef

The over-spray particulate controls for the paint spray booths shall be provided with adequate access for inspection.

Some booths operate parallel scr-ubbers with the option of shutting down the manual zone if no manual spraying is in operation. When two scrubbers are in use, the monitoring requirements should be applied to both scrubbers but annual mass emission limits should be applied to the booth discharge through both scrubbers.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 2 of the 3/7/07 Permit)

2. Emission Controls - Volatile organic compound (VOC) emissions from the following painting/coating processes shall be controlled by the use of waterborne, high-solids coatings, zero-VOC solvent borne coatings, or DEQ approved equivalent:

- Chassis IPE-001 - Chasis IPE-002

- Clearcoat 9PE-001 - Inspection&RepairlOPE-001&002

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 3 of the 3/7/07 Permit)

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Volatile organic compound (VOC) emissions from the cab

J. Emission Controls

prime process 5PE-001 shall be controlled by the use of waterborne coatings or DEQ approved equivalent.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 4 of the 3/7/07 Pen-nit)

4. Emission Controls - Volatile organic compound (VOC) emissions from the electrodeposition (E-coat inunersion) process 3 )PE-00 I shall be controlled b y the use of electrodeposited waterborne coatings.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 5 of the 3 )/7/07 Permit)

5. Emission Controls and Control Efficiency - Volatile organic compound (VOC) emissions from the Cab Basecoat Spray Booth 8PE-002 shall be controlled by air

recirculation to concentrate VOCs inside the booth followed by a thermal VOC f ume

incinerator with a minimum incinerator VOC destruction efficiency of 95%. The air

recirculation system and incinerator shall be provided with adequate access fo r

inspection. During operation of this painting process, the minimum incinerato r

chamber temperature shall be maintained at 1400'F with a minimum 0.5 second retention time, or maintained at a minimum operating temperature determined by

emissions testing necessar-y to achieve an overall 95 percent destr-uction of volatile

organic compounds entering the incinerator.

[Note: for purposes of estimating VOC emissions from Basecoat, use of control efficiencies derived from the most recent performance testing demonstrating compliance are an acceptable method, rather than using the minimum efficiencie s

cited above.]

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-260, and Condition 6 of the 3 )/7 /07

Permit)

6. Emission Controls - Volatile organic compound emissions from painting/coati ng

operations in spray booths not controlled by VOC incineration (spray booths ot her

than Basecoat 8PE-002), are limited to 3.5 lbs/gal of coating as applied as a monthly

facility-wide average and as a consecutive twelve (12) month average for the o verall

painting/coating facility.

(9 VAC 5-80-110, 9 VAC 5-80-1180, 9 VAC 5-50-180, 9 VAC 5-50-260, and Condition 7 of the 3/7/07 Per'mit)

7. Emission Controls - Organic Hazardous Air Pollutant emissions from painting/coating operations. are limited to the more stringent of:

a. 2.6 lbs/gal of coating solids as applied, or

b. 0.16lbsVHAP/lbofcoatingsolidasapplied,'

as an annual facility-wide average, calculated monthly as a rolling twelve (12 ) month

average, for the overall painting/coatiiiig facility.\*



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\*The facility has chosen to demonstrate compliance with MACTs NINIM and PAPP by demonstrating emissions levels which meet the MACT requirements on the basis of monthly and annualized averages. This choice does not preclude the facility from electing to demonstrate compliance by another methodology in the future, provided the appropriate amendments are made to the required permits.  
(9 VAC 5-80-110, 9 VAC 5-60-90, 9 VAC 5-60-100, and Condition 8 of the 3/7/07 Permit)

8. Emission Controls - Reasonable precautions shall be taken to minimize volatile organic compound (VOC) emissions from cleaning and purging operations. Reasonable precautions may include the following:

- a. The use of capture or control devices or both.
- b. The use of detergents, high pressure water, or other non-volatile cleaning methods.
- c. The minimization of the quantity of the volatile organic compounds used to clean lines.
- d. The adjustment of production schedules to minimize coatings changes thereby reducing the need for frequent cleaning or purging of the system.

(9 VAC 5-80-110, 9 VAC 5-40-20, and Condition 9 of the 3/7/07 Permit)

9. Alternative Emission Controls - The 8PE-002 incinerator may be bypassed for maintenance of the control equipment without cessation of operations in the Basecoat 8PE-002 Spray Booth provided that:

- a. The exact dates and times when emissions commence and cease being routed through the bypass are documented.
- b. The VOC emissions during the bypass period are tabulated and recorded as uncontrolled emissions.
- c. The differential air pressure reading for the venturi scrubber particulate control device is recorded at least once per hour while paint operations are ongoing.
- d. The emissions from the bypassed operation do not violate any other conditions of this permit.
- e. The Air Compliance Manager, West Central Regional Office, is notified within two weeks of the bypass that this action has occurred, the duration or anticipated duration of the action, and the reason for the action.

(9 VAC 5-80-110 and Condition 10 of the 3/7/07 Permit)

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10. Requirements by Reference - Perinittee is subject to all applicable provisions of 40 CFR 6' ).3880 et seq. [NIACT Subpart MMMM] for the following process areas: 1PE-001, I PE-002, 3PE-001, 5PE-001, 7PE-001, 8PE-001, 8PE-002, 9PE-001, I OPE-001, I OPE-002, 13PE-001, 13PE-002, and 13PE-004\*. [\* see Condition II below] (9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 18 the 3/7/07 Permit)

I 1. Requirements by Reference - Permittee is subject to all applicable provisions of 40 CFR 63.4480 et seq. [NIACT Subpart PPPP] for the following process areas: 7PE-001, 8PE-001, 8PE-002, 9PE-001, 10PE-001, I OPE-002, 13PE-001, 13PE-002, and 13PE-004\*. (9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 19 the 3/7/07 Permit)  
For process areas that mav be subject to both NIACT MNE" and NiACT PPPP, the r egulations allow the facility to designate which MACT is the predominant operation of the process a rea and comply onlv with one MACT.. either MMMM or PPPP. For process areas listed in both Conditions 9 and I 0, above. compliance with either MMNIM or PPPP shall be considered compliance with both conditions if th e appropriate predominant activity is demonstrated. Volvo proposes to demonstrate compliance with NIACT PPPP for any plastic or metal as a demonstration of compliance for both MACTs based on MACT PPPP being more stringent than NIACT NUVININ4.

12. Throughput - The volatile organic compound consumption for painting/coatin g shall not exceed 1,400 tons per year, calculated monthly as the sum of the previous consecutive twelve month period. (9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 13 the 3/7/07 Permit)

I3 ). Throughput - The volatile orgar& compound consumption for painting/coati ng shall not exceed 233.3 tons per month. (9 VAC 5-80-110, 9 VAC 5-80-1180, and Condition 14 of the 3/7/07 Permit)

14. Emission Limits - Emissions from the operation of the 8PE-001 Cab Multi-To ne Spray Booth sball not exceed the limits specified below:

Volatile Organic Compounds 43.7 tons/yr  
Annual emissions calculated monthly as the sum of the previous consecutive twe lve month period. (9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-80-1615, and Condition 20 of the 3/7/07 Pennit)

15. Emission Limits - Emissions from the operation of truck painting/coating s hall not exceed the liniits specified below:

Volatile Organic Compounds 532.5 tons/yr  
Annual enilssions calculated monthl), as the sum of the previous consecutive t welve

nionth period.  
(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-80-1615, and Condition 21 of the  
3/7/07 Permit)

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16. Emission Limits - Particulate emissions from the operation of truck painting/coating

shall not exceed the limits specified below:

Chassis Spray Combined 1PE-001&002 8.5 tons/yr

Cab Prime Spray 5PE-001 4.4 tons/yr

Specialty/Touch-Up Spray 7PE-001 1.0 tons/yr

Cab Multi-Tone Spray 8PE-001 13.3 tons/yr

Cab Basecoat Spray 8PE-002 3.1 tons/yr

Cab Clearcoat Spray 9PE-001 7.3 tons/yr

Spot Repair Booths Combined I OPE-001 1.0 & I OPE-002 7.7 tons/yr

Inspection & Repair I I PE-001 3.0 tons/yr

P-C Building Spray Combined 133PE-001, 002, & 004 8.8 tons/yr

Annual emissions calculated monthly as the sum of the previous consecutive twelve month period.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 23 of the 3/7/07 Permit)

17. Visible Emission Limit - Visible emissions from the facility's spray booths shall not

exceed five (5) percent opacity, except for one six minute period in any one hour of

not more than ten (10) percent, as determined by EPA Method 9 (reference 40 CFR

60, Appendix A). The opacity standard shall apply at all times, except during periods

of malfunction, start up, and shut down.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 25 of the 3/7/07 Permit)

## B. Monitoring

1. Monitoring Devices - The VOC fume incinerator controlling the Basecoat Booth

(8PE-002) shall be equipped with automatic thermostats to maintain the required

chamber temperature and with a continuous temperature sensor at or near the chamber exit to monitor, indicate, and record the chamber temperature.

(9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 6 of the 3/7/07 Permit)

2. Monitoring Devices - The Chassis IPE-002, Cab Prime 5PE-001, Special Projects

7PE-001, Cab Multi-Tone 8PE-001, Cab Basecoat 8PE-002, and Cab Clearcoat 9PE-001 spray booths shall be equipped with differential pressure gauges to continuously

measure the differential pressure across the Venturi wet scrubbers. The Chassis IPE-

001 spray booth shall be equipped with a differential pressure gauge to continuously

measure the differential pressure across the water curtain. The 8PE-002 spray booth

shall be equipped with differential pressure gauges to continuously measure the

differential pressure between the spray booth and the building air outside the booth

and to measure the differential pressure across the recirculation air filters.

Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the

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manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the spray booth is operating.  
(9 VAC 5-80-1180, 9 VAC 5-80-110, 9 VAC 5-50-260, and Condition I I of the 3/7/07 Permit)

3. Compliance Assurance Monitoring (CAM) - The permittee shall monitor, operate, calibrate and maintain the CAM subject control devices controlling the CAM-affected units listed in the table below, as detailed in the unit-by-unit listings in Appendix A:

Control Device (Capture Monitor)	Pollutant	Emission Unit
Regenerative Thermal Oxidizer	voc	Basecoat Booth 8PE-002
(Differential Pressure Monitor)	voc	Basecoat Booth 8PE-002
Venturi Scrubber PM		Basecoat Booth 8PE-002
Water Curtain PM		South Chassis Booth I PE-00 I
Venturi Scrubber PM		North Chassis Booth 1PE-002
Venturi Scrubber PM		Primer Robotic Zone 5PE-001
Venturi Scrubber PM		Multi-Tone Booth 8PE-001
Venturi Scrubber PM		Clearcoat Booth 9PE-00 I

(9 VAC 5-80-110 and 40 CFR 64.6 (c))

4. Compliance Assurance Monitoring (CAM) - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 64.9. Details of the monitoring shall be specified in a Compliance Assurance Monitoring plan developed by the permittee and approved by VDEQ.  
(9 VAC 5-80-110 and 40 CFR 64.6 (c))

5. Compliance Assurance Monitoring (CAM) - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.  
(9 VAC 5-80-110 and 40 CFR 64.7 (b))

6. Compliance Assurance Monitoring (CAM) - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the CAM-affected units are operating during production periods. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part

by  
inadequate maintenance or improper operation are not nialfunctions.  
(9 VAC 5-80-1 1 0 and 40 CFR 64.1 (c))

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7. Compliance Assurance Monitoring (CAM) - Upon detecting an excursion or exceedance, the permittee shall restore operation of a CAM-affected unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distributed control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.  
(9 VAC 5-80-110 and 40 CFR 64.7 (d)(1))

8. Compliance Assurance Monitoring (CAM) - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control devices, associated capture system, and the process.  
(9 VAC 5-80-110 and 40 CFR 64.7(d)(2))

9. Compliance Assurance Monitoring (CAM) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Air Compliance Manager, West Central Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.  
(9 VAC 5-80-110 and 40 CFR 64.7(e))

10. Compliance Assurance Monitoring (CAM) - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for any CAM-affected unit for a semiannual reporting period, the permittee shall develop, implement and

maintain a Quality Improvement Plan (QIP) for that unit in accordance with 40 CFR

64.8. If a QIP is required, the permittee shall have it available for inspection. The

QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall

modify the plan to include procedures for conducting one or more of the following, as appropriate:

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- a. Improved preventative maintenance practices;
- b. Process operation changes-
- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring.

(9 VAC 5-80-1 10 and 40 CFR 64.8(a) and (b))

### C. Recordkeeping

On Site Records - The permittee shall develop a data base record keeping system, or equivalent methodology acceptable to the Department, to maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit.

VOC emissions should not include the amount of VOC that is not emitted due to VOC incineration emissions controls, VOC returned to vendor, VOC removed for off-site disposal, etc. Separate records shall be kept for each operational area, such as a spray booth and associated ovens, cooling areas, flash-off areas, etc. (Note: The PC area may be treated as a single operational area where emission records for booths 1 3 PE-00 1, 002

PE-004 and emissions from operations outside the booths may be combined as a single data record.) The content and format of such records shall be arranged with the Air Compliance Manager, West Central Regional Office. These records shall include , but are not limited to:

1. A record of the VOC content of each material used in the truck assembly and coating operation based on a certified product data sheet from the material vendor or testing of the material using an EPA approved testing methodology such as 40 CFR part 60, Appendix A EPA Reference Method 24 or equivalent.

2. Monthly and annual consumption of VOC for each operational area, including separate tabulations for 8PE-001 and 8PE-002. Annual consumption and throughput shall be calculated monthly as the sum of the previous consecutive 12 month period.

3. Monthly and annual consumption of VOC for overall truck painting/coating. Annual consumption and throughput shall be calculated monthly as the sum of the previous consecutive 12 month period.

4. Monthly and annual consumption of, gallons of paints/coatings for each operational area, including separate tabulations for 8PE-001 and 8PE-002, and for overall

truck  
painting/coating. The waterborne/ exempt solvent paints/coatings shall be reported  
on both bases of with water and exempt solvent and less water and exempt solvents.  
Annual consumption shall be calculated monthly as the sum of the previous  
consecutive 12 month period.

5. Monthly and annual throughput of skids for overall painting/coating. Annual  
throughput shall be calculated monthly as the sum of the previous consecutive  
12  
month period.

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6. Monthly and annual emissions of VOC from overall truck painting/coating. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.

7. Average monthly and annual VOC emissions in pounds/gallon as an average from overall truck painting/coating, except for spray booths controlled by VOC fume incineration, accounting for waterborne/exempt solvent paints/coatings on the bases of both "with water and exempt solvents" and "less water and exempt solvents." Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.

8. Average monthly and annual organic HAP emissions in pounds/gallon of solids or pounds VHAP/pound coating solids as an average from overall truck painting/coating (except that spray booth 8PE-002, controlled by VOC fume incineration may be otherwise documented to demonstrate MACT compliance). Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.

9. Records of the differential pressure readings for the Venturi scrubbers controlling particulate emissions from the following spray booths: Chassis I PE-002, Cab Prime 5PE-001, Special Projects.7PE-001, Cab Multi-Tone 8PE-001, Cab Basecoat 8PE-002, and Cab Clearcoat 9PE-001; for the water curtain controlling particulate emissions from the Chassis I PE-001 spray booth; for the recirculation filters in the 8PE-002 spray booth; and differential pressure readings between the factory floor and the Cab Basecoat 8PE-002 spray booth. Readings shall be recorded at least once per shift during process operations.

10. Records of the temperature of the regenerative thermal oxidizer controlling VOC emissions from Cab Basecoat spray booth 8PE-002. One-hour averages of the continuously monitored temperature shall be recorded at least once per hour during process operations.

11. Compliance Assurance Monitoring (CAM) Recordkeeping - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

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 5-50-50, 9 VAC 5-80-110, 40 CFR 64.9(b), and/or Condition 29 of the 3/7/07 Permit)

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D. Testing

1. Testing/Monitoring Ports - The pennitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods.

Test ports shall be provided when requested at the appropriate locations or in accordance with the applicable performance specification (reference.40 CFR Part 60, Appendix B).

(9 VAC 5-50-30, 9 VAC 5-80-1 10, and Condition 12 of the 3/7/07 Permit)

2. Stack Tests - At least once during the term of this pemiit and additionally upon

request by the DEQ, the permittee shall conduct performance tests for the VOC and HAP destruction efficiency of the incinerator controlling VOC and HAP emissions

from the Basecoat 8PE-002 spray booth to demonstrate compliance with the emission limits and control efficiency requirements contained in this pennit. Requested tests

shall be performed, and demonstrate compliance, within 60 days after notice by the

Air Compliance Manager, West Central Regional Office,. that the Department has reason to believe that the facility or a portion of the facility is not in compliance with

the emission limits of this permit. Tests shall be conducted and reported and data

reduced as set forth in 9 VAC 5-50-30 of State Regulations, and the test methods and

procedures contained in each applicable section or subpart listed in 9 VAC 5-50-41 0.

The details of the tests shall be arranged with the Air Compliance Manager, West

Central Regional Office. The permittee shall submit a test protocol at least 30 days

prior to testing. Two copies of the test results shall be submitted to the Air

Compliance Manager, West Central Regional Office within 45 days after test completion and shall confoonn to the test report format enclosed with The New Source

Review pennit.

(9 VAC 5-50-30 G, 9 VAC 5-80-1 10, and Condition 26 of the, 3/7/07 Permit)

3. Stack Tests - At least once during the ten-n of this pen-nit and additionally upon

request by the DEQ (on a booth specific basis), the permittee shall conduct perfon-nance tests for the particulate emissions from spraying or coating in each spray

booth to demonstrate compliance with the emission limits and control requirements

contained in this permit. Requested tests shall be perfonned, and demonstrate

compliance, within 60 days after notice by the Air Compliatice Manager, West Central Regional Office, that the Department has reason to believe that the facility or

a portion of the facility is not in compliance with the emission limits of this permit.

Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 of, State Regulations, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-41 0. The details of the tests shall be arranged with the Air Compliance Manager, West Central Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Air Compliance Manager, West Central Regional Office within 45 days after test completion and shall conform to the test report format enclosed with the New Source Review permit. (9 VAC 5-50-30 G, 9 VAC 5-80-1 1 0, and Condition 27 of the 3/7/07 Permit)

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4. Visible Emissions Evaluation - Upon request by the DEQ, the permittee shall conduct visible emission evaluations in accordance with 40 CFR, Part 60, Appendix A, Method 9 on any spray operation stack(s) to demonstrate compliance with the visible emission limits contained in this permit. Each test shall consist of three (3) sets of twenty-four (24) consecutive observations (at fifteen (15) second intervals) to yield a six (6) minute average. The details of the tests are to be attached with Air Compliance Manager, West Central Regional Office. The tests shall be performed, and demonstrate compliance, within 60 days after notice by the Air Compliance Manager, West Central Regional Office, that the Department has reason to believe that the facility or a portion of the facility is not in compliance with the emission limits of this permit. Two (2) copies of the test results shall be submitted to the Air Compliance Manager, West Central Regional Office within 45 days after test completion and shall conform to the test report format enclosed with the New Source Review permit.  
(9 VAC 5-50-30 G, 9 VAC 5-80-1 1 0, and Condition 29 of the 3/7/07 Permit)

#### E. Reporting

1. Compliance Assurance Monitoring (CAM) Reporting - the permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by General Condition C.3 of this permit to the Air Compliance Manager, West Central Regional Office. Such reports shall include at a minimum:

a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and  
.p

c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.  
(9 VAC 5-80-1 1 0 and 40 CFR 64.9(a))

Other reporting requirements for this section are satisfied by the recordkeeping requirements in this section, the recordkeeping and reporting requirements of the Facility Wide Section, and the General Conditions section.



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## V. Facility Wide Conditions

### A. Limitations

1. Plantwide Emission Limits - Total emissions from the facility, including all truck painting/ coating and all miscellaneous sources, shall not exceed the limits specified below:

Volatile Organic Compounds 532.5 tons/yr

Annual emissions calculated monthly as the sum of the previous consecutive twelve month period.

(9 VAC 5-80-110, 9 VAC 5-50-260, and Condition 24 of the 3/7/07 Permit)

2. Violation of Ambient Air Quality Standard - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-80-110, 9 VAC 5-20-180 1, and Condition 36 of the 3/7/07 Permit)

The permittee shall take the following

Maintenance/Operating Procedures

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

a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

b. Maintain an inventory of spare parts.

c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five

years and shall be made available to DEQ personnel upon request.

(9 VAC 5-80-110, 9 VAC 5-50-20 E, 9 VAC 5-80-110, and Condition 34 of the 3/7/07 Permit)

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#### B. Monitoring

1. Visible Emissions - Each emissions unit with a visible emissions requirement in this permit shall be observed visually at least once each calendar week in which the emissions unit operates. The visual observations shall be conducted using 40 CFR 60

Appendix A Method 22 techniques (condensed water vapor/steam is not a visible emission) for at least a brief time to only identify the presence of visible emissions.

Each emissions unit in the Method 22 technique observation having visible emissions

shall be evaluated by conducting a 40 CFR 60 Appendix A Method 9 visible emissions evaluation (VEE) for at least six (6) minutes, unless corrective action is

taken that achieves no visible emissions. 40 CFR 60 Appendix A Method 9 requires

the observer to have a Method 9 certification that is current at the time of the VEE. If

any of these six (6) minute VEE averages exceed the unit's opacity limitation, a VEE

shall be conducted on these emissions for at least three (3) six-minute periods (at least

18 minutes). All visible emission observations, VEE results, and corrective actions

taken shall be recorded.

(9 VAC 5-80-110)

#### C. Recordkeeping

On Site Records - The permittee shall develop a data base record keeping system, or

equivalent methodology acceptable to the Department, to maintain records of all emission

data and operating parameters necessary to demonstrate compliance with this permit.

VOC emissions should not include the amount of VOC that is not emitted due to VOC

incineration emissions controls, VOC returned to vendor, VOC removed for off-site

disposal, etc. The content and format of such records shall be arranged with the Air

Compliance Manager, West Central Regional Office. These records shall include, but are

not limited to:

1. A record of the VOC content of each material used in the truck assembly and coating

operation based on a certified product data sheet from the material vendor or testing

of the material using an EPA approved testing methodology such as 40 CFR part 60,

Appendix A EPA Reference Method 24 or equivalent.

2. Monthly and annual consumption of VOC from all miscellaneous VOC sources other

than truck painting/coating for the total plant. Annual consumption shall be calculated monthly as the sum of the previous consecutive 12 month period.

3. Monthly and annual consumption of all VOC combined for the total plant. Annual

consumption shall be calculated monthly as the sum of the previous consecutive  
12  
month period.

4. Monthly and annual VOC emissions from all miscellaneous VOC sources for the total  
plant. Annual emissions shall be calculated monthly as the sum of the previous  
consecutive 12 month period.

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5. Monthly and annual emissions of VOC from the total plant (painting/coating and all other miscellaneous sources). Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.

6. Monthly and annual emissions from the total plant of all Hazardous Air Pollutants emitted from production related activities including, but not limited to, total glycol ethers (excluding non-HAP glycol ethers), methyl isobutyl ketone, xylene, toluene, methanol, ethylbenzene, hexamethylene 1,6 diisocyanate, formaldehyde, lead from lead chromate, chromium from lead chromate, and antimony. Annual emissions shall be calculated monthly as the sum of the previous consecutive 12 month period.

7. Results of all stack tests, visible emission evaluations and performance evaluations, used to demonstrate compliance with this permit.

8. Scheduled and unscheduled maintenance, and operator training.

9. Weekly records of required opacity evaluations including all Method 22 evaluations, all Method 9 evaluations, all malfunction adjustments associated with opacity observations, and a record of any spray booths which did not operate during the weekly evaluation period.

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

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 5-50-50, 9 VAC 5-20-180, 9 VAC 5-80-1 10 and/or Conditions 29 and 35 of the 3/7/07 Permit)

#### D. Testing

I . Testing/Monitoring Ports - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations or in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B).

(9 VAC 5-50-30, 9 VAC 5-80-1 10, and Condition 12 of the 3/7/07 Permit)

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E. Reporting

1. Notification for Control Equipment Maintenance - The permittee shall furnish notification to the Air Compliance Manager, West Central Regional Office of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-110, 9 VAC 5-20-180 B, and Condition 31 of the 3/7/07 Permit)

2. Notification for Facility or Control Equipment Malfunction - The permittee shall furnish notification to the Air Compliance Manager, West Central Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or electronic mail. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the break-down, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Air Compliance Manager, West Central Regional Office.

(9 VAC 5-80-110, 9 VAC 5-20-180 C, and Condition 32 of the 3/7/07 Permit)

3. Reports for Facility or Control Equipment Malfunction - Within 30 days of a failure or malfunction that is expected to exist for 30 days or more, and semi-monthly thereafter until the failure or malfunction is corrected, the permittee shall furnish written reports to the Air Compliance Manager, West Central Regional Office

containing the following:

a. Identification of the specific facility that is affected as well as its location and registration number;

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b. The expected length of time that the air pollution control equipment will be out of service;

c. The nature and quantity of air pollutant emissions likely to occur during the break-down period;

d. Measures taken to reduce emissions to the lowest amount practicable during the break-down period;

e. A statement as to why the owner was unable to obtain repair parts or perform repairs that would allow compliance with the provisions of these regulations within 30 days of the malfunction or failure;

f. An estimate, with reasons given, of the duration of the shortage of repairs or repair parts which would allow compliance with the provisions of these regulations; and

g. Any other pertinent information as may be requested by the board.

(9 VAC 5-80-110, 9 VAC 5-20-180 D, and Condition 30 of the 3/7/07 Permit)

Other reporting requirements for this section are satisfied by the recordkeeping requirements in this section and the General Conditions section.

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#### VI. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-120:

Emission Unit No.	Description (9 VAC 5-80-720 B)	Pollutant(s)	Emitted Capacity
FBAD-1	Cleaver Brooks boiler, Model CB-60HP, Lochinvar water heater, n.g.	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	2,500,000 BTU/hr
FBAD-2	heater, CNA 726-080-OF9, n.g.	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	725,000 BTU/hr
FBBRV2A	Two PVI Water Heaters, n-9 each	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	399,000 BTU/hr
FBBRVIA	Eight HV Space heaters	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3,000,000 BTU/hr
FBBRVIIH	Beating Units, n.g. each		
	Portable welders for WELD equipment maintenance	PM, CO, SO <sub>2</sub> , NO <sub>x</sub>	NA
PWI-PW5	Five cold cleaner parts washers	VOC	< 5 tpy
	One small paint spray booth for test panels	VOC	< 5 tpy
PM13TI-8	Eight 175 gallon bulk tanks for paint/solvent	VOC	< 5 tpy
FBABIA	475,200 BTU/hr to Nine Door Heaters	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	1
FBABII	900,800 BTU/hr		
FBAB2A	Twenty-Nine HV		
FBAB2CC	Space Heating Units, 9	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3,460,000 BTU/hr
FBAB3A	Two Air Houses for	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	6,804,000 BTU/hr
FBAB3B	space heating, n.g. each		
FBAB4	Assembly Bldg Boiler	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3,600,000 BTU/hr
FBAB5A	Six MAU Space	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	3,024,000 BTU/hr
FBAB5F	Heating Units, n.g. each		
FBAB6A	Two MAU Space	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	1,814,400 BTU/hr
FBAB6B	Heating Units, n.g. each		
FBSBIA	Two FIV Space		3,456,000 BTU/hr
IFBSBIB	Heating units, n.g.	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	total
'FBWTB	Dyno Water Test Unit	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	388,800 BTU/hr
FBPCIA	Four HV Space	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	8,294,400 BTU/hr
FBPCID	Heating units, n.g. total		
FBPC2A	Six [R Door Heaters,		
FBPC2F	unvented	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	75,000 BTU/hr each
FBPC3A	Two HV Unit MUA		2.203 MMBTU/hr
	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NO <sub>x</sub>	
FBPC3B	021, 022 each		

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Emission Unit Pollutant(s) Emitted Rated Capacity  
Citation I  
Unit No. Description (9 VAC 5-80-720 B) (9 VAC 5-80-720 C)

Old Chassis Booth  
FBPC4 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 5.5 MMBTU/hr  
MUA 023

FBPC5A- Eleven Dravo Door 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 475,200 BTU/hr

FBPC5L Heaters 1,900,800 BTU/hr

FBPC6 One ENG-A HV unit 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 2.12 MMBTU/hr

FBDFIA- Fifteen IR Door 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 75,000 BTU/hr each  
FBDFIO Heaters (vented)

FBDF2A, 40 MMBTU/hr  
Two Building MUA 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub>  
FBDF2B each

WWTP003 Batch waste water 9 VAC 5-80-720B VOC VOC < 5 tpy  
plants

WWTFIA- Three Building Gas 150,000 BTU/hr

WWTFIC Unit Heaters 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> each

WWTF2 One Office HVAC 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 45,000 BTU/hr

BIWWIA- Thirteen IR Door 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 75,000 BTU/hr each  
BIWWIM Heaters (vented)

BIWW2A- Nine Building WA 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 2.25 MMBTU/hr

BIWW21 each

ASWIA - Twenty-Nine IR Door 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 75,000 BTU/hr each  
ASWICC Heaters (vented)

ASW2 One HVAC Unit 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 250,000 BTU/hr

ASW1A Twelve Building 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 2.25 MMBTU/hr

ASW1A M-UA each

FBNBWI HV Unit, n.g 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 625,000 BTU/hr

FBNBW2 HV Unit, n.g 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 842,000 BTU/hr

FBNBW3 Trane RV Unit, n.g 9 VAC 5-80-720C PM, CO, VOC, SO<sub>2</sub>, NO<sub>x</sub> 500,000 BTU/hr

FBNWB4A Three Trane HV 9 VAC 5-80-720C PM, CO, VOC, S02, NOx 250,000 BTU/hr

FBN"4C Units, n.g. each

FBN'"/-B5A Eight dock heaters n.g. 9 VAC 5-80-720C PM, CO, VOC, SO,, NOx 91,200 BTU/hr each

FBNWB5H

FBNWB6A Eight M-UA 002-009 9 VAC 5-80-720C PM, CO, VOC, S02, NOx 3.127 MMIBTU/Iir

FBNWB6H each

FBNWB7A Eight 14V Units 0 1 3- 9 VAC . 5-80-720C PM, CO, VOC, S02, NOx 5'5 MNMTU/hr

FBNWB7H 020 each

FBNWB8A Tilree HV Units 0 1 0- 4.59 MMBTU/hr

9 VAC 5-80-720C PM, CO, VOC, S02, NOx

FBNWB8C 012 each

FBNWB9 One ffV Uiiit 024 9 VAC 5-80-720C PM, CO, VOC, SO,, NOx 3.4 MMBTU/hr

FBNWB I 0 Two 40 ton HVAC 9 VAC 5-80-720C PM, CO, VOC. S02, NOx 1.062 NINMTU/hr

A Units each

FBNWB I I One 60 ton ITV Unit 9 VAC 5-80-720C PM, CO, VOC, S02, NOx 885,000 BTU/fir

FBNWB 12) Four PAC units 9 VAC 5-80-720C PM, CO, VOC, SO,, NOx 123,600 BTU/hr to

A-D 545,900 BTU/hr

FBNWB13 412,000 BTU/hr

A&B Two water heaters 9 VAC 5-80-720C PM, CO, VOC, S02, NOx eacli

'FBNWBI4 Three PAC Units 9 VAC 5-80-720C PM, CO, VOC, S02, NOx 1.318 MMBTU/hr

A,B&C 1.54 NIMBTU /fir

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Unit No.	Description	_(9 VAC 5-80- (9 VAC 5-80-720 C)	Pollutant(s)	Emitted	Rated Capacity
FBNW1315	Three PAC Units	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , N	64,890 BTU/hr to A, B & C	ox 735,420 BTU /hr
FBNWB 1 6	Fl'fteen Door Heaters	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NOx	77,250 BTU/hr	A-0 each
FBNWB 17	Two Paint Dock Door	226,000 BTU/hr			
A&B Heaters	.9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NOx	each		
FBNWB 1 8	One Door Heater	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NOx	875,000 BTU/hr	
FBNWB]9	Two Direct Fired	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NOx	8.24 MMBTU/hr	A&B Bumers each
FBNWB20	One MUA	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NOx	659,200 BTU/hr	
FORKLffT	Forty-Two Gas	9 VAC 5-80-720A	PM, CO, VOC, NOx	NA	Powered Forklifts
PDSLOOI	Diesel Fuel Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
EGEN	Emergency Generator,	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub> , NOx	150 KW (201 bh p)	diesel
GEN0001	Diesel Fuel Tank	9 VAC 5-80-720B	VOC VOC	< 5 t-pv	
'AST-101	SCH 50 Wt Oil Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-102	Trans. Fluid Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST- 1 03	Anti-Freeze Tank-	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-104	15W40 Oil Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-105	75W90 storage tank,	9 VAC 5-80-720B	VOC VOC	< 5 tpy	aluminum, heat-traced
AST- 1 06	Freon 134A Tank	9 VAC 5-80-720B	VO VOC	< 5 tpy	
AST- 1 07	Methanol Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-108	Diesel Fuel Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST- 1 09	Anti-Freeze Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-1 I 0	80W90 Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-1 I I	80W90 Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-] 12	Anti-Freeze Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-201	lvent Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-202	Paint Waste Tank	9 VAC 5-80-720B	VOC voc	< 5 tpy	
AST-301	Gasoline storage tank,	9 VAC 5-80-720B	VOC VOC	< 5 tpy	550 gal near PC bldg
AST-401	- Eight	30,000 gallon			
AST-408	propane storage tanks	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-501	Diesel Fuel Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
AST-502	Diesel Fuel Tank	9 VAC 5-80-720B	VOC VOC	< 5 tpy	
TUBEHTRI ay	Tube Heater	9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub>	NOX 750,000 BTU/hr	
6PE-00 I	Prep/Sand Bootti	9 VAC 5-80-720B	PM PM	< 5 tpy	
121FBE-002	Space Air Unit# I	-S 9 VAC 5-80-720C	PM, CO, VOC, SO <sub>2</sub>	NOx 8.0 MMBT U/hr	
I 12FBE-003	I Space Air Unit# I-N 1	9 VAC 5-80-720C	I PM, CO, VOC, SO <sub>2</sub> , NQx	L9 .5 MMBTU/Iir	

These insignificant 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 5-80-1 10.

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#### Vil. Permit Shield & Streamlined 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 identified as being alternately satisfied by this permit:

Citation	Title of Citation	Description of Streamline
9 VAC 5-40-900	Particulate Matter Standard for Conditions III-A-1 and III-A-6	Fuel Burning Equipment insure that equipment cannot exceed this emission standard
9 VAC 5-40-930	Sulfur Dioxide Standard for Fuel Conditions III-A-1 and III-A-6	Burning Equipment insure that equipment cannot exceed this emission standard-----,,

Burning Equipment insure that equipment cannot exceed this emission standard-----,,

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 10.1-13.14 or 10.1-13.15 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to 10.1-13.07.3 of the Virginia Air Pollution Control Law.  
(9 VAC 5-80-140)

VIII. 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 5-80-11.1)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the effective date of this permit. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

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 11 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 I and F 5 (ii) of section 9 VAC 5-80-80 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline

e  
specified in writing by the Board any additional information identified as bei  
ng  
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)

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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 pennit, 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 5-80-1 1 0 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monito.ring 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 5-80-1 10 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than September 1 and March 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 pen-nit requirements. For purposes of this permit, deviations include, but are not limited to:

(1) Exceedance of emission 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,

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(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this pen-nit.

c. If there were no deviations from permit conditions during the time period, the pennittee shall include a statement in the report that "no deviations from pennit requirements occurred during this semi-annual reporting period."

d. The report shall be sent to the following address:  
Air Compliance Manager  
VA DEQ  
3019 Peters Creek Road  
Roanoke, VA 24019

(9 VAC 5-80-1 10 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 to 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 14(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 5-80-1 10 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.

7. This annual compliance certification shall be sent to the following addresses:

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Air Compliance Manager  
VA DEQ  
3019 Peters Creek Road  
Roanoke, VA 24019

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

(9 VAC 5-80-1 1 0 K.5)

#### E. Permit Deviation Reporting

The permittee shall notify the Air Compliance Manager, West Central Regional Office, within four (4) 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 IX.C.3 of this permit.  
(9 VAC 5-80-1 10 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 after the malfunction is discovered, notify the Air Compliance Manager, West Central Regional Office, by facsimile transmission, telephone, or electronic mail of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Air Compliance Manager, West Central 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

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inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.  
(9 VAC 5-80-1 1 0 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 5-80-1 10 G.2)

#### 1. 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 5-80-1 10 G.3)

#### J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.  
(9 VAC 5-80-190 and 9 VAC 5-80-260)

#### K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9 VAC 5-80-1 10 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 5-80-1 10 G.6)

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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 5-80-1 10 KJ)

#### 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 5-80-3 10 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 5-80-1 10 H and 9 VAC 5-80-3 140 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 tracked 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 5-40-20 E and 9 VAC 5-50-20 E)

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 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 5-80-1 10 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 years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

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

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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 affinnative 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 malftmction, 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 malftmction. 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 pennittee to comply with the deadline. This notification fulfills the requirement of 9 VAC 5-80-1 10 F.2.b to report promptly deviations from permit requirements. This notification does not release the pennittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the pennittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malftmction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

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#### V. Permit Revocation or Termination for Cause

A pen-nit may be revoked or terminated prior to its expiration date if the own er knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee @iolates, fails, neglects or refuses to comply with the terins or conditions of the perinit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 A-rticle 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any penriit for any of the grounds for revocation or termination or for any other violations of these regulations.  
(9 VAC 5-80-190 C and 9 VAC 5-80-260)

#### W. Duty to Supplement or Correct Application

A-any applicant who fails to submit any relevant facts or who has submitted inc orrect 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 infonnation as necessary to address an y 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 ll substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.  
(40 CFR Part 82, Subparts A-F)

#### Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standar ds for Flazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standar ds for Asbestos as it applies to the following: Standards for Demolition and Reno vation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Stand ards for Waste Disposal (40 CFR 61.150).  
(9 VAC 5-60-70 and 9 VAC 5-80-1 10 A. 1)

#### Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a re gulated substance in a process, as determined by 40 CFR 68.115, the permittee shall co mply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

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AA. 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 5-80-1 1 0 1)

BB. 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 5-80-1 10 1)

IX. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by hPA and draft permits by affected states.

1. Odor .....
2. State toxics rule .....

The New Source Review pennit for this facility contains conditions required under these rules in a section designated "state only enforceable." The pennit is attached as an appendix to the statement of legal and factual basis for this permit. The permittee has elected not to explicitly address such requirements in this federal operating permit.

(9 VAC 5-80-1 1 0 N and 9 VAC 5-80-3 )00)

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#### Appendix A - CAM Monitoring Specifications

##### Summary of Instrumentation with CAM Requirements

Control Device (Capture Monitors) Pollutant Emission Unit  
Regenerative Thermal Oxidizer voc Basecoat Booth 8PE-002  
(Differential Pressure Monitor) voc Basecoat Booth SPE-002  
Venturi Scrubber PM Basecoat Booth 8PE-002  
Water Curtain and Dry Filters PM South Chassis Booth I PE-00 I  
Venturi Scrubber and Dry Filters PM North Chassis Booth I PE-002  
Venturi Scrubbers PM Primer Booth 5PE-00 I and 5PE-00 IA  
Venturi Scrubber PM Multi-Tone Booth 8PE-001  
Venturi Scrubber PM Clearcoat Booth 9PE-00 I

Detailed Specifications Follow

Volvo Compliance Assurance Monitoritig (CAM) Plan

Executive Sunimary Tables

Basecoat Booth #2 (8PE-002) Thermal VOC Fume Incinerator

Indicator I Indicator 2 Indicator 3

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Indicator @booth-t'O-Aiiibien, r,e s's@ u re

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Measuremeint The incinerator is equipped with a continuous temperature sensor at the Perform a monthly The robotic zone of the Approach chamber exit to monitor., indicate, and record the chai-nber temperature. burner inspectioll spray booth is equipped

with a continuous pressure

sensor to monitor,

indicate, and record the

pressure differential

between the booth and the

ambient air in the

building.

Indicator The minimum incinerator chamber temperature shall be maintained at or NA The maximum booth-to-

Range above 1480°F with a minimum 0.5 second retention time. building anibicii t pressure

differential shall not

exceed + 0.3" of water.

QIEP The QIP will be reviewed and modified (if necessary) should the An excursion

Threshold iincinerator have excursions greater than 5% of the production time in would be failure to An excursion would be a

any semi-annual reporting period. An excursion is defined as a 1-hr conduct a montlily booth-to-building ambient

average in which the chamber temperature falls below 1480°F. burner inspection . pressure differential

reading of more than +

0.3" of water.

Performance

Criteria:

Data Thermocouples are located in the incinerator chamber as an integral NA Pr  
oper operation of bootli.

Representa- part of the incinerator design. The thermocouples are connected to  
a

tiveness chamber temperature controller. Proper temperature range is a direct  
indicator of proper VOC destruction.

Verification of Continuous readout of measured temperature. NA Continuous read  
out of

Operational  
measured pressure  
Status differential.

QA/QC A digital temperature controller will be used to evaluate the readings of NA. Follow specifications of

Practices and the temperature controller semi-annually. If the digital temperature meter including calibration

Criteria reading differs from the temperature reading of the controller by more than 0.75% of full scale, the temperature controller will be recalibrated

with a multimeter and calibrator to compare the readings

at the controller.

Monitoring continuous readout of

Frequency Temperatures are monitored continuously. One 1-hour average will

be maintained pressure

and Data calculated and maintained on-site, differential. One 1-hour

Collection average will be calculated

Procedure

and maintained on-site.

# South Chassis Paint Booth (IPE-001) Water Wash Spray Booth with Dry Filters

## Indicator 1 Indicator 2

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Indicat

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ressure, Drop.- S B66ifi. 'S ;ray Booth lns`ppctign:.-.,,:...:

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s

Measurement The pressure drop is monitored with a differential pressure transducer. Perform a monthly inspection of the

Approach wet scrubber

Indicator The lower control limit (LCL) for the differential pressure is 0.85 inches of NA

Range water and the upper control limit (UCL) is 5.0 inches of water.

QLP Thr6hold The QIP will be reviewed and modified (if necessary) should the water spray An excursion would be failure to

booth liave excursions greater than 5% of the production time in any semi- conduct a monthly inspectioii on the

annual reporting period. An excursion is defined as a 1-tir average in which wet scrubber.

the differential pressure readings are outside of the LCL and UCL parameters.

Performance

Criteria:

Data The monitoring system consists of a differential pressure transducer NA

Representa- which compares the pressure immediately upstream of the water wash

tiveness to the pressure directly downstream of the water wash. Its minimum

accuracy is ñ2 percent of the entire range.

Verification of -

Operational Database software application shows the readings and logs data NA

Status

QA/QC

Practices and Preventative maintenance and calibrations are performed every 6 months. NA

Criteria The accuracy of the differential pressure transducer is checked against known

standard traceable to N.I.S.T.

Monitoring The signal from the transducer is sampled several times per minute.  
NA  
Frequency and I -minute averages are computed and displayed. The PC then computes a I -hr  
Data Collection average using each 1-minute average and stores it.  
Procedure

North Chassis Paint Booth (IPE-002) Venturi Wet Scrubber with Dry Filters  
Indicator 1 Indicator 2  
Indicator  
Pressure Drop Across Venturi, Scrubber Inlet, Scrubber Outlet, Scrubber  
..... s@p q-  
Measurement The pressure drop is monitored with a differential pressure transducer. Perform a monthly scrubber  
Approach inspection

Indicator The lower control limit (LCL) for the differential pressure is 1.35 inches of water and the upper control limit (UCL) is 5.0 inches of water.

The QIP will be reviewed and modified (if necessary) should the water spray Area excursions would be failure to  
QIP Threshold booth have excursions greater than 5% of the production time in any semi-conductor monthly scrubber  
annual reporting period. An excursion is defined as a 1-hr average in which inspection.  
the differential pressure reading is outside of the LCL and UCL parameters.  
Performance  
Criteria:

Data The monitoring system consists of a differential pressure transducer NA  
Representativeness - which compares the pressure immediately upstream of the water spray  
Y  
tiveness to the pressure downstream of the water spray. Its minimum accuracy

Verification of is ±2 percent of the entire range.  
Database software application shows the readings and logs data NA  
Operational  
Status

QA/QC Preventative maintenance and calibrations are performed every 6 months is. NA  
Practices and The accuracy of the differential pressure transducer is checked against known  
Criteria standard traceable to N.I.S.T.

Monitoring The signal from the transducer is sampled several times per minute.  
NA  
Frequency and 1-minute averages are computed and displayed. The PC then computes a 1-hour  
Data Collection  
Procedure average using each 1-minute average and stores it.

Cab Prime Paint Booth (5PE-001) Venturi Wet Scrubber

Indicator 1 Indicator 2  
Indicator

tu ScrObbeHnspe6tion

:;Pfe@stjrO Dib

.. ..

4

X

Measurement The pressure drop is monitored with a differential pressure transducer. Perform a monthly scrubber approach inspection

Indicator The lower control limit (LCL) for the differential pressure is 1.35 inches of NA

Range water and the upper control limit (UCL) is 5.0 inches of water.

The QfP will be reviewed and modified (if necessary) should the venturi wet An excursion would be failure to

QIEP Threshold scrubber have excursions greater than 5% of the production time in any semi- conduct a monthly scrubber

annual reporting period. An excursion is defined as a 1 -hr average in which inspection.

the differential pressure reading is outside of the LCL and UCL parameters.

Performance

Criteria:

Data The monitoring system consists of a differential pressure transducer NA Representa- which compares the pressure immediately upstream of the water spray

Y tiveness to the pressure directly downstream of the water spray. Its minimum accuracy is 2 percent of the entire range.

Verification of

Operational Database software application shows the readings and logs data NA

A

Status

QA/QC

Practices and Preventative maintenance and calibrations are performed every 6 months. NA

Criteria The accuracy of the differential pressure transducer is checked against known

standard traceable to N.I.S.T.

Monitoring

Frequency and The signal from the transducer is sampled several times per minute. NA

1 -minute averages are computed and displayed. The PC then computes a 1 -hr

Data Collection average using each 1 -minute average and stores it.

Procedure

Multitone Paint Booth (8PE-001) Venturi Wet Scrubber

Indicator 1 Indicator 2

.....  
Indicator  
-ressu r'6b, 'r'op@Ac'rbs@s cVen'tiJri;:Sd46ber@  
S mbb' M l) t  
c eu s ec ion  
'Me'.  
.....

Measurement The pressure drop is monitored with a differential pressure transducer. Perform a monthly scrubber approach inspection

Indicator The lower control limit (LCL) for the differential pressure is 1.35 inches of water and the upper control limit (UCL) is 5.0 inches of water.

QIP Threshold The QIP will be reviewed and modified (if necessary) should the venturi wet scrubber have excursions greater than 5% of the production time in any semi-annual reporting period. An excursion is defined as a 15-minute average in which the differential pressure reading is outside of the LCL and UCL parameters.  
Performance  
Criteria:

Data The monitoring system consists of a differential pressure transducer which compares the pressure immediately upstream of the water spray.

Accuracy to the pressure directly downstream of the water spray. Its minimum accuracy is ±2 percent of the entire range.  
Verification of  
Operational Database software application shows the readings and logs data

Status

QA/QC Preventative maintenance and calibrations are performed every 6 months.  
Practices and The accuracy of the differential pressure transducer is checked against known  
Criteria  
standard traceable to N. I.S.T.

Monitoring The signal from the transducer is sampled several times per minute.  
Frequency and 15-minute averages are computed and displayed. The PC then computes a 15-minute  
Data Collection  
Procedure average using each 15-minute average and stores it.

Basecoat Paint Booth (8PE-002) Venturi Wet Scrubber

Indicator 1 Indicator 2

s Ventur ber.:

..S

Indicator

sur6 Acros' i:

rii er. spection,.,'.,.@@,--.,,

C

Measurement The pressure drop is monitored with a differential pressure transducer. Perfonn a montlily scrubber

Approach inspection

Indicator The lower control lim't (LCL) for the differential pressure is 3.0 inches of water NA

Range and the upper control limit (UCL) is I 0.0 inches of water.

The QFP will be reviewed and modified (if necessary) should the venturi wet An excursion would be failure to

QIEP Threshold scrubber have excursions greater than 5% of the production.time in any semi- conduct a i-noiithly scrubb.er

annual reporting period. An excursion is defined as a I -hr average in which iispectioli.

the differential pressure reading is outside of the LCL and UCL parameters.

Performiance

Criteria:

Data The monitoring system consists of a differential pressure transducer NA

Representa- which compares the pressure immediately upstream of the water spray

tiveness to the pressure directly downstreami of th6 water spray. Its minimum

accuracy is ñ2 percent of the entire range.

Verificatioin of Database software application shows the readings and logs dat a NA

Operational

Status

QA/QC Preventative maintenance and calibrations are performed every 6 months.

NA

Practices and The accuracy of the differential pressure transducer is checked against known

Criteria standard traceable to N.I.S.T.

Monitoring

The signal from the transducer is sampled several times per minute. NA

Frequency and I -minute averages are computed and displayed. The PC then compu tes a I -hr

Data Collection average using each 1-minLite average and stores it.

Procedure



Clearcoat Paint Booth (9PE-001) Venturi Wet Scrubber

Indicator 1 Indicator 2

Indicator

re@@iii@,Dr6b:Acros@,.Vebtil@i,,Sci6bber:.I@,@:"@ Scrub er.

6b M

Measurement The pressure drop is monitored with a differential pressure transducer. Perforiii a inojithly scrubber

Approach inspection

Indicator The lower control limit (LCL) for the differential pressure is 1.35 inches of NA

Range water and the upper control limit (UCL) is 5.0 inclies of water.

QILP Threshold An exctirsn would be differential pressure readijigs otitside of the LCL and An excursion would be failure to

UCL parameters. conduct a monthiv scrubber

inspection.

Performance

Criteria:

Data The monitoring system consists of a differential pressure transducer NA Representa- which coinpare the pressure immediately upstream 6f the water spr ay

tiveness to the pressure directly downstream of the water spray. Its minimum accuracy is ñ2 percent of the entire range.

Verirication of -

Database software application shows the readings and logs data NA

Operational

Status

QA/QC Preventative maintenance and calibrations are performed every 6 months.

NA

Practices and

Criteria The accuracy of the differential pressure transducer is checked again st known

standard traceable to N.1S.T.

Monitoring

The sigiial from the transdticer is sampled several t'mes per i-ninute. NA

I

Frequency and I -minute averages are comptited and displayed. Tile PC then com ptites a I -hr

Data Collection average using each 1-niinLite average and stores it.

Procedure