AIR QUALITY PERMIT

Permit No.:	3711-285-0084-P-01-0	Effective Date: July 27, 2007
Facility Name:	Kia Motors Manufacturing Georgia, Inc. Webb Bartley Road and Gabbettville Road West Point, Georgia 31833 Troup County	
Mailing Address:	1302 Orchard Hill Road LaGrange, GA 30240	
Parent/Holding Company:	Kia Motors	

Facility AIRS Number: 04-13-285-00084

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a construction and operating permit for:

The construction and operation of an automobile and light-duty truck manufacturing plant, including the VPC touchup painting and underbody wax application.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit. This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 17363 received 4/19/07, any other applications upon which this Permit is based; supporting data entered therein or attached thereto; or any subsequent submittals or supporting data; or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 70 pages.

Director Environmental Protection Division

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PART 1.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

1.1 SIP General Requirements

- 1.1.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate this source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection or surveillance of the source.
 [391-3-1-.02(2)(a)10]
- 1.1.2 The Permittee shall not build, erect, install or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged into the atmosphere. [391-3-1-.03(2)(c)]
- 1.1.3 The Permittee shall submit a Georgia Air Quality Permit application to the Division prior to the commencement of any modification, as defined in 391-3-1-.01(pp), which may result in air pollution and which is not exempt under 391-3-1-.03(6). Such application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. The application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity and pollutant emission rates of the plant before and after the change, and the anticipated completion date of the change. [391-3-1-.03(1) through (8)]
- 1.1.4 In cases where conditions of this Permit conflict with each other for any particular source or operation, the most stringent condition shall prevail.
 [391-3-1-.02(2)(a)2]
- 1.1.5 This Permit is not transferable by the Permittee. Future owners and operators shall obtain a new Permit from the Director.[391-3-1-.03(4)]
- 1.1.6 In VOC emission compliance determination(s) involving the exclusion of water presented, organic compounds not defined as VOC's, i.e. "exempt compounds/solvents", shall be treated as water.
 [391-3-1-.02(2)(a)6(iii)]
- 1.1.7 This permit shall become invalid if construction is not commenced within 18 months after the effective date of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Director may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21 PSD]

1.1.8 Unless specifically defined in this permit, terms in this permit shall be defined by 40 CFR63, 40 CFR 60, and the Georgia Rules for Air Quality Control 391-3-1 as applicable.

1.2 Facility Wide Emission Caps and Operating Limits

- 1.2.1 The Permittee shall limit the production rate of automobiles off the final line to no more than 300,000 units/cars during any twelve (12) consecutive months.
 [PSD/NSR Major Source Production Scale]
- 1.2.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the entire facility, volatile organic compounds (VOC) in amounts exceeding 452 tons during any twelve (12) consecutive months.
 [PSD/NSR Major Source Ambient Impact Assessment]
- 1.2.3 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the entire facility, nitrogen oxides (NO_x), in amounts exceeding 109 tons during any twelve (12) consecutive months.
 [PSD/NSR- Major Source Ambient Impact Assessment]
- 1.2.4 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the entire facility, carbon monoxide (CO), in amounts exceeding 99 tons during any twelve (12) consecutive months.[BACT avoidance]

PART 2.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

2.2 Equipment Emission Caps and Operating Limits

Best Available Control Technology – Emission Limits – 52.21

2.2.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere from any process equipment listed below, any gases, which contain particulate matter (PM) in excess of 0.0015 grains per dry standard cubic foot.
 [40 CFR 52.21 – PSD]

1 able 2.2.1-1			
Unit ID	Unit Description	Control Device Description	
VP	VPC Body Wax and Touchup Booths	Dry Filters	
APB1 APB2	Final Repair Booths	Dry Filters	
CWD1	Cavity Wax / Blackout Coating Booth	Dry Filters	
RB01	Touchup Booth	Dry Filters	
UBS1	Sealer/USB/Deadener Work Decks	Dry Filters	
RSD1	Sanding/Repair Work Decks	Dry Filters	
ESD1	E-coat Sanding Deck	Dry Filters	
PSB1	Guide coat (Surfacer) Spray Booth	Wet Scrubbers	
BSB1	Topcoat Basecoat Spray Booth 1	Wet Scrubbers	
BSB2	Topcoat Basecoat Spray Booth 2	Wet Scrubbers	
CSB1	Topcoat Clearcoat Spray	Wet Scrubber PM pre-control	
CSB2	Booths 1 and 2	prior to RTO	
RSB1	Rocker Panel Primer Spray Booth	Dry Filters prior to RTO	

Table 2.2.1-1

2.2.2 The VOC destruction efficiency of the regenerative thermal oxidizer (RTO) shall be no less than 95% at all times that electrodeposition prime coat, guide coat (surfacer), or top coat application are in operation. VOC emissions from the following operations shall be captured and controlled by the RTO: [40 CFR 52.21 – PSD]]

aut 2.2.2-1	
Unit ID	Unit Description
EOV1	Electrodeposition (E-coat) curing oven
POV1	Guide coat (surfacer) curing oven
RSB1	Rocker Panel Primer Spray Booth
ROV1	Rocker Panel Primer Cure Oven
CSB1	Top Coat Clear Coat Spray Booth 1
CSB2	Top Coat Clear Coat Spray Booth 2
TOV1	Top Coat Clear Coat Cure Oven 1
TOV2	Top Coat Clear Coat Cure Oven 2
10,2	Top cout clour cout cute oven 2

Table 2.2.2-1

- 2.2.3 The Permittee shall not discharge or cause the discharge into the atmosphere from the electrodeposition prime coat (E-Coat) operations (Emission Units EDT1, EOV1, and ECZ1), VOC emissions in excess of 0.19 pounds per gallon (0.023 kg/liter) of applied coating solids as averaged on a monthly basis. [40 CFR 52.21 – PSD)]
- 2.2.4 The Permittee shall not discharge or cause the discharge into the atmosphere from guide coat (surfacer) operations (Emission Units PSB1, POV1, and PCZ1), VOC emissions in excess of 2.92 pounds per gallon (0.350 kg/liter) of applied coating solids as averaged on a monthly basis.
 [40 CFR 52.21 PSD]
- 2.2.5 The Permittee shall not discharge or cause the discharge into the atmosphere from top coat (basecoat/clearcoat) operations (Emission Units BSB1, BSB2, BFD1, BFD2, CSB1, CSB2, TOV1, TOV2, TCZ1, TCZ2), VOC emissions in excess of 5.20 pounds per gallon (0.622 lb/liter) of applied coating solids as averaged on a monthly basis.
 [40 CFR 52.21 PSD]
- 2.2.6 The Permittee shall not use or apply rocker panel primer coatings that have a VOC content in excess of 4.7 pounds per gallon coating as applied, averaged on a monthly basis.
 [40 CFR 52.21 PSD]
- 2.2.7 The Permittee shall not use or apply sealers or sound deadeners that have a combined VOC content in excess of 0.45 pounds per gallon as applied, averaged on a monthly basis.
 [40 CFR 52.21 PSD]

- 2.2.8 The Permittee shall not use or apply cavity wax that has a VOC content in excess of 0.3 pounds per gallon as applied, averaged on a monthly basis.
 [40 CFR 52.21 PSD]
- 2.2.9 The Permittee shall not use or apply blackout coatings that have a VOC content in excess of 1.0 pounds per gallon as applied, averaged on a monthly basis.
 [40 CFR 52.21 PSD]
- 2.2.10 The Permittee shall not discharge or cause the discharge into the atmosphere from body wiping, strippable paint booth coatings, and equipment cleaning processes at this plant, combined VOC emissions in excess of 90 tons during any twelve consecutive months. This limit does not include paint gun purge cleaning, production or touchup coating, or windshield cleaner-activator. [40 CFR 52.21 – PSD]
- 2.2.11 The Permittee shall not cause, let, suffer, permit, or allow emissions of NO_x, from each of the hot water heaters (boilers) HW01, HW02, or HW03 to exceed 30 ppm at 3% O₂, dry basis when burning natural gas. No fuels other than natural gas shall be burned in said heaters during the months of May through September of each year. Fuel oil usage shall be limited to 1 million gallons (combined total for all three heaters) during any 12 consecutive months.
 [40 CFR 52.21 PSD BACT, 391-3-1-.02(2)(III) subsumed]
- 2.2.12 The Permittee shall not cause, let, suffer, permit, or allow emissions of NO_x, from each of the direct-fired heaters or indirect-fired heaters listed below to exceed 0.09 lb/MMBtu heat input. No fuels other than natural gas shall be burned in these units.

Emission Unit ID	Description	Approx. Input Capacity (MMBtu/hr)
	Direct-Fired Unit	s
UBS1	USB booth heater	12
SD1, SD2, RSB1	Sealer, RPP booth heater	10
PSB1	Surfacer booth heater 1	19
PSB2	Surfacer booth heater 2	19
BSB1	Basecoat booth heater 1	20
BSB2	Basecoat booth heater 2	20
BFD1	Basecoat flash area heater 1	2
BFD2	Basecoat flash area heater 2	2
CFD1	Clearcoat booth heater 1	8
CFD2	Clearcoat booth heater 2	8
PS1-C	Clean room heater	5
PS1-C2	General shop heater	31
CWD1	Blackout/wax, misc heater	10

Table 2.2.12-1

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RB01	Touchup booth heater	8
Indirect-Fired Process Heaters (each heat exchanger/burner capacity < 10 MMBtu/hr)		
EOV1	E-coat oven	20
ROV1	UBS and RPP oven	12
POV1	Surfacer Oven	20
TOV1	Topcoat Oven 1	17
TOV2	Topcoat Oven 2	17

Best Available Control Technology – Work Practice Requirements – 52.21

- 2.2.13 All the operating limits and/or work practice requirements as specified in Conditions 2.3.5, 2.3.6, 2.3.7, 2.4.9, and 2.4.10 have been deemed as BACT for the VOC emissions from the same affected sources. Consequently, compliance with these operating limits, procedures and/or requirements for the VOC/HAP emissions is considered as compliance with the BACT requirements for the VOC emissions from the same affected sources. [40 CFR 52.21 BACT/NSR Review]
- 2.2.14 The Permittee may not transfer or cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank, unless:
 [40 CFR 52.21 PSD]
 - a. The tank is equipped with all of the following:
 - i. A submerged fill pipe;
 - ii. A Division approved Stage I vapor recovery system that shall remain in good working condition, such as keeping the vapor return opening free of liquid or solid obstructions, and that also shall be leak tight as determined by tests conducted in accordance with test procedures as approved by the Division; and
 - iii. Vents that shall be at least 12 feet in height from the ground and shall have a Pressure/Vacuum vent valve with minimum settings of 8 ounces of pressure and 1/2 ounce of vacuum unless the facility has a CARB certified Stage II vapor recovery system where the CARB executive order explicitly states the settings for the vent valve; and

- b. The vapors displaced from the storage tank during filling are controlled by one of the following:
 - i. The utilization of a vapor-tight vapor return line from the stationary gasoline storage tank(s) to the delivery vessel for each product delivery line that is connected from the delivery vessel to the storage tank(s) and a system that will ensure the vapor line(s) is connected before gasoline can be transferred into the tank(s); or
 - ii. If a manifold connects all stationary gasoline storage tanks vent lines, the utilization of a vapor tight vapor return line from a tank being filled to the delivery vessel. There should be sufficient return capacity to control vapors from all tanks being filled at the time and to prevent release of said vapors from the vent line(s) or other tank openings; or
 - iii. The utilization of a refrigeration-condensation system or a carbon adsorption system that recovers at least 90 percent by weight of the organic compounds in the displaced vapor. An application must be submitted six months prior to the construction of the refrigeration-condensation system or the carbon adsorption system for the facility to control displaced vapors with this method.
- 2.2.15 The Permittee may not transfer or cause or allow the transfer of any volatile organic liquid (other than gasoline) with a maximum true vapor pressure of greater than 3.5 kilopascals from any delivery vessel into any stationary storage tank greater than 4,000 gallons, unless the tank is equipped with submerged fill pipe(s). [40 CFR 52.21 PSD]
- 2.2.16 The Permittee shall comply with the following equipment design and work practice standards as they pertain to any of the cold solvent metal parts cleaners/degreasers at this facility:
 [40 CFR 52.21 PSD]
 - a. Solvent cleaners shall be equipped with a cover to prevent escape of VOC during periods of non-use,
 - b. Solvent cleaners shall be equipped with a device to drain cleaned parts before removal from the unit,
 - c. If the solvent volatility is 0.6 psi or greater measured at 100°F, or if the solvent is heated above 120°F, then one of the following control devices must be used:
 - i. Freeboard that gives a freeboard ratio of 0.7 or greater,
 - ii. Water cover (solvent must be insoluble in and heavier than water);
 - iii. Other systems of equivalent control, such as a refrigerated chiller or carbon adsorption.

- d. Any solvent spray utilized by solvent cleaners must be in the form of a solid, fluid stream and at a pressure which will not cause excessive splashing, and
- e. All waste solvent from solvent cleaners shall be stored in covered containers and shall not be disposed of by a method to allow excessive evaporation into the atmosphere.
- 2.2.17 The Permittee shall store all the used VOC-laden cleaning materials, including shop towels and rags in covered containers immediately after use.
 [40 CFR 52.21 PSD]

2.3 Equipment Federal Rule Standards

<u>40 CFR Part 63, Subpart IIII: National Emission Standards for Hazardous Air Pollutants: Surface</u> <u>Coating of Automobiles and Light-Duty Trucks</u>

2.3.1 On and after the initial startup of the affected sources, the Permittee shall limit, as a single group, combined organic HAP emissions to the atmosphere from EDP primer (E-coat), guide coat (surfacer), topcoat, final repair, glass bonding primer and glass bonding adhesive operations plus all coatings and thinners (excluding deadener materials and for adhesive and sealer materials that are not components of glass bonding systems) used in coating operations added to the affected source pursuant to 40 CFR 63.3082(c), to no more than 0.036 kilogram (kg)/liter (0.30 pound (lb)/gallon) of coating solids deposited during each month, determined according to Conditions 5.2.34 and/or 5.2.35 per 40 CFR 63.3161.

As an alternative to the limit above, the Permittee may comply with the HAP limit of 0.060 kg/liter (0.5 pound /gallon) of coating solids deposited from guide coat (surfacer), topcoat, final repair, glass bonding primer and glass bonding adhesive operations plus all coatings and thinners (excluding deadener materials and for adhesive and sealer materials that are not components of glass bonding systems), provided that emissions from the E-coat oven are captured and controlled (reduced) by 95 percent, or that coatings used in the E-coat process contain no more than 1.0 percent HAP (0.1 percent for any HAP carcinogen) [40 CFR 63.3082, 63.3090, and 63.3092]

For the purpose of this condition, an affected source is the collection of all the items listed below, as used for surface coating of new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks:

- a. All coating operations as defined in 40 CFR 63.3176.
- b. All storage containers and mixing vessels for coatings, thinners, and cleaning materials.
- c. All manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials.
- d. All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

- e. Any additional coating operations, as defined in 40 CFR 63.3176, chosen by the Permittee to include in the affected source herby instead of being subject to the NESHAP for surface coating of miscellaneous metal parts and products (40 CFR Part 63, Subpart MMMM) or for surface coating of plastic parts and products (40 CFR Part 63, Subpart PPPP) which apply coatings to parts intended for use in new automobiles or new light-duty trucks or as aftermarket repair or replacement parts for automobiles or light-duty trucks. Such additional coating operations shall also include:
 - i. All associated storage containers and mixing vessels used for storing or mixing coatings, thinners, and cleaning materials; manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials; and storage containers and manual and automated equipment and containers used for conveying waste materials.
 - ii. All cleaning and purging of equipment associated with the added surface coating operations.

The Permittee shall identify and describe all additions to the affected source made pursuant to paragraph (e) of this condition in the initial notification required in Condition 5.2.14 per 40 CFR 63.3110(b).

- 2.3.2 The Permittee shall limit average organic HAP emissions from all adhesive and sealer materials <u>other than</u> materials used as components of glass bonding systems to no more than 0.010 kg/kg (lb/lb) of the adhesive and sealer material used during each month. Adhesives and sealers that are not components of glass bonding systems and added per 40 CFR 63.3082(c) to the affected source specified in Condition 2.3.1 shall be included in the demonstration of this limit. [40 CFR 63.3090(c) and 63.3090(e)(1)]
- 2.3.3 The Permittee shall limit average organic HAP emissions from all deadener materials to no more than 0.010 kg/kg (lb/lb) of the deadener material used during each month. Deadener materials added per 40 CFR 63.3082(c) to the affected source specified in Condition 2.3.1 shall be included in the demonstration of this limit. [40 CFR 63.3090(c) and 63.3090(e)(2)]

2.3.4 The Permittee shall meet the operating limits applicable to the regenerative thermal oxidizer (RTO) and the associated capture systems by controlling the organic HAP emissions from the affected source as defined in Condition 2.3.1. The Permittee shall establish the operating limits during the performance tests via Condition 3.2.1 per 40 CFR 63.3167. The Permittee shall meet these operating limits at all times during coating operations on and after the establishment of these limits.

[40 CFR 63.3093(b), 63.3168(a) and Table 1 to 40 CFR Part 63, Subpart IIII]

- a. The average combustion temperature of the RTO in any 3-hour period shall not fall below that established during the most recent Division-approved performance test, as monitored per Condition 4.2.1. Until the initial performance test is conducted, the minimum temperature shall be 1400°F.
- b. For each associated capture system that is a permanent total enclosure (PTE):
 - i. The air flow at all times shall flow into the enclosure; and either
 - ii The average facial velocity of air through all natural draft openings in the enclosure shall be at least 200 feet per minute; <u>or</u>
 - iii The pressure drop across the enclosure shall be at least 0.007 inch water column.
- c. For each associated capture system that is not a PTE, the average gas volumetric flow rate or duct static pressure in each duct between a capture device and the RTO inlet in any 3-hour period shall not fall below the average volumetric flow rate or duct static pressure established for that capture device during the most recent Division-approved performance test.
- 2.3.5 The Permittee shall develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners, and cleaning materials used in, and waste materials generated by, all coating operations subject to the applicable HAP emission limits in Conditions 2.3.1, 2.3.2 and 2.3.3 per 40 CFR 63.3090(a) (c), (d) and (e). The plan shall specify practices and procedures to ensure that, at a minimum, the elements specified below are implemented. [40 CFR 63.3094(b)]
 - a. Store all organic-HAP-containing coatings, thinners, cleaning materials, and waste materials in closed containers.
 - b. Minimize the risk of spills of organic-HAP-containing coatings, thinners, cleaning materials, and waste materials.
 - c. Convey organic-HAP-containing coatings, thinners, cleaning materials, and waste materials from one location to another in closed containers or pipes.
 - d. Close mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials when adding to, removing, or mixing the contents.

- e. Minimize organic HAP emissions during cleaning of storage, mixing, and conveying equipment.
- 2.3.6 The Permittee shall develop and implement a work practice plan to minimize organic HAP emissions from cleaning and from equipment purging associated with all coating operations subject to the emission limit in Conditions 2.3.1, 2.3.2 and 2.3.3 per 40 CFR 63.3090(a) (c), (d) and (e). The plan shall, at a minimum, address each of the operations listed below for the use of organic-HAP-containing materials or in which there is a potential for emission of organic HAP.
 [40 CFR 63.3094(c)]
 - a. For vehicle body wipe emissions, using <u>one or more</u> of the techniques listed below or an approved alternative:
 - i. Use of solvent-moistened wipes;
 - ii. Keeping solvent containers closed when not in use;
 - iii. Keeping wipe disposal/recovery containers closed when not in use;
 - iv. Use of tack-wipes; and/or
 - v. Use of solvents containing less than 1 percent organic HAP by weight.
 - b. For coating line purging emissions, using <u>one or more</u> of the techniques listed below or an approved alternative:
 - i. Air/solvent push-out;
 - ii. Capture and reclaim or recovery of purge materials (excluding applicator nozzles/tips);
 - iii. Block painting to the maximum extent feasible; and/or
 - iv. Use of low-HAP or no-HAP solvents for purge.
 - c. For flushing of coating systems, using <u>one or more</u> of the techniques listed below, or an approved alternative.
 - i. Keeping solvent tanks closed;
 - ii. Recovering and recycling solvents;
 - iii. Keeping recovered/recycled solvent tanks closed; and/or
 - iv. Use of low-HAP or no-HAP solvents.
 - d. For cleaning of spray booth grates, using <u>one or more</u> of the techniques listed below or an approved alternative.
 - i. Controlled burn-off;
 - ii. Rinsing with high-pressure water (in place);
 - iii. Rinsing with high-pressure water (off line);
 - iv. Use of spray-on masking or other type of liquid masking; and/or
 - v. Use of low-HAP or no-HAP content cleaners.
 - e. For cleaning of spray booth walls, using <u>one or more</u> of the techniques listed below, or an approved alternative.

- i. Use of masking materials (contact paper, plastic sheet, or other similar type of material);
- ii. Use of spray-on masking;
- iii. Use of rags and manual wipes instead of spray application when cleaning walls;
- iv. Use of low-HAP or no-HAP content cleaners; and/or
- v. Controlled access to cleaning solvents.
- f. For cleaning of spray booth equipment, using <u>one or more</u> of the techniques listed below, or an approved alternative.
 - i. Use of covers on equipment (disposable or reusable);
 - ii. Use of parts cleaners (off-line submersion cleaning);
 - iii. Use of spray-on masking or other protective coatings;
 - iv. Use of low-HAP or no-HAP content cleaners; and/or
 - v. Controlled access to cleaning solvents.
- g. For cleaning of external spray booth areas, using <u>one or more</u> of the techniques listed below, or an approved alternative.
 - i. Use of removable floor coverings (paper, foil, plastic, or similar type of material);
 - ii. Use of manual and/or mechanical scrubbers, rags, or wipes instead of spray application;
 - iii. Use of shoe cleaners to eliminate coating track-out from spray booths;
 - iv. Use of booties or shoe wraps;
 - v. Use of low-HAP or no-HAP content cleaners; and/or
 - vi. Controlled access to cleaning solvents.
- h. For emissions from housekeeping measures not aforementioned, using <u>one or more</u> of the techniques listed below, or an approved alternative.
 - i. Keeping solvent-laden articles (cloths, paper, plastic, rags, wipes, and similar items) in covered containers when not in use;
 - ii. Storing new and used solvents in closed containers; and/or
 - iii. Transferring of solvents in a manner to minimize the risk of spills.

Notwithstanding the requirements aforementioned, if the type of coatings used in any surface coating operations subject to the requirements of this condition are of such a nature that the need for one or more of the practices aforementioned is eliminated, then the plan may include approved alternative or equivalent measures that are applicable or necessary during cleaning of storage, conveying, and application equipment.

2.3.7 As provided in 40 CFR 63.6(g), the Division may grant the Permittee permission to use an alternative to the work practice standards in Conditions 2.3.5 and 2.3.6. The work practice plans developed in accordance with Conditions 2.3.5, 2.3.6 and this condition shall be incorporated into Title V permit when deemed as part of the BACT for VOC emissions from the affected source and/or other operations/source. Copies of the work practice plans, as well as plans developed within the preceding 5 years if applicable, shall be available onsite for inspection and copying by the permitting authority. [40 CFR 63.3094(d) thru (f)]

<u>40 CFR Part 60, Subpart MM: Standards of Performance for Automobile & Light Duty Truck Surface</u> <u>Coating Operations</u>

- 2.3.8 The Permittee shall not discharge or cause the discharge into the atmosphere from the e-coat operation VOC emissions in excess of 0.17 kilogram of VOC per liter of applied coating solids (monthly average). Compliance with Condition 2.2.3 indicates compliance with this limit. [40 CFR 60.392(a)]
- 2.3.9 The Permittee shall limit the emissions of VOC from the guide coat (surfacer) and rocker panel primer operation to no more than 1.40 kilograms of VOC per liter of applied coating solids (monthly average). The guide coat operation consists of spray booth PSB1, oven POV1, cooling zone PCZ1, spray booth RSB1, backup spray booth RSB2, and oven ROV1. [40 CFR 60.392(b)]
- 2.3.10 The Permittee shall limit the emissions of VOC from each of the top coat operations to no more than 1.47 kilograms of VOC per liter of applied coating solids (monthly average). The top coat operation consists of basecoat booths BSB1 and BSB2, Heated dryers BFD1 and BFD2, Clearcoat booths CSB1 and CSB2, Clearcoat flash zones CFD1 and CFD2, and Topcoat ovens TOV1 and TOV2. [40 CFR 60.392(c)]

<u>40 CFR Part 63, Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for</u> <u>Industrial, Commercial & Institutional Boilers & Process Heaters</u>

- 2.3.11 Upon startup of each of the fire-tube boilers/hot water heaters HW01, HW02, and HW03, the Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD as they pertain to units defined as New, Small, Liquid Fuel Units firing only natural gas, LPG, and/or distillate fuel oil (no residual fuel oil).
 [40 CFR 63.7506(b)]
- 2.3.12 Upon startup of each of the indirect process heaters EOV1, ROV1, POV1, TOV1, and TOV2, the Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart DDDDD as they pertain to units defined as New, Small, Gaseous Fuel Units. [40 CFR 63.7506(c)]

<u>40 CFR Part 60, Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal</u> <u>Combustion Engines</u>

- 2.3.13 The accumulated maintenance check and readiness testing time for <u>each</u> of the emergency stationary diesel engines subject to 40 CFR Part 60, Subpart IIII, shall not exceed 100 hours per year. Any operation other than emergency power generation, fire extinguishing, and maintenance check and readiness testing is prohibited. [40 CFR 60.4211(e)]
- 2.3.14 Each of the emergency stationary diesel engines subject to 40 CFR Part 60, Subpart IIII, shall be operated and maintained according to the manufacturer's written specifications/instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine. The Permittee may only change engine/generator settings that are permitted by the manufacturer. [40 CFR 60.4206 & 60.4211(a)]
- 2.3.15 Each of the emergency stationary diesel engines subject to 40 CFR Part 60, Subpart IIII, and any associated control devices if applicable, shall be installed and configured according to the manufacturer's written instructions.[40 CFR 60.4211(c)]
- 2.3.16 On and after startup of the operation, each of the stationary emergency diesel engines, shall comply with the applicable emission limits of 40 CFR Part 63, Subpart IIII: "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" during the entire life of the engine.
 [40 CFR 60.4205 & 60.4206]

2.3.17 The Permittee shall operate each of the stationary emergency diesel engines subject to 40 CFR Part 60, Subpart IIII, using diesel fuel that contains no more than 0.5% of sulfur by weight from startup of the engines. Beginning on October 1, 2007, the Permittee shall only use diesel fuel that has a maximum sulfur content of 500 parts per million (ppm) (0.05% by weight) and either a minimum cetane index of 40 or maximum aromatic content of 35 volume percent. Beginning on October 1, 2010, the Permittee shall only use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015% by weight) and either a minimum cetane index of 40 or maximum percent. [40 CFR 60.4207]

<u>40 CFR Part 60, Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units</u>

2.3.18 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A – "General Provisions" and 40 CFR 60 Subpart Dc – "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of the boilers/hot water heaters HW01, HW02, and HW03.
[40 CFR 60 Subpart Dc]

[40 CFR 60 Subpart Dc]

2.3.19 Hot water heaters HW01, HW02, and HW03 shall be fired with only natural gas, propane and/or distillate fuel oil containing no more than 0.3% of sulfur, by weight. Distillate fuel oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, "*Standard Specification for Fuel Oils.*"
[40 CFR 60.42c(d)]

40 CFR Part 63 Subpart EEEE: National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution

2.3.20 The Permittee shall comply with all applicable provisions of 40 CFR 63 Subpart EEEE for any organic liquid (non-gasoline) storage containers. Tanks with capacities greater than 10,000 gallons containing organic liquid with a HAP vapor pressure greater than 0.1 psia shall comply with the control requirements of 40 CFR 63.2346. Methanol windshield wiper fluid exceeds this vapor pressure threshold. [40 CFR 63 Subpart EEEE]

2.4 Equipment SIP Rule Standards

Georgia Rule 391-3-1-.02(2)(b): Visible Emissions

2.4.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the manufacturing processes, any visible emissions which exhibit opacity equal to or greater than forty (40) percent, unless otherwise specified. [391-3-1-.02(2)(b)]

Georgia Rule 391-3-1-.02(2)(e): Particulate Emissions from Manufacturing Processes

2.4.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere from any manufacturing processes in this facility, any gases which contain particulate matter (PM) in excess of the rate derived from $E = 4.1P^{0.67}$ at production rates up to including 30 tons per hour, and $E = 55P^{0.11} - 40$ at production rates over 30 tons per hour, where E equals the allowable particulate emission rate in pounds per hour and P equals the process weight input rate in tons per hour. [391-3-1-.02(2)(e)]

Georgia Rule 391-3-1-.02(2)(d): Fuel Burning Equipment

- 2.4.3 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the hot water heaters HW01, HW02, or HW03, any gases which contain fly ash and/or other particulate matter in excess of the rate derived from $P = 0.5(10/R)^{0.5}$ where P equals the allowable weight of emissions of fly ash and/or other particulate matter in pounds per million BTU heat input and R equals heat input of the boiler in million BTU per hour. [391-3-1-.02(2)(d)(2)(ii)]
- 2.4.4 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the hot water heaters HW01, HW02, or HW03, any visible emissions which exhibit opacity equal to or greater than twenty (20) percent except for one six minute period per hour of not more than twenty-seven (27) percent opacity. [391-3-1-.02(2)(d)3.]

Georgia Rule 391-3-1-.02(2)(g): Sulfur Dioxide

2.4.5 The Permittee shall burn only natural gas, propane and/or distillate fuel oil in all combustion sources/units at this facility, unless otherwise specified. [391-3-1-.03(2)(c), 391-3-1-.02(2)(g) subsumed]

<u>Georgia Rules for Air Quality Control 391-3-1-.02(2)(mmm): NO_x Emissions from Stationary Gas</u> <u>Turbines & Stationary Engines Used to Generate Electricity</u>

2.4.6 The Permittee shall operate <u>each</u> of the stationary emergency diesel generators only as "emergency standby stationary engines" and only when electric power from the local utility is not available. The accumulated operating time for each of the generators shall be less than 200 hours during any period of twelve (12) consecutive months. [391-3-1-.02(2)(mmm)4.(i)]

Georgia Rule 391-3-1-.02(2)(t): VOC Emissions from Surface Coating of Automobiles & Light-Duty <u>Trucks</u>

- 2.4.7 The Permittee shall not cause, let, permit, suffer or allow the emissions of VOC from this facility to exceed:
 - a. 1.2 pounds of VOC per gallon of coating excluding water, as a monthly weighted average, from each electrophoretic (E-coat) applied prime operation;
 - b. 15.1 pounds of VOC per gallon of applied coating solids, as a daily weighted average, from each spray prime operation (includes surfacer and rocker panel primer)
 - c. 15.1 pounds of VOC per gallon of applied coating solids, as a daily weighted average, from each topcoat operation;
 - d. 4.8 pounds of VOC per gallon of coating delivered to the coating applicator from each final repair operation. If any coating delivered to the coating applicator contains more than 4.8 pounds of VOC per gallon of coating, the limit shall be 13.8 pounds of VOC per gallon of coating solids sprayed, as a daily weighted average.
 - e. 3.5 pounds of VOC per gallon of sealer, excluding water, delivered to an applicator that applies sealers in amounts less than 25,000 gallons during a 12 consecutive month period;

- f. 1.0 pound of VOC per gallon of sealer, excluding water, delivered to a coating applicator that applies sealers in amounts greater than 25,000 gallons during a 12 consecutive month period;
- g. 3.5 pounds of VOC per gallon of adhesive, excluding water, delivered to an applicator that applies adhesives, except body glass adhesives;
- h. 6.9 pounds of VOC per gallon of cleaner, excluding water, delivered to an applicator that applies cleaner to the edge of body glass prior to priming;
- i. 5.5 pounds of VOC per gallon of primer, excluding water, delivered to an applicator that applies primer to the body glass or to the body to prepare the glass and body for bonding;
- j. 1.0 pound of VOC per gallon of adhesive, excluding water, delivered to an applicator that applies adhesive to bond body glass to the body; and
- k. 3.5 pounds of VOC per gallon of material, excluding water, for all other materials not subject to some other emission limitation stated in this paragraph.

The emission limits aforementioned shall be achieved by the application of low solvent technology or a system demonstrated to have equivalent control efficiency on the basis of pounds of VOC per gallon of solids. [391-3-1-.02(2)(t)]

- 2.4.8 The Permittee shall not cause, let, permit, suffer or allow the emissions of VOC from the use of wipe-off solvents to exceed 1.0 pound per unit of production, as a rolling 12-month average. Wipe-off solvents shall include those solvents used to clean dirt, grease, excess sealer and adhesive, or other foreign matter from the car body in preparation for painting or other production-related operation. [391-3-1-.02(2)(t)]
- 2.4.9 The Permittee shall not cause, let, permit, suffer or allow the emission of VOC from solvents used to purge, flush or clean paint application systems including paint lines, tanks and applicators, unless such solvents are captured to the maximum degree feasible by being directed into containers that prevent evaporation into the atmosphere. [391-3-1-.02(2)(t)]
- 2.4.10 The Permittee shall not store solvents or waste solvents in drums, pails, cans or other containers unless such containers have air-tight covers which are in place at all times when materials are not being transferred into or out of the container. The solvents or waste solvents shall not be disposed of or transferred by any method, which allows the excessive evaporation of the solvent(s) into the atmosphere. [391-3-1-.02(2)(t)]

- 2.4.11 The Permittee shall not cause, let, permit, suffer or allow the emissions of VOC from the cleaning of oil and grease stains on the body shop floor to exceed 0.1 pounds per unit of production.[391-3-1-.02(2)(t)]
- 2.4.12 The Permittee shall, during all periods of the operation of any coating line(s) in which the RTO VOC reduction credit is needed to comply with any applicable emission limit(s) in this subsection, operate the RTO and associated emission capture system(s) serving the coating line(s) in accordance with Condition 2.3.4, and keep the burner temperature set point of the RTO at such level that it allows the maintenance of the RTO combustion temperature at or greater than that established during the most recent Division approved compliance performance test(s) at which destruction efficiency was determined. [391-3-1-.02(2)(t) & 391-3-1-.02(2)(a)10.]

PART 3.0 REQUIREMENTS FOR PERFORANCE AND COMPLIANCE TESTING

3.1 General Testing Requirements

- 3.1.1 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 2.2, 2.3, and 2.4 which pertain to the emission units listed in Section 2.1 are as follows:
 - a. Method 1or 1A for the determination of sample point locations;
 - b. Method 2, 2A, 2C, 2D, 2F, or 2G for the determination of flow rate;
 - c. Method 3, 3A, or 3B for the determination of stack gas molecular weight;
 - d. Method 4 for the determination of stack gas moisture;
 - e. Method 5 for the determination of PM emissions;
 - f. Method 9 and the procedures contained in Section 1.3 of the above reference document for the determination of opacity;
 - g. Method 10, 10A or 10B for the determination of CO emissions (using ASTM D6522-00 when natural gas is the fuel)
 - h. Method 24 for the determination of the volatile matter content, water content, density, volume solids, and weight solids of surface coatings;
 - i. Method 25 for the determination of total gaseous nonmethane organic emissions as carbon.
 - j. Method 204 for criteria for and verification of a permanent or temporary total enclosure.
 - k. Method 300 for the determination of surface coating transfer efficiency.
 - 1. Method 311 for the determination of HAP content of surface coatings, solvents and other VOC materials.
 - m. ASTM Method D2697–86, "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings" (ref. 40 CFR 63.14), or ASTM Method D6093– 97, "Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer" to determine the volume fraction of coating solids for each coating.

- n. ASTM Method D5066–91 (Re-approved 2001), "Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis" or the guidelines presented in "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA–450/3–88–018. In determining compliance with the emission limits in Section 2.112 of the above referenced document and Condition 2.4.7, the Permittee shall follow the applicable procedures in EPA-450/3-88-018: Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoal for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations.
- o. ASTM Method D1475–98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products", or test method A or test method B of ASTM Method D5965-02, "Standard Test Methods for Specific Gravity of Coating Powders" for the determination of density of coatings
- p. Method 7 or 7E for the determination of NOx emissions

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable. [391-3-1-.02(3)(a)]

- 3.1.2 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division ("Division"). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
- 3.1.3 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.
- 3.1.4 All required continuous monitoring system(s) shall be installed, calibrated and operating in accordance with the applicable manufacturer specifications and/or specifications in applicable federal and/or state regulations when any performance test(s) is conducted. [391-3-1-.02(3)(a)]
- 3.1.5 Should production rate(s) increase above the rate(s) at which the acceptable performance test(s) was made, the Division may require that the relevant emission control system(s) be tested for compliance at a higher production rate.
 [391-3-1-.02(3)(a)]

- 3.1.6 The Permittee shall submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in 63.10(d)(2).
- 3.1.7 The Permittee shall submit reports of transfer efficiency tests no later than 60 days after completing the tests as specified in § 63.10(d)(2) unless specified otherwise. 63.10(d)(2).

3.2 Specific Testing Requirements

40 CFR Part 63, Subpart IIII Testing Requirements

3.2.1 Within 180 days of the initial startup of the affected sources in Condition 2.3.1, the Permittee shall conduct a performance test of each emission capture system and add-on emission control device involved according to the applicable requirements in 40 CFR 63.7(e)(1) and 63.3164 through 40 CFR 63.3166. The performance test shall demonstrate compliance with applicable emission limits, and establish the operating limits required by Condition 2.3.4 per 40 CFR 63.3093. The Permittee shall meet the following requirements during the performance test: [40 CFR 63.3160, 63.3164 thru 63.3167]

- a. All emission capture systems, add-on control devices, and continuous parameter monitoring system (CPMS) involved shall be installed and operating no later than the applicable compliance date.
- b. The performance test shall be conducted under representative operating conditions for the coating operation(s) involved. Coating operations during periods of startup, shutdown, or malfunction, and during periods of non-operation do not constitute representative conditions. The Permittee shall record the process information that is necessary to document operating conditions during the test(s) and explain why the conditions represent normal operation.
- c. The performance test(s) shall be conducted when the emission capture system(s) and add-on control device(s) involved are operating at a representative flow rate, and the add-on control device(s) is operating at a representative inlet concentration. The Permittee shall record information that is necessary to document emission capture system(s) and add-on control device(s) operating conditions during the test(s) and explain why the conditions represent normal operation.
- d. The Permittee shall use the applicable presumptions, procedures and test methods specified in 40 CFR 63.3165 to determine the capture efficiency of each emission capture system involved and the corresponding operating limits/parameters of the system per 40 CFR 63.3165.

- e. The Permittee shall use the applicable procedures and test methods specified in 40 CFR 63.3166 to determine the emission destruction or removal efficiency of each emission add-on control device and the corresponding operating limits/parameters of the control device per 40 CFR 63.3167. The Permittee shall conduct three test runs as specified in 40 CFR 63.7(e)(3), and each test run must last at least one (1) hour.
- 3.2.2 Pursuant to Condition 3.2.1, the Permittee shall conduct performance testing to determine the VOC destruction efficiency of the regenerative thermal oxidizer (RTO). During the test(s), the combustion chamber temperature shall be monitored and recorded using the equipment required in Condition 4.2.1, and the records submitted along with test results. [391-3-1-.02(3)(a)]
- 3.2.3 Pursuant to Condition 3.2.1, the Permittee shall conduct performance testing to determine the capture efficiency of each capture system exhausting to RTO. Capture efficiency testing shall be conducted in accordance with the procedures specified in 40 CFR 63.3165. During the test(s), the Permittee shall monitor and record either the gas volumetric flow rate or duct static pressure in each individual capture system prior to merging (manifolding) of ductwork using the devices required in Condition 4.2.2, and submit the records along with the test results.

The capture efficiency testing shall, at a minimum, sufficiently determine the portion of VOC applied in a coating application area that is captured (either from within the application area or from the curing oven) and routed to the RTO, such as the portion of VOC used in the E-Coat tank that is captured in the E-Coat oven. Furthermore, the capture testing plan shall address VOC from adhesive bonding, sealers, and deadeners that are expected to be released in the E-coat oven, and rocker panel primer cure oven. [391-3-1-.02(3)(a)]

3.2.4 Within 180 days of the initial startup of the affected sources in Condition 2.3.1, the Permittee shall determine the transfer efficiency of the surface coating spray operations in accordance with 40 CFR 63.3161(g). Such a determination shall be made on each paint spray booth subject to 40 CFR 63 Subpart IIII or 40 CFR 60 Subpart MM, including, but not limited to the sources listed below, unless an alternative determination as allowed by 40 CFR 63 IIII is approved by the Division.

Table 3.2.4-1	
Spray Booth	Unit ID
Rocker Panel Primer	RSB1
Surfacer (Guide coat)	PSB1
Top Coat Basecoat 1	BSB1
Top Coat Basecoat 2	BSB2
Top Coat Clear coat 1	CSB1
Top Coat Clear Coat 2	CSB2
Clear Coat Flash 1 (manual spray)	CFZ1
Clear Coat Flash 2 (manual spray)	CFZ2
Touchup	RB01
Cavity Wax & Blackout	CWB1
VPC underbody wax	VP-BW
VPC final touchup	VP-TU

Other Testing Requirements

- 3.2.5 Within 180 days of the initial startup of each of the hot water heaters HW01, HW02 and HW03, the Permittee shall conduct performance test(s) on said unit to determine emissions of nitrogen oxides (NOx) and demonstrate initial compliance with Condition 2.2.11. [391-3-1-.02(3)(a)]
- 3.2.6 Within 180 days of the initial startup of the facility, the Permittee shall conduct a performance test on at least one (1) representative direct or indirect–fired heater from Table 2.2.12-1 to determine emissions of nitrogen oxides (NOx). [391-3-1-.02(3)(a)]
- 3.2.7 Within 180 days of the initial startup of the facility, the Permittee shall conduct a particulate matter performance test on each wet scrubber controlling the surfacer (guide coat) spray booth, and the basecoat spray booths. During the tests, the Permittee shall measure and record the scrubbant supply pump pressure of each wet scrubber at a frequency of once per 15 minutes, and submit the records (and established average pressure) along with the test results. [391-3-1-.02(3)(a)]

PART 4.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

4.1 General Monitoring Requirements

4.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service. [391-3-1-.02(6)(b)1]

4.2 Specific Monitoring Requirements

40 CFR Part 63, Subpart IIII

- 4.2.1 The Permittee shall install, calibrate and maintain and operate continuous parameter monitoring systems (CPMS) to continuously monitor and record the gas/combustion temperature of the RTO. In doing so, the Permittee shall comply with the following requirements for the combustion temperature CPMS: [40 CFR 63.3168(c)]
 - a. Install the gas temperature monitor/CPMS in the firebox of the RTO or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.
 - b. Meet the following requirements:
 - i. Locate the gas temperature sensor in a position that provides a representative temperature.
 - ii. Use a temperature sensor with a measurement sensitivity of 4°F or 0.75% of the temperature value, whichever is larger.
 - iii Shield the temperature sensor system from electromagnetic interference and chemical contaminants.
 - iv. If a gas temperature chart recorder is used, it must have a measurement sensitivity in the minor division of at least 20°F.
 - v. Perform an electronic calibration at least semiannually according to the manufacturer's owners manual, and then conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 30°F of the process temperature sensor reading
 - vi Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.
 - vii. At least monthly, inspect components for integrity and electrical connections for continuity, oxidation, and galvanic corrosion.

- 4.2.2 The Permittee shall install, calibrate, maintain, and operate CPMS to continuously monitor and record the operating parameters of each capture system feeding the RTO in accordance with and allowed by Table 1 to 40 CFR 63 Subpart IIII. For the clearcoat spray booths, the duct pressure or airflow rate shall be monitored on the RTO duct at a point downstream of the split to re-circulate the air. In doing so, the Permittee shall comply with the following requirements for the CPMS involved: [40 CFR 63.3168(g)]
 - a. For each CPMS measuring gas flow, the Permittee shall meet the following requirements:
 - i. Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.
 - ii. Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
 - iii. Conduct a flow sensor calibration check at least semiannually.
 - iv. At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.
 - b. For each CPMS measuring pressure drop, the Permittee shall meet the following requirements:
 - i. Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening that is being monitored.
 - ii. Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.
 - iii. Check pressure tap pluggage daily.
 - iv. Using an inclined manometer with a measurement sensitivity of 0.0002 inch water column, check gauge calibration quarterly and transducer calibration monthly.
 - v. Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum, operating pressure range or install a new pressure sensor.
 - vi. At least monthly, inspect components for integrity, electrical connections for continuity, and mechanical connections for leakage.

- 4.2.3 The Permittee shall meet the following requirements for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.[40 CFR 63.3168(b)]
 - a. Monitor or secure the valve or closure mechanism controlling the bypass line in a non-diverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism shall meet one of the requirements specified in paragraphs (i) through (iv) of this condition.
 - i. Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position shall be recorded, as well as every time the flow direction is changed. The flow control position indicator shall be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.
 - ii. Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. The Permittee shall visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.
 - iii. Ensure that any bypass line valve is in the closed (non-diverting) position through monitoring of valve position at least once every 15 minutes. The Permittee shall inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.
 - iv. Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. The Permittee shall inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.
 - b. If any bypass line is opened, the Permittee shall include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in Condition 5.2.15.

- 4.2.4 The Permittee shall install, operate, and maintain each CPMS specified in Conditions 4.2.1 and 4.2.2 according to the requirements of subparagraphs (a) through (f) of this condition, and each CPMS specified in Condition 4.2.3 according to the requirements of subparagraphs (c) through (e) of this condition. [40 CFR 63.3168(a)]
 - a. The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. Each hour of CPMS operation shall have a minimum of four equally spaced successive cycles.
 - b. The Permittee shall determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.
 - c. The Permittee shall record the results of each inspection, calibration, and validation check of the CPMS.
 - d. The Permittee shall maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.
 - e. The Permittee shall operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks, and required zero and span adjustments).
 - f. The Permittee shall not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, outof-control periods, or required quality assurance or control activities when calculating data averages. The Permittee shall use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring systems is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

40 CFR Part 60, Subpart Dc

4.2.5 The Permittee shall install, calibrate, maintain and operate natural gas and distillate fuel oil consumption meters on each hot water heater HW01, HW02, and HW03. As allowed by Subpart Dc, the Permittee may propose an alternative protocol for monitoring fuel usage. The proposal shall be submitted in writing to the Division for review and final approval. [40 CFR 60.48c(g)]

40 CFR Part 60, Subpart IIII & Georgia Rule (mmm)

4.2.6 Each of the emergency stationary diesel generators and fire pump engines shall be equipped with a non-resettable hour meter to track the number of hours operated during any type of operation and during each calendar month. The Permittee shall record the time of operation of each generator and engine and the reason the generator or engine was in operation during that time. [40 CFR 60.4209(c), 60.4214(b) & 391-3-1-.02(2)(mmm)4.(i)]

Georgia Rule 391-3-1-.02(2)(lll)

4.2.7 The Permittee shall, each calendar year, monitor emissions of nitrogen oxides (NO_x) from hot water heaters HW01, HW02, and HW03 by performing a tune-up for each boiler to demonstrate compliance with the NO_x concentration limit of Condition 2.2.11 using the following procedures:

[391-3-1-.02(2)(lll), PTM Section 2.119]

- The tune-up shall be performed no earlier than March 1 and no later than May 1 of a. each calendar year. In the case of startups that occur after May 1 but before September 30, tune-ups shall be performed no later than 120 hours after startup.
- The tune-up shall be performed by using the manufacturer recommended settings for b. reduced NO_x emissions or by using a NOx analyzer. Adjustments shall be made, as needed, so that NOx emissions are reduced in a manner consistent with good combustion practices and safe fuel-burning equipment operation.

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- c. Following the adjustments, or determination that adjustments are not required, the Permittee shall perform a minimum of three emissions measurement runs to demonstrate that the emissions are less than or equal to the NO_x concentration limit of Condition 2.2.11. Each measurement run shall be a minimum of 30 minutes in length and shall measure the average NO_x concentration over the measurement duration. Following any run which results in an average NO_x concentration that exceeds the NO_x limit of Condition 2.2.11, the Permittee shall make adjustments to the boiler and conduct a new set of measurement runs within one day. Subsequent adjustments followed by measurement runs shall be continued until the results of 3 consecutive test runs do not exceed the NO_x concentration limit of Condition 2.2.11.
- d. All measurements of NO_x and oxygen concentrations in paragraphs b. and c. of this condition shall be conducted using procedures of the American Society for Testing and Materials (ASTM) Standard Test Method for Determination of NO_x, Carbon Monoxide (CO), and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, ASTM D 6522-00; procedures of Gas Research Institute Method GRI-96/0008, EPA/EMC Conditional Test Method (CTM-30) Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers ASTM D 6522-00; procedures of Gas Research Institute Method GRI-96/0008, EPA/EMC Conditional Test Method (CTM-30) Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers and Process Heaters Using Portable Analyzers; or procedures of EPA Reference Method 7E and 3A.
- e. The Permittee shall maintain records of all tune-ups performed in accordance with this condition. These records shall include the following:
 - i. date and time the tune-up was performed
 - ii. the boiler settings for each test run
 - iii. the average NOx concentration (in ppm at 3% O2, dry basis) for each test run
 - iv. what operating parameters were adjusted to minimize NOx emissions
 - v. an explanation of how the final (compliant) settings were determined
- f. Following the tune-up, from the period May 1 through September 30 of each year, the Permittee shall operate each affected boiler using the settings determined during the annual tune-up. If no parameters can be monitored to indicate the performance of a specific boiler, the Permittee shall certify that no adjustments have been made to the boiler by the Permittee and/or any third party since the most recent successful tune-up was completed. This certification shall be made in writing no later than October 15 of each year and shall be maintained with the records required by paragraph e. of this condition.
- g. If a boiler is capable of operating for 3 consecutive test runs with average NO_x concentrations of less than or equal to 15 ppm corrected to 3 percent oxygen, the Permittee may conduct the next subsequent tune-up in the fourth calendar year following the demonstration of 15 ppm or less. Performance of tests and tune-ups, maintenance of records, and subsequent boiler operation shall otherwise be conducted as described in paragraphs a through f of this condition. The Permittee shall continue to make annual certifications of no adjustments since the previous tune-up.

Particulate Matter Monitoring, Work Practice Standards, and 391-3-1-.02(2)(t)

- 4.2.8 The Permittee shall install, calibrate, maintain, and operate pressure-monitoring devices for the measurement of scrubbant supply pump pressure in each wet scrubber serving the surfacer (guide coat) booth, and the top coat basecoat booths. Pressure shall be recorded once per operating day. [391-3-1-.02(6)(b)1]
- 4.2.9 The Permittee shall perform monthly inspections to ensure compliance with the work practice standards of Conditions 2.2.16, 2.3.5, 2.3.6, 2.3.7, 2.4.9, and 2.4.10. Inspection reports shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry. [391-3-1-.02(6)(b)1]
- 4.2.10 The Permittee shall inspect and replace the dry particulate matter exhaust filters serving paint spray booths, sanding or polishing booths/stations in accordance with manufacturer recommendations or locally prepared maintenance plans. [391-3-1-.02(6)(b)1]
- 4.2.11 The Permittee shall, each time that gasoline is transferred to a gasoline storage tank, verify and keep a record that: [391-3-1-.02(6)(b)1]
 - a. the vapor return line is properly sealed, and
 - b. the Stage I recovery system (approved by the Division) is in good working condition.

PART 5.0 RECORD KEEPING, COMPLIANCE DEMONSTRATION AND REPORTING REQUIREMENTS

5.1 General Record Keeping and Reporting Requirements

- 5.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry. [391-3-1-.02(6)(b)1(i)]
- 5.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.

[391-3-1-.02(6)(b)1(iv)]

5.1.3 The Permittee shall submit a written report containing the following items for each semiannual period ending June 30 and December 31 of each year. All reports shall be postmarked by the 30th day following the end of each reporting period, July 30 and January 30, respectively. In the event that there have not been any deviations during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:

[391-3-1-.02(6)(b), 40 CFR 60.48c, 40 CFR 60.395, 40 CFR 63.3130]

- The magnitude of all exceedances and excursions computed in accordance with a. the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.
- Specific identification of each period of such exceedances, and excursions that b. occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.
- The date and time identifying each period during which any required monitoring c. system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

- d. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- e. Exceedances: (means for the purpose of this Condition, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
 - i. Any period of twelve (12) consecutive months during which the VOC emissions from the entire facility exceed 452 tons;
 - ii. Any period of twelve (12) consecutive months during which the number of the vehicles produced by this facility/plant exceeds 300,000 units;
 - iii. Any period of twelve (12) consecutive months during which the NOx emissions from the entire facility exceed 109 tons;
 - iv. Any period of twelve (12) consecutive months during which the CO emissions from the entire facility exceed 99 tons;
 - v. Any period of twelve (12) consecutive months during which the total VOC emissions from body wiping, strippable paint booth coatings, and equipment cleaning processes exceed 90 tons;
 - vi. Any exceedance of a VOC emission limit established as BACT in Conditions 2.2.3 through 2.2.9;
 - vii. Any 12-month rolling average HAP emission from coating operations specified in Condition 2.3.1 that exceeds the applicable NESHAP limit in 2.3.1;
 - viii. Any calendar month during which the average HAP emissions from all adhesives, and sealers (other than glass bonding sealer) exceed 0.1 lb/lb material;
 - ix. Any calendar month during which the average HAP emissions from all deadener material exceed 0.01 lb/lb material;
 - x. Any calendar month during which the VOC emissions from the E-coat, guide coat (surfacer) and rocker panel primer, or topcoat operations exceed the respective NSPS limit in Conditions 2.3.8 through 2.3.10 (if no exceedance occurs, the report shall so state);

- xi. Any exceedance of an applicable VOC emission limit of Georgia Rule (t) in Conditions 2.4.7, 2.4.8, or 2.4.11;
- xii. Any 12-month rolling total of distillate oil usage in the hot water heaters that exceeds 1,000,000 gallons;
- xiii. Any use of fuel oil other than distillate oil.
- f. Excursions: (means for the purpose of this condition, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)
 - i. Any three-hour block period during which the average gas stream/combustion temperature of the RTO is lower than the temperature established during the most recent Division approved performance test at which destruction efficiency was determined **minus** the accuracy tolerance for the temperature determined in accordance with Condition 4.2.1,
 - ii. Any three-hour block period during which the average gas volumetric flow or duct pressure on any VOC emissions capture system is lower than that established during the most recent performance, or, for PTE's, if the average measured parameter falls below the criteria set by Method 204,
 - iii. Any failure to conduct tune-ups on hot water heaters HW01, HW02, or HW03 in accordance with PTM Method 2.119, and any NOx measurement that exceeds 30 ppm;
 - iv. Any instance in which the inspection and/or filter replacement, as required by Condition 4.2.10, is not performed;
 - v. Any two consecutive readings of wet scrubber flow pressure that are less than 80% of the average value established in the most recent particulate matter performance test.
 - vi. Any instance of failure to comply with the work practice standard(s) in Conditions 2.2.16, 2.3.5, 2.3.6, 2.3.7, 2.4.9, 2.4.10, as indicated by inspections.

5.1.4 The Permittee shall maintain files of all required measurements, including continuous monitoring systems, monitoring devices, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; and adjustments and maintenance performed on these systems or devices. These files shall be kept in a permanent form suitable for inspection and shall be maintained for a period of at least five (5) years following the date of such measurements, reports, maintenance and records. [391-3-1-.03(10)(d)1(i)]

5.2 Specific Record Keeping, Compliance Demonstration & Reporting Requirements

<u>40 CFR Part 60, Subpart MM & Georgia Rule (t) Record Keeping, Compliance Demonstration & Reporting Requirements</u>

Record Keeping Requirements

5.2.1 The Permittee shall keep, for each of the coating operations and/or production processes/activities subject to Georgia Rule 391-3-1-.02(2)(t), and/or 40 CFR Part 60, Subpart MM, appropriate batch, shipment, daily and/or monthly material usage and/or operation/production records. The records shall meet the record keeping requirements in the pertinent State and Federal rules, and shall allow the demonstration of whether the operations and/or production processes/activities involved are in compliance with the applicable emission and/or operational limits or standards in this permit. Such records shall include, but are not limited to, those necessary such as gallons of coatings, thinners, sealers, adhesives, clean-up solvents and other VOC materials used, VOC and solids content(s) (weight or volume percent as appropriate) of the coatings, sealers, adhesives and other VOC-containing materials as applied or received, Division-approved or rule-specified coating transfer efficiencies, Division approved overall control efficiency of the VOC control system(s) involved, downtime or malfunction time of the VOC control system(s) if applicable, and number of vehicles produced each month.

The Permittee may subtract from the monthly usage any VOC-containing material disposed as containerized waste or recovered for reuse provided that the total weight, VOC content (expressed as a weight percentage), and documentation of the method for determining the VOC content of such material be included as part of the monthly records. All calculations used to determine the material usage and VOC content should be kept as part of the monthly records.

Material information/data from results of EPA Method 24, material safety data sheets (MSDS), product data sheets (PDS), manufacturer's formulation data and/or technical bulletin are acceptable for the purpose of this condition provided that they are permissible by the pertinent rules/standards or approved by the Division.

[391-3-1-.02(6)(b)1., 391-3-1-.03(2)(c), 391-3-1-.02(2)(t), & 40 CFR Part 60, Subpart MM]

- 5.2.2 The Permittee shall use the appropriate operation/production records Condition 5.2.1 to determine the total number of the vehicles produced during each calendar month by this facility. The Permittee shall notify the Division in writing if the production during any calendar month exceeds 25,000 units. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the production limit in Condition 1.2.1. [391-3-1-.02(6)(b)1, 391-3-1-.03(2)(c)]
- 5.2.3 The Permittee shall use the monthly vehicle production data in Condition 5.2.2 to calculate the rolling 12-month total of the vehicles produced by the facility for each calendar month in the reporting period. All calculations should be kept as part of the monthly record required in Condition 5.2.1. Each 12-month rolling total shall be included in the report specified in Condition 5.1.3. The Permittee shall notify the Division in writing if any of the 12-month rolling total of the vehicles produced by the facility exceeds 300,000 units. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the production limit in Condition 1.2.1. [391-3-1-.02(6)(b)1., 391-3-1-.03(2)(c)]

Compliance Demonstration Requirements for Georgia Rule (t)

5.2.4 The Permittee shall demonstrate compliance with the VOC emission limit for the use of wipe-off solvents in Condition 2.4.8 and the VOC emission limit for cleaning of body shop floor in Condition 2.4.11, using the appropriate material usage, VOC content and production records in Conditions 5.2.1 and 5.2.2. The initial 12-rolling month compliance period consists of the first 12 months of the operation from the initial startup of this facility; the second 12-rolling month compliance period consist of 2nd through 13th month from the startup of this facility; and so on. The Permittee shall use the equation below to calculate the 12-month rolling averages for the current month by the 15th of the following calendar month:

$$E = \frac{\sum_{i=1}^{12} \left(\frac{W_{voc,i}}{N_i} \right)}{12}$$
 Equation 5.2.4-1

Where:

E: The current 12-month rolling average of the VOC emissions from the use of wipe-off solvent **or** the cleaning of body shop floor, pounds of VOC per unit of vehicle assembled;

- $W_{voc,i}$ VOC emissions from the use of wipe-off solvent **or** cleaning of body shop floor during the ith month within the current 12-month rolling average period, pounds;
- N_i : Total number of vehicles assembled during the ith month within the current 12month rolling average period.

The Permittee shall notify the Division in writing if any of the rolling 12-month average VOC emissions exceeds the applicable limit in Condition 2.4.8 or 2.4.11. This notification shall be postmarked by the 15^{th} day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit involved. All the rolling 12-month average of VOC emissions shall be included in the reports specified in Condition 5.1.3. [391-3-1-.02(6)(b)1, 391-3-1-.03(2)(c), 391-3-1-.02(2)(t)]

- 5.2.5 The Permittee shall demonstrate compliance with the VOC emission limits in Condition 2.4.7 (Georgia Rule (t)) using the appropriate material usage, VOC content and production records in Conditions 5.2.1 and 5.2.2. The Permittee shall use the applicable equations and/or approaches in this condition to calculate the daily or monthly average emissions or to determine the VOC emissions from the operations involved:
 - a. For VOC emissions from the E-coat operation:

$$E_{EDP} = \frac{\sum_{i=0}^{n} \{ [(C_{EDP,i})(V_{EDP,i})](1 - R_{EDP}) \}}{\sum_{i=0}^{n} (V_{EDP,i})}$$
Equation 5.2.5-1

- E_{EDP} : The monthly weighted average of VOC emissions from the EDP/electrophoretic applied prime operation/coating tank, pounds of VOC per gallon of coating excluding water;
- $C_{EDP,i}$: VOC content of the prime coating solution in the coating tank after the ith addition of EDP/electrophoretic coating solution to the EDP coating tank during the month ($C_{EDP,0}$ designates to the VOC content of the coating solution in the EDP coating tank at the beginning of the month), pounds of VOC per gallon of the coating solution;

 $C_{EDP,i}$ shall be determined using the following equation:

$$C_{EDP,i} = \frac{\left[(C_{EDP,i-1}) (V_{EDP,i-1}) + (C_{EDP,add,i}) (V_{EDP,add,i}) \right]}{(V_{EDP,i-1}) + (V_{EDP,add,i})}$$

Where $C_{EDP,i-1}$ and $V_{EDP,i-1}$ represent respectively the VOC content and volume of the coating solution (excluding water) inside the EDP coating tank <u>before</u> the ith addition of the coating solution. $C_{EDP,add,i}$ and $V_{EDP,add,i}$, represent respectively the VOC content and volume of ith addition of the coating solution to the EDP coating tank.

 $V_{EDP,i}$: Gallons of the coating solution in the coating tank excluding water after the ith addition of the EDP/electrophoretic coating solution to the EDP coating tank during the month ($V_{EDP,0}$ designates to the total volume the EDP/electorphoretic solution inside the EDP coating tank at the beginning of the month), which shall be determined below:

$$V_{EDP,i} = V_{EDP,i-1} + V_{EDP,add,i}$$

- R_{EDP} : Overall control efficiency of the capture system and RTO serving the E-coat tank and curing oven. R_{EDP} shall be assumed zero when the 3-hour average RTO temperature is less than that established during the most recent performance test unless otherwise specified by the Division.
- b. For VOC emissions from <u>each</u> spray prime, topcoat and final repair operation that demonstrates compliance via a daily weighted average:

$$E_{VOC} = \frac{\sum_{j=1}^{m} \{ [(C_{coating VOC, j})(V_{coating, j})](1 - R_{voc, j}) \}}{\sum_{j=1}^{m} (V_{coating solids, j})}$$
Equation 5.2.5-2

Where:

 E_{VOC} : The daily weighted average VOC emissions from each spray prime, topcoat or final repair operation involved, pounds of VOC per gallon of <u>applied</u> coating solids for spray prime and topcoat operation or pounds of VOC per gallon of coating solids <u>sprayed</u> for final repair operation;

- $C_{coating VOC, j}$ VOC content of the jth spray prime, topcoat or final repair coating used by each spray prime, topcoat or final repair operation involved during the day, pounds of VOC per gallon of the coating;
- $V_{coating, j}$ Volume of the jth spray prime, topcoat or final repair coating used by each spray prime, topcoat or final repair operation involved during the day, gallons;
- $R_{voc,j}$: Overall efficiency of the VOC control system controlling the VOC emissions from the jth spray prime, topcoat or final repair coating used by the spray prime, topcoat or final repair operation involved during the R_{EDP} shall be assumed zero when the 3-hour average RTO temperature is less than that established during the most recent performance test unless otherwise specified by the Division.
- $V_{coating \ solids, j}$ Total volume of the <u>applied</u> coating solids (coating solids that were deposited on the surface being coated) for the jth spray prime and topcoat respectively, or total volume of the coating solids <u>sprayed</u> for the jth spray final repair coatings, as used by each spray prime, topcoat or final repair operation involved during the day, gallons.

The Permittee may use the applicable coating transfer efficiencies in Condition 5.2.8 to determine the applied coating solids.

c. For VOC emissions from the use of sealer, adhesive, body glass edge cleaner, prepriming cleaner, primer to bond glass or to the body to prepare the glass and body for bonding, adhesive to bond body glass to the body, coatings used in final repair operation(s) that does not involve in daily average, and all other materials subject to Condition 2.4.7k, the Permittee shall use results of EPA Method 24 tests, MSDS, PDS, manufacturer's formulation data and/or technical bulletin MSDS sheets, formulation data, and/or other product and/or production information, as required by Condition 5.2.1 and approved by the Division, to demonstrate that the VOC content of <u>each</u> of the materials involved is equal to or below the corresponding limit in Condition 2.4.7.

The Permittee shall notify the Division in writing if any of the VOC emissions exceeds the applicable limit in Condition 2.4.7. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit involved.

- 5.2.6 The Permittee shall use the records required in Condition 5.2.1 to calculate the monthly total VOC emissions from body wiping, strippable paint booth coatings, and equipment cleaning processes subject to the VOC limit in Condition 2.2.10. All calculations should be kept as part of the monthly records as required by Condition 5.2.1. The Permittee shall notify the Division in writing if any monthly total VOC emission exceeds 7.5 tons. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limit in Condition 2.2.10.
 - [391-3-1-.02(6)(b)1, 391-3-1-.03(2)(c)]
- 5.2.7 The Permittee shall use the monthly VOC emission data in Condition 5.2.6 to calculate the 12-month rolling total of the VOC emissions from body wiping, strippable paint booth coatings, and equipment cleaning processes. All calculations should be kept as part of the monthly records as required by Condition 5.2.1. The Permittee shall notify the Division in writing if any of the 12-month rolling totals of the VOC emissions exceed 90 tons. This notification shall be postmarked by the 15th day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit in Condition 2.2.10.

[391-3-1-.02(6)(b)1, 391-3-1-.03(2)(c)]

Compliance Demonstration Requirements for 40 CFR Part 60, Subpart MM

- 5.2.8 The Permittee shall demonstrate compliance with the VOC emission limits in Conditions 2.3.8, 2.3.9 and 2.3.10 using the appropriate material usage, VOC content and production records in Condition 5.2.1, and follow the procedures specified below to determine the volume weighted average of the total mass of VOC per volume of coating solids used each calendar month: [40 CFR 60.393]
 - Calculate the mass of VOC used during the calendar month for each a. EDP/electrophoretic applied prime coat, non-EDP prime coat, guide coat and/or topcoat operation:

$$M_{o} + M_{d} = \sum_{i=1}^{n} \left(L_{ci} D_{ci} W_{ci} \right) + \sum_{j=1}^{m} \left(L_{di} D_{di} W_{di} \right)$$
 Equation 5.2.8-1

- M_o : Total mass of VOC in coatings (EDP prime coat, non-EDP prime coat, guide coat and/or topcoat) as received, kilogram (kg);
- Total mass of VOC in dilution solvent, kg; M_d :
- Volume of coating i consumed, as received, liters; L_{ci} :

- D_{ci} : Density of coating i as received, kilogram (kg) per liter;
- W_{ci} : Mass ratio/fraction of VOC in coating i as received; kg of VOC per kg of coating i;
- L_{dj} : Volume of each type VOC dilution solvent (j) added to the coatings, as received, liters;
- D_{dj} : Density of each type VOC dilution solvent j added to the coatings, as received, kg per liter;
- W_{dj} : Mass ratio/fraction of VOC in each type VOC dilution solvent (j), added to the coatings, as received; kg of VOC per kg of the solvent.
- b. Calculate the total volume of coating solids used during the calendar month for each EDP/electrophoretic applied prime coat, non-EDP prime coat, guide coat and/or topcoat operation:

$$L_s = \sum_{i=1}^n \left(L_{ci} V_{si} \right)$$

Equation 5.2.8-2

- *L_s*: Volume of solids in coatings consumed, liters;
- *n*: Total number of coatings used;
- L_{ci} : Volume of coating i consumed, as received, liters;
- V_{si} : Volume ration/fraction of solids in coating i, as received, liter of coating solids per liter of coating i;
- c. Select the appropriate transfer efficiency (T) from the following tables for each surface operation:

Table 5.2.8-1: Overall Transfer Efficiency of the Coating Operation	ons Using
Total Purge Material Capture	

Application Method	Transfer Efficiency, Mass Fraction
Air Atomized Spray (Waterborne Coating)	0.39
Air Atomized Spray (Solvent-borne Coating)	0.50
Manual Electrostatic Spray	0.75
Automatic Electrostatic Spray	0.95
Electrodeposition (EDP)/Electrophoretic Applied Prime	1.00

Table 5.2.8-2: Overall Transfer Efficiency of the Coating Op	perations Not		
Collecting Any Purge Material After Purging			

Application Method	Transfer Efficiency, Mass Fraction
Air Atomized Spray (Waterborne Coating)	0.30
Air Atomized Spray (Solvent-borne Coating)	0.40
Manual Electrostatic Spray	0.62
Automatic Electrostatic Spray	0.95

It the Permittee can justify to the Division's satisfaction that other values for the transfer efficiencies are appropriate, the Division will approve their use on a case-by-case basis.

When more than one application method (l) is used on an individual surface coating operation, the Permittee shall use the follow to determine an average transfer efficiency (T) for the operation:

$$T = \frac{\sum_{i=1}^{n} (T_i V_{si} L_{cil})}{\sum_{l=1}^{p} (L_s)}$$

Where:

- T_l : Transfer efficiency of the application method (l);
- V_{si} : Fraction/proportion of coating solids by volume in each coating (i) as received;
- L_{cil} : Volume of each coating (i) consumed by each application method (l), as received, liters;
- *L_s*: Volume of coating solids consumed, liters;
- d. Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) during each calendar month for each affected facility by the following equation:

$$G = \frac{M_o + M_d}{L_s T}$$

Equation 5.2.8-3

e. Calculate the volume weighted average mass of VOC per volume of applied coating solids (G) emitted after the RTO for each affected facility/coating operation by the following equation:

$$N = G(1 - R_{voc})$$

Where:

- *N*: The post-control volume weighted monthly average VOC emissions rate for the affected facility/coating operation, pounds of VOC per gallon of coating solids as applied after the control;
- R_{voc} : Overall control efficiency of the capture system and RTO serving the E-coat tank and curing oven. *Rvoc* shall be assumed zero when the 3-hour average RTO temperature is less than that established during the most recent performance test unless otherwise specified by the Division.

If the G or N as calculated monthly for a specific affected facility/coating operation is less than the applicable emission standard in Condition 2.3.8, 2.3.9 or 2.3.10, the source is in compliance.

Reporting Requirements for 40 CFR Part 60, Subpart MM

- 5.2.9 The Permittee shall submit the following reports: [40 CFR 60.395]
 - a. The Permittee shall submit, along with the test results submitted in accordance with Conditions 3.2.1, 3.2.2, and 3.2.3, an initial compliance report including the following information:
 - i The volume weighted average mass of VOC per volume of applied coating solids for each coating operation subject to 40 CFR 60 Subpart MM (e-coat, guide coat and rocker panel primer, and topcoat);
 - ii. The total mass of VOC per volume of applied coating solids before and after the RTO
 - iii. Efficiency of each VOC capture system feeding the RTO;
 - iv. Destruction of the RTO used to attain the compliance with the applicable emission limit(s);
 - v. A description of the method used to establish the fraction of VOC captured and sent to the RTO.

b. The Permittee shall submit quarterly reports of any exceedance of the limits of Conditions 2.3.8, 2.3.9, 2.3.10, within 30 days of the end of each calendar quarter. If no exceedances occur, the Permittee shall indicate such in the report in accordance with Condition 5.1.3.

<u>Georgia Rule 391-3-1-.02(2)(d), 391-3-1-.02(2)(g) and NSPS 40 CFR Part 60, Subpart Dc Record</u> <u>Keeping, Compliance Demonstration & Reporting Requirements</u>

- 5.2.10 The Permittee shall furnish the Division a written notification of the date of the initial startup of each of hot water heaters HW01, HW02, and HW03 within fifteen (15) days of such date.
 [40 CFR 60.48c & 391-3-1-.03(2)(c)]
- 5.2.11 The Permittee shall submit to the Division a semiannual report, within 30 days following the end of each such period (July 30 and January 30), regarding fuel oil purchases and the firing of such oil in hot water heaters HW01, HW02, and HW03. The report shall contain: [40 CFR 60.48c & 391-3-1-.03(2)(c)]
 - a. Calendar dates in the report period.
 - b. The fuel oil supplier certifications required by Condition 5.2.12 for each fuel oil shipment received during the reporting period.
 - c. A certified statement, signed by an official of the company, affirming that the records of fuel oil supplier certifications submitted in accordance with subparagraph (b) of this condition represent all of the fuel oil fired in the boilers during the semiannual period.
 - d. The total quantity of the fuel oil burned in hot water heaters HW01, HW02, and HW03 for each calendar month during the semiannual reporting period, as specified in Condition 5.2.12. If fuel oil was not fired in the boilers during the semiannual period, the report shall so state.
- 5.2.12 The Permittee shall retain the following records for each of the hot water heaters HW01, HW02, and HW03 and keep the records available for inspection or submittal for five years from the date of record:
 [40 CFR 60.48c & 391-3-1-.03(2)(c)]
 - a. Quantity of the fuel oil burned each month
 - b. Quantity of natural gas burned each calendar month
 - c. Fuel supplier certifications containing the following information if applicable:
 - i. The name of the fuel oil supplier; and
 - ii. A statement of the oil supplier that the fuel oil complies with the specification of 0.3% sulfur distillate oil in Condition 2.3.19.

40 CFR Part 63, Subpart IIII Record Keeping, Compliance Demonstration & Reporting Requirements

General Compliance Requirements

- 5.2.13 The Permittee is in compliance with the applicable HAP emission limits and/or operating and/or work practice standards of 40 CFR Part 63, Subpart IIII provided that: [40 CFR 63.3100]
 - a. The Permittee shall comply with the emission limits in Conditions 2.3.1, 2.3.2 and 2.3.3 at all times, as determined on a monthly basis.
 - b. The affected sources/coating operations involved are in compliance with the operating limits for the capture systems and add-on control devices required by Condition 2.3.4 at all times except during periods of startup, shutdown, and malfunction.
 - c. The Permittee shall comply with the work practice standards in Conditions 2.3.5, 2.3.6 and 2.3.7 at all times.
 - d. The Permittee shall always operate and maintain the affected sources including all air pollution control and monitoring equipment involved according to the provisions in 40 CFR 63.6(e)(1)(i).
 - e. The Permittee shall maintain a log detailing the operation and maintenance of the emission capture systems, RTO, and CPMS involved during the period between initial startup of the facility and the date when the initial performance tests on the emission capture system and add-on control devices have been completed.
 - f. The Permittee shall develop and implement, according to the provisions in 40 CFR 63.6(e)(3), a written startup, shutdown, and malfunction plan (SSMP) to address startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system and RTO.

Notifications

- 5.2.14 The Permittee shall submit the notifications in 40 CFR 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h), as applicable, by the dates in the respective sections, except as provided in paragraphs (b) and (c) of this condition. [40 CFR 63.3110]
 - a. *Initial* Notification required by 40 CFR 63.9(b) no later than 120 days after initial startup of the affected sources.

- b. *Notification of Compliance Status* required by 40 CFR 63.9(h) no later than 60 calendar days after the first day of the first full month following completion of all applicable performance tests. The Notification shall contain the information specified below and in 40 CFR 63.9(h).
 - i. Company name and address.
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - iii. Date of the report and beginning and ending dates of the reporting period. The reporting period is the applicable initial compliance period described in Condition 5.2.30 per 40 CFR 63.3160.
 - iv. Identification of the compliance option used for coating processes in the affected source during the initial compliance period, i.e., Condition 2.3.1.
 - v. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.
 - vi. If a deviation occurred, include the following information:
 - 1. A description and statement of the cause of the deviation.
 - 2. All the calculations used to determine the applicable emission rate or applicable average organic HAP content for the applicable emission limits in Condition 2.3.1 per 40 CFR 63.3090(a) that the source failed to meet.
 - vii. All data and calculations used to determine the monthly average mass of organic HAP emitted per volume of applied coating solids from all the coating or HAP materials subject to Condition 2.3.1.
 - viii. All data and calculations used to determine the monthly mass average HAP content of the materials subject to the emission limits in Conditions 2.3.2 and 2.3.3 per 40 CFR 63.3090(c) or (d).
 - ix. All data and calculations used to determine the transfer efficiency for guidecoat (surfacer), rocker panel primer, topcoat coatings and all the subject coatings used in coating operations pursuant to 40 CFR 63.3082(c).

- x. The following information:
 - 1. For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the procedure followed for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If the data quality objective (DQO) or lower confidence limit (LCL) approach was used, the Permittee shall also include the statistical calculations to show the DQO or LCL criteria in appendix A to 40 CFR 63 Subpart KK were met.
 - 2. A summary of the results of each add-on control device performance test.
 - 3. A list of the RTO's and each emission capture system's operating limits and a summary of the data used to calculate those limits.
- xi. A statement of whether or not the work practice plans required by Conditions 2.3.5 and 2.3.6 per 40 CFR 63.3094(b) and (c) were developed and implemented.

Semiannual Compliance Report

- 5.2.15 The Permittee shall submit semiannual compliance reports for each affected source according to the following requirements. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the CAA, as specified in paragraph (b) of this condition: [40 CFR 63.3120(a)]
 - a. *Dates*. The Permittee shall prepare and submit each semiannual compliance report according to the dates specified below:
 - i. The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in Conditions 5.2.30 per 40 CFR 63.3160 that applies to the affected source and ends on June 30 or December 31, whichever occurs first following the end of the initial compliance period.
 - ii. Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
 - iii. Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

- iv. For each affected source subject to permitting regulations pursuant to 40 CFR Part 70, and if dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) has been established, the Permittee may submit the first and subsequent compliance reports according to such dates instead of the date specified in paragraph (a)(1)(iii) of this condition.
- b. *General requirements*. The semiannual compliance report shall contain the following information, as applicable:
 - i. Company name and address.
 - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - iii. Date of report and beginning and ending dates of the reporting period.
- c. *No deviations*. If there were no deviations from the applicable emission limitations, operating limits, or work practices specified in Conditions 2.3.1, 2.3.4, 2.3.5 and 2.3.6 per 40 CFR 63.3090, 63.3093, and 63.3094, the semiannual compliance report shall include a statement that there were no deviations from the emission limitations during the reporting period. If control devices were used to comply with the emission limits, and there were no periods during which the CPMS were out of control as specified in 40 CFR 63.8(c)(7), the semiannual compliance report shall include a statement that there were no periods during which the CPMS were out of control during the reporting period.
- d. *Deviations*. If there was a deviation from the emission limits in Condition 2.3.2 or 2.3.3 per 40 CFR 63.3090(c) or (d), the semiannual compliance report shall contain the following information:
 - i. The beginning and ending dates of each month during which the monthly average organic HAP content exceeded the applicable emission limit.
 - ii. The volume and organic HAP content of each material used that is subject to the applicable organic HAP content limit.
 - iii. The calculation used to determine the average monthly organic HAP content for the month in which the deviation occurred.
 - iv. The reason for the deviation.
- e. *Deviations*. If there was a deviation from the applicable emission limit in Condition 2.3.1 per 40 CFR 63.3090, the semiannual compliance report shall contain the following information:
 - i. The beginning and ending dates of each month during which the monthly organic HAP emission rate exceeded the applicable emission limit.

- ii. The calculation used to determine the monthly organic HAP emission rate according to Conditions 5.2.34 and/or 5.2.35 per 40 CFR 63.3161 or 63.3171, excluding the background data supporting these calculations.
- iii. The date and duration of any malfunctions of the capture system or add-on control devices used to control emissions from these operations.
- iv. A brief description of the CPMS.
- v. The date of the latest CPMS certification or audit.
- vi. The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.
- vii. The date and time period that each CPMS was out of control, including the information in 40 CFR 63.8(c)(8).
- viii. The date and time period of each deviation from an applicable operating limit in Condition 2.3.4; date and time period of each bypass of an add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
- ix. A summary of the total duration and the percent of the total source operating time of the deviations from each applicable operating limit in Condition 2.3.4 and the bypass of each add-on control device during the semiannual reporting period.
- x. A breakdown of the total duration of the deviations from each applicable operating limit in Condition 2.3.4 and bypasses of each add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- xi. A summary of the total duration and the percent of the total source operating time of the downtime for each CPMS during the semiannual reporting period.
- xii. A description of any changes in the CPMS, coating operation, emission capture system, or add-on control devices since the last semiannual reporting period.
- xiii. For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions taken to correct the deviation.
- xiv. A statement of the cause of each deviation.
- f. Deviation: For any deviation from an applicable work practice plan in Condition 2.3.5 or 2.3.6, the report shall contain the following information:
 - i. The time period during which each deviation occurred.
 - ii. The nature of each deviation.
 - iii. The corrective action(s) taken to bring the applicable work practices into compliance with the work practice plan.

- g. *Startup, shutdown, and malfunction reports.* For any startup, shutdown, or malfunction of any add-on control systems during the semiannual reporting period, The Permittee shall submit the reports specified below:
 - i. For actions consistent with the SSMP, including the information specified in 40 CFR 63.10(d) in the semiannual compliance report.
 - ii. For actions not consistent with the SSMP, submit an immediate startup, shutdown, and malfunction report as described below:
 - 1. Describe of the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Division within 2 working days after starting actions inconsistent with the plan.
 - 2. Submit a letter to the Administrator within 7 working days after the end of the event, unless having made alternative arrangements with the Division as specified in 40 CFR 63.10(d)(5)(ii). The letter shall contain the information specified in 40 CFR 63.10(d)(5)(ii).

Record Keeping Requirements

- 5.2.16 The Permittee shall collect and keep a copy of each notification and report submitted to comply with 40 CFR 63 Subpart IIII, and the documentation supporting each notification. [40 CFR 63.3130(a)]
- 5.2.17 The Permittee shall keep all the records required in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). Failure to comply with any of the requirements in those conditions is a deviation from the applicable standard. Where appropriate, those records may be maintained as electronic spreadsheets or as a database. Except as provided in Condition 5.2.29, each record shall be kept for 5 years (on site for at least 2 years and may be off site for the remaining 3 years) following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.3130 and 63.3131]
- 5.2.18 The Permittee shall collect and keep a current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP, the density and the volume fraction of coating solids for each coating, the mass fraction of organic HAP and the density for each thinner, and the mass fraction of organic HAP for each cleaning material. If the Permittee conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the Permittee shall keep a copy of the complete test report. If the Permittee uses information provided by the manufacturer or supplier of the material that was based on testing, the Permittee shall keep the summary sheet of results provided by the manufacturer or supplier. If the Permittee uses the results of an analysis conducted by an outside testing lab, the Permittee shall keep a copy of the test report. There is no need to obtain the test report or other supporting documentation from the manufacturer or supplier. [40 CFR 63.3130(b)]

- 5.2.19 The Permittee shall keep a monthly record of the data and information as required by this condition.[40 CFR 63.3130(c)]
 - a. For each coating used for EDP primer, guidecoat (surfacer) (including rocker panel primers), topcoat, final repair, glass bonding primer, and glass bonding adhesive operations and for each coating, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 40 CFR 63.3082(c), a record of the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids.
 - b. For each thinner used for EDP primer, primer surfacer, topcoat, final repair, glass bonding primer, and glass bonding adhesive operations and for each thinner, except for thinner used for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 40 CFR 63.3082(c), a record of the volume used in each month, the mass fraction organic HAP content, and the density.
 - c. For each deadener material and for each adhesive and sealer material, a record of the mass used in each month and the mass organic HAP content.
 - A record of the calculation of the organic HAP emission rate for EDP primer (if d. complying with 40 CFR 63.3090(a), surfacer (including rocker panel primer), topcoat, final repair, glass bonding primer, and glass bonding adhesive plus all coatings and thinners, except for deadener materials and for adhesive and sealer materials that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 40 CFR 63.3082(c) for each This record must include all raw data, algorithms, and intermediate month. calculations. If the guidelines presented in the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018, are used, the Permittee keep records of all data input to this protocol. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. These data shall be provided to the Division on request on paper, and in (if calculations are done electronically) electronic form.
 - e. A monthly record of the calculation of the average monthly mass organic HAP content of
 - i. Sealers and adhesives; and
 - ii. Deadeners.

- 5.2.20 The Permittee shall keep the following record for each of the cleaning materials used during each month. [40 CFR 63.3130(d) thru (f)]
 - a. The name and volume of each of the cleaning materials.
 - b. The mass fraction of organic HAP of each of the cleaning materials.
 - c. The density of each of the cleaning materials.
- 5.2.21 The Permittee shall keep a record of the date, time, and duration of each deviation, and for each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction. [40 CFR 63.3130(g)]
- 5.2.22 The Permittee shall keep records required by 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. [40 CFR 63.3130(h)]
- 5.2.23 For each capture system that is a PTE, the Permittee shall keep a record of the data and documentation used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100%, as specified per 40 CFR 63.3165(a). [40 CFR 63.3130(i)]
- 5.2.24 For each capture system that is not a PTE, the Permittee shall keep a record of the data and documentation used to determine capture efficiency according to the requirements specified per 40 CFR 63.3164 and 63.3165(b). The records shall contain, as applicable, the following data and information: [40 CFR 63.3130(j)]
 - a. Records for a liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure. Records of the mass of total volatile hydrocarbon (TVH), as measured by Method 204A or F of appendix M to 40 CFR Part 51, for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR Part 51 for either a temporary total enclosure or a building enclosure.

- b. Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure. Records of the mass of TVH emissions captured by the emission capture system, as measured by Method 204B or C of appendix M to 40 CFR Part 51, at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or E of appendix M to 40 CFR Part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.
- c. Records for panel tests. Records needed to document a capture efficiency determination using a panel test as described in 40 CFR 63.3165(e) and (g), including a copy of the test report and calculations performed to convert the panel test results to percent capture efficiency values.
- d. Records for an alternative protocol. Records needed to document a capture efficiency determination using an alternative method or protocol, as specified in 40 CFR 63.3165(f), if applicable.
- 5.2.25 The Permittee shall keep the data and information specified below for each add-on control device organic HAP destruction or removal efficiency determination as required by Condition 3.2.1 of this permit per 40 CFR 63.3166. [40 CFR 63.3130(k)]
 - a. Records of each add-on control device performance test conducted according to Condition 3.2.1 per 40 CFR 63.3164 and 63.3166.
 - b. Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.
- 5.2.26 The Permittee shall keep records of the data and calculations used to establish the emission capture and add-on control device operating limits as specified in Condition 3.2.1 per 40 CFR 63.3167 and to document compliance with the operating limits as specified in Table 1 to 40 CFR Part 63, Subpart IIII.
 [40 CFR 63.3130(1)]
- 5.2.27 The Permittee shall keep records of the data and calculations used to determine the transfer efficiency for guidecoat (surfacer) and topcoat coatings and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source pursuant to 40 CFR63.3082(c). [40 CFR 63.3130(m)]

- 5.2.28 The Permittee shall keep a record of the work practice plans required by Conditions 2.3.5 and 2.3.6 per 40 CFR 63.3094(b) and (c) and documentation implementing the plans on a continuous basis. Appropriate documentation may include operational and maintenance records, records of documented inspections, and records of internal audits. [40 CFR 63.3130(n)]
- 5.2.29 The Permittee shall keep records pertaining to the design and operation of control and monitoring systems must be maintained on-site for the life of the equipment in a location readily available to plant operators and inspectors. [40 CFR 63.3130(o)]

Compliance Demonstration Requirements for Adhesive, Sealer & Deadener

5.2.30 The Permittee shall complete the initial compliance demonstration for the initial compliance period according to the requirements in Condition 5.2.31 per 40 CFR 63.3151. The initial compliance demonstration includes the calculations according to Condition 5.2.31 per 40 CFR 63.3151 and supporting documentation showing that during the initial compliance period, the mass average organic HAP content for each group of materials was equal to or less than the applicable emission limits in Conditions 2.3.2 and 2.3.3.

The initial compliance period is the 1-month period beginning on the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period begins on the compliance date and extends through the end of that month plus the following month. [40 CFR 63.3150]

5.2.31 The Permittee shall separately calculate the mass average organic HAP content of the materials used during the initial compliance period as defined in Condition 5.2.30 for each group of materials subject to any emission limit in Conditions 2.3.2 and 2.3.3 per 40 CFR 63.3090(c) and (d). If every individual material used within a group of materials meets the emission limit for that group of materials, the Permittee may demonstrate compliance with that emission limit by documenting the name and the organic HAP content of each material used during the initial compliance period. If any individual material used within a group of materials exceeds the emission limit for that group of materials, the Permittee shall determine the mass average organic HAP content according to the procedures below: [40 CFR 63.3151]

- a. Determine the mass fraction of organic HAP for each material used during the compliance period using one of the options listed below:
 - i. Method 311 for determining the mass fraction of organic HAP according to the procedures specified below:
 - 1. Count each organic HAP present at 0.1% by mass or more for OSHAdefined carcinogens, as specified in 29 CFR 1910.1200(d)(4), and at 1.0% by mass or more for other compounds. Express the mass fraction of each organic HAP counted as a value truncated to four places after the decimal point.
 - 2. Sum the total mass fraction of organic HAP in the test material and truncating the result to three places after the decimal point.
 - ii. Method 24 for determining the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP.
 - iii. Division-approved alternative method for determining the mass fraction of organic HAP (Following the procedure in 40 CFR 63.7(f) to submit the alternative test method for approval).
 - iv. Information from the supplier or manufacturer of the material. The Permittee may rely on information other than that generated by the test methods specified in paragraphs (a)(i) through (iii) of this condition, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1% by mass or more for OSHA defined carcinogens, and at 1.0% by mass or more for other compounds. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(i) through (iii) of this condition, then the test method results will take precedence, unless after consultation, the facility demonstrates to the satisfaction of the Division that the facility's data are correct.
 - v. When the organic HAP contained in solvent blends must be counted toward the total organic HAP mass fraction of the materials, and neither test data nor manufacturer's data for the solvent blends are available, the Permittee may use the default values for the mass fraction of organic HAP in the solvent blends listed in Table 3 or 4 to 40 CFR Part 63, Subpart IIII. If using the tables, the Permittee shall use the values in Table 3 for all solvent blends that match Table 3 entries, and may only use Table 4 if the solvent blends in the materials used do not match any of the solvent blends in Table 3 and the Permittee only knows whether the blend is aliphatic or aromatic. However, if the results of a Method 311 test indicate higher values than those listed on Table 3 or 4, the Method 311 results will take precedence, unless after consultation, the facility demonstrates to the satisfaction of the Division that the data from Table 3 or 4 are correct.

- b. Determine the density of each material used during the compliance period from test results using ASTM Method D1475–98 or, for powder coatings, test method A or test method B of ASTM Method D5965-02, or information from the supplier or manufacturer of the material. If there is disagreement between the ASTM test method results and the supplier's or manufacturer's information, the ASTM test method results will take precedence unless after consultation, the facility demonstrates to the satisfaction of the Division that the supplier's or manufacturer's data are correct.
- c. Determine the volume (liters) of each material used during each month by measurement or usage records.
- d. Determine the mass average organic HAP content of the materials used during the initial compliance period for each group of materials for which an emission limit is established in Conditions 2.3.2 and 2.3.3, using Equations 1 and 2 of 40 CFR 63.3151.
 - i. Calculate the mass average organic HAP content of adhesive and sealer materials other than components of the glass bonding system used in the initial compliance period using Equation 1 of 40 CFR 63.3151.
 - ii. Calculate the mass average organic HAP content of deadener materials used in the initial compliance period using Equation 2 of 40 CFR 63.3151.
- e. The affected source is in compliance when the calculated mass average organic HAP content for the compliance period is less than or equal to the applicable emission limit in Conditions 2.3.2 and 2.3.3. The Permittee shall keep all records used for the calculation as required by Condition 5.2.17. As part of the Notification of Compliance Status required by Condition 5.2.14, the Permittee shall submit a statement that the coating operations were in compliance with the emission limitations during the initial compliance period because the mass average organic HAP content was less than or equal to the applicable emission limits in Conditions 2.3.2 and 2.3.3, determined according to this condition.
- 5.2.32 To demonstrate continuous compliance, the mass average organic HAP content for each compliance period, determined according to Condition 5.2.31, shall be less than or equal to the applicable emission limit in Conditions 2.3.2 and 2.3.3. A compliance period consists of one (1) month. Each month after the end of the initial compliance period described in Condition 5.2.30 is a compliance period consisting of that month.

If the mass average organic HAP emission content for any compliance period exceeds the applicable emission limit in Conditions 2.3.2 and 2.3.3, this is a deviation from the emission limitations for that compliance period and shall be reported as specified in Conditions 5.2.14 and 5.2.15 per 40 CFR 63.3110(c)(6) and 63.3120(a)(5). The Permittee shall maintain records as specified per 40 CFR 63.3130 and 63.3131. [40 CFR 63.3152]

Compliance Demonstration Requirements for Coating and Glass Bonding Adhesive Emission Limits Specified in Condition 2.3.1

- 5.2.33 The Permittee shall comply with the performance test and other initial compliance requirements specified below: [40 CFR 63.3160(a)]
 - a. Install and operate all emission capture systems, add-on control devices, and CPMS no later than the applicable compliance date per 40 CFR 63.3083, and conduct a performance test of each capture system and add-on control device according to Condition 3.2.1 per 40 CFR 63.3164 through 63.3166 and establish the operating limits required by Conditions 2.3.4 per 40 CFR 63.3093 no later than 180 days after the applicable compliance date per 40 CFR 63.3083.
 - b. Develop and begin implementing the work practice plans required by Conditions 2.3.5 and 2.3.6 per 40 CFR 63.3094(b) and (c) no later than the compliance date.
 - c. Complete the initial compliance demonstration for the initial compliance period as defined in Condition 5.2.30, according to Conditions 5.2.34 and 5.2.35 per 40 CFR 63.3161 and 63.3171. The Permittee shall determine the mass of organic HAP emissions and volume of coating solids deposited in the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to Condition 3.2.1 per 40 CFR 63.3164 through 63.3166; supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in Condition 2.3.1; the operating limits established during the performance tests and the results of the continuous parameter monitoring required per 40 CFR 63.3168; and documentation of whether the Permittee developed and implemented the work practice plans required by Conditions 2.3.5 and 2.3.6.
- 5.2.34 To demonstrate initial compliance with either HAP emission limit in Condition 2.3.1, the Permittee shall meet all the requirements of this condition as listed below. When demonstrating compliance with the alternative emission limit of 0.5 lb/GACS (separate E-coat requirements), exclude all materials used in the E-Coat operations in items a. through n. below.

[40 CFR 63.3161(a) through (j), (l) through (o), and 40 CFR 63.3171]

- a. The HAP emissions from the affected source specified in Condition 2.3.1 shall not exceed the applicable limit.
- b. Except as provided in 40 CFR 63.3160(a)(4), establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by Condition 2.3.4 per 40 CFR 63.3093, using the procedures specified in Conditions 3.2.1, 4.2.1, 4.2.2, 4.2.3 and 4.2.4 per 40 CFR 63.3167 and 63.3168.

- c. Develop, implement, and document implementation of the work practice plans required by Conditions 2.3.5 and 2.3.6 per 40 CFR 63.3094(b) and (c) during the initial compliance period, as specified in Condition 5.2.14 per 40 CFR 63.3130.
- d. Follow the procedures in paragraphs (e) through (o) of this condition to demonstrate compliance with the applicable emission limit in Condition 2.3.1. The Permittee may also use the guidelines presented in *"Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations"* in making this demonstration.
- e. Follow the procedures specified in Condition 5.2.31 per 40 CFR 63.3151(a) through (c) to determine the mass fraction of organic HAP and the density and volume of each coating and thinner used during each month.
- f. Determine the volume fraction of coating solids (liter of coating solids per liter of coating) for each coating used during the compliance period by a test or by information provided by the supplier or the manufacturer of the material, as specified below. If test results obtained according to paragraph (f)(i) of this condition do not agree with the information obtained under paragraph (f)(ii), the test results will take precedence unless after consultation, the facility demonstrates to the satisfaction of the Division that the facility's data are correct.
 - i. ASTM Method D2697-86 for determining the volume fraction of coating solids for each coating.
 - ii. Volume fraction of coating solids for each coating provided from the supplier or manufacturer.
- g. Determine the transfer efficiency for each primer surfacer and topcoat coating, and for all coatings, except for deadener and for adhesive and sealer that are not components of glass bonding systems, used in coating operations added to the affected source in Condition 2.3.1, using ASTM Method D5066–91, or the guidelines presented in *'Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations*". The Permittee may conduct transfer efficiency testing on representative coatings and for representative spray booths as described in the *''Protocol"* aforementioned. The Permittee may assume 100% transfer efficiency for electrodeposition primer coatings, glass bonding primers, and glass bonding adhesives. For final repair coatings, the Permittee may assume 40% transfer efficiency for air-atomized spray and 55% transfer efficiency for electrostatic spray and high volume, low pressure spray.
- h. Calculate the total mass of organic HAP emissions before consideration of add-on controls from all coatings and thinners subject to Condition 2.3.1 and used during each month using Equation 1 of this condition:

$$H_{BC} = A + B \qquad (Eq. 1)$$

- H_{BC} = Total mass of organic HAP emissions before consideration of add-on controls during the month, kg.
- A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this condition.
- B = Total mass of organic HAP in the thinners used during the month, kg, as calculated in Equation 1B of this condition.

When demonstrating compliance with the alternative emission limit of 0.5 lb/GACS (separate E-coat requirements), uncontrolled HAP emissions from E-Coat operations need not be included this total.

i. Calculate the total mass of organic HAP in the coatings used during the month using Equation 1A of this condition:

$$A = \sum_{i=1}^{m} (Vol_{c,i}) (D_{c,i}) (W_{c,i})$$
 (Eq. 1A)

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

 $Vol_{c,i}$ = Total volume of the ith coating used during the month, liters.

 $D_{c,i}$ = Density of the ith coating, kg coating/liter coating.

- $W_{c,i}$ = Mass fraction of organic HAP in the ith coating, kg organic HAP/kg coating.
- m = Number of different coatings used during the month.
- ii. Calculate the total mass of organic HAP in the thinners used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} (Vol_{t,j}) (D_{t,j}) (W_{t,j})$$
 (Eq. 1B)

Where:

B = Total mass of organic HAP in the thinners used during the month, kg.

 $Vol_{t,j}$ = Total volume of the jth thinner used during the month, liters.

 $D_{t, j}$ = Density of the jth thinner, kg per liter.

- $W_{t,j}$ = Mass fraction of organic HAP in the jth thinner, kg organic HAP/kg thinner.
- n = Number of different thinners used during the month.
- i. Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month using the procedures in paragraph (j) of this condition to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system.
- j. For each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system, calculate the mass of organic HAP emission reduction for the controlled coating operation, excluding all periods of time in which a deviation, including a deviation during a period of startup, shutdown, or malfunction, from an operating limit or from any CPMS requirement for the capture system or control device serving the controlled coating operation occurred, during the month using Equation 2 of this condition. Except as provided in paragraph (p) of this section, for any period of time in which a deviation occurred, the Permittee shall assume zero efficiency for the emission capture system and add-on control device involved.

$$H_{Cn} = (A_{C} + B_{C} - A_{unc} - B_{unc}) \left(\frac{CE}{100} \times \frac{DRE}{100}\right)$$
 (Eq. 2)

- H_{Cn} = Mass of organic HAP emission reduction, excluding all periods of time in which a deviation occurred, for the controlled coating operation during the month, kg.
- A_C = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 2A of this condition.
- B_C = Total mass of organic HAP in the thinners used in the controlled coating operation during the month, kg, as calculated in Equation 2B of this condition.
- A_{unc} = Total mass of organic HAP in the coatings used during all periods of time in which a deviation occurred for the controlled coating operation during the month, kg, as calculated in Equation 2C of this condition.
- B_{unc} = Total mass of organic HAP in the thinners used during all periods of time in which a deviation occurred for the controlled coating operation during the month, kg, as calculated in Equation 2D of this condition.

- CE = Capture efficiency of the emission capture system vented to the add-on control device, percent as determined according to Condition 3.2.1.
- DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent as determined according to Condition 3.2.1.
- i. Calculate the mass of organic HAP in the coatings used in the controlled coating operation, kg, using Equation 2A of this condition.

$$A_{c} = \sum_{i=1}^{m} (Vol_{c,i}) (D_{c,i}) (W_{c,i})$$
 (Eq. 2A)

- A_{C} = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg. $Vol_{c,i}$, $D_{c,i}$, $W_{c,i}$ and m are defined under Equation 1A.
- ii. Calculate the mass of organic HAP in the thinners used in the controlled coating operation, kg, using Equation 2B of this condition.

$$B_{c} = \sum_{j=1}^{n} \left(Vol_{t,j} \right) \left(D_{t,j} \right) \left(W_{t,j} \right)$$
(Eq. 2B)

Where:

 $B_C =$ Total mass of organic HAP in the thinners used in the controlled coating operation during the month, kg.

 $Vol_{t,j}$, $D_{t,j}$, $W_{t,j}$ and n are defined under Equation 2A.

Calculate the mass of organic HAP in the coatings used in the controlled coating operation during deviations specified in Condition 5.2.36 per 40 CFR 63.3163(c) and (d), using Equation 2C of this condition:

$$A_{unc} = \sum_{i=1}^{m} (VOLD_i)(D_i)(W_i)$$
 (Eq. 2C)

- A_{unc} = Total mass of organic HAP in the coatings used during all periods of time in which a deviation occurred for the controlled coating operation during the month, kg.
- $VOLD_i = Total volume of the ith coating used in the controlled coating operation during deviations, liters.$
- $D_i = Density of the ith coating, kg per liter.$

- W_i = Mass fraction of organic HAP in the ith coating, kg organic HAP per kg coating.
- m = Number of different coatings.
- iv. Calculate the mass of organic HAP in the thinners used in the controlled coating operation during deviations specified Condition 5.2.36 per 40 CFR 63.3163(c) and (d), using Equation 2D of this condition:

$$B_{unc} = \sum_{j=1}^{n} (VOLD_j) (D_j) (W_j)$$
 (Eq. 2D)

- B_{unc} = Total mass of organic HAP in the thinners used during all periods of time in which a deviation occurred for the controlled coating operation during the month, kg.
- $VOLD_j =$ Total volume of the jth thinner used in the controlled coating operation during deviations, liters.

$$D_j = Density of the jth thinner, kg per liter.$$

- W_j = Mass fraction of organic HAP in the jth thinner, kg organic HAP per kg coating.
- n = Number of different thinners.
- k. Determine the total volume of coating solids deposited, liters, in the coating materials subject to the emission limit in Condition 2.3.1 using Equation 5 of this condition:

$$V_{sdep} = \sum_{i=1}^{m} (Vol_{c,i}) (V_{s,i}) (TE_{c,i}) / 100$$
 (Eq. 5)

- V_{sdep} = Total volume of coating solids deposited during the month, liters.
- $Vol_{c,i}$ = Total volume of the ith coating used during the month, liters.
- $V_{s,i}$ = Volume fraction of coating solids for the ith coating, liter solids per liter coating, determined according to Condition 5.2.34 per 40 CFR 63.3161(f).
- $TE_{c,i}$ = Transfer efficiency of the ith coating, determined according to Condition 5.2.34 per 40 CFR 63.3161(g), expressed as a decimal.
- m = Number of coatings used during the month.
- 1. Determine the mass of organic HAP emissions, kg, during each month, using Equation 6 of this condition.

$$H_{HAP} = H_{BC} - \sum_{i=1}^{q} \left(H_{Cn,i} \right) - \sum_{k=1}^{q} \sum_{m=1}^{Sk} \left(H_{DEV,k,m} \right)$$
(Eq. 6)

- H_{HAP} = Total mass of organic HAP emissions for the month, kg.
- H_{BC} = Total mass of organic HAP emissions before add-on controls from all the coatings and thinners used during the month, kg, determined according to paragraph (h) of this condition.
- $H_{Cn,i}$ = Total mass of organic HAP emission reduction for the ith controlled coating operation not using a liquid-liquid material balance, excluding all periods of time in which a deviation occurred, for the controlled coating operation during the month, from Equation 2 of this condition.
- $H_{DEV,k,m}$ = Mass of organic HAP emission reduction, based on the capture system and control device efficiency approved by the Division for period of the mth deviation for the kth controlled coating operation, kg, as determined according to Condition 5.2.35.
- q = Number of controlled coating operations not using a liquid-liquid material balance.
- Sk = Number of periods of deviation in the month for which non-zero capture and control device efficiencies have been approved for controlled coating operation, k.
- m. Determine the organic HAP emission rate for the month, kg organic HAP per liter coating solids deposited, using Equation 7 of this condition:

$$H_{rate} = \frac{\left(H_{HAP}\right)}{\left(V_{sdep}\right)}$$
(Eq. 7)

- H_{rate} = Organic HAP emission rate for the month compliance period, kg organic HAP per liter coating solids deposited.
- H_{HAP} = Mass of organic HAP emissions for the month, kg, determined according to Equation 6 of this condition.
- V_{sdep} = Total volume of coating solids deposited during the month, liters, from Equation 5 of this condition.

AIR QUALITY PERMIT

- n. To demonstrate initial compliance, the combined organic HAP emissions from the coating materials subject to the emission limit in Condition 2.3.1 shall be less than or equal to the applicable emission limitation in Condition 2.3.1. The Permittee shall keep all records as required per 40 CFR 63.3130 and 63.3131. As part of the Notification of Compliance Status required by Condition 5.2.14 per 40 CFR 63.3110, the Permittee shall submit a statement that the coating operations were in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in Condition 2.3.1 and the operating limits required by Condition 2.3.4 per 40 CFR 63.3093 and the work practice standards required by Conditions 2.3.5 and 2.3.6 per 40 CFR 63.3094 were achieved.
- o. To demonstrate initial compliance with the alternative 0.5 lb/GACS standard and separate E-coat requirements, the combined organic HAP emissions from the coating materials subject to the alternative emission limit in Condition 2.3.1 shall be less than or equal to 0.5 lb/GACS. The Permittee shall keep all records as required by Condition 5.2.17 per 40 CFR 63.3130 and 63.3131. As part of the Notification of Compliance Status required by Condition 5.2.14 per 40 CFR 63.3110, the Permittee shall submit a statement that the coating operations were in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in Condition 2.3.1 and the operating limits required by Conditions 2.3.5 and 2.3.6 per 40 CFR 63.3094 were achieved. In addition, the Permittee shall submit a statement that the organic HAP emissions from the E-coat operation met either of the applicable emissions limitations in Condition 2.3.1 per 63.3092.
- 5.2.35 The Permittee may request approval from the Division to use non-zero capture efficiencies and add-on control device efficiencies for any period of time in which a deviation specified in Condition 5.2.36 occurred.
 [40 CFR 63.3161(p)]
 - a. If the Permittee has manually collected parameter data indicating that a capture system or add-on control device was operating normally during a CPMS malfunction, a CPMS out-of-control period, or associated repair, then these data may be used to support and document the Permittee's request to use the normal capture efficiency or add-on control device efficiency for that period of deviation.
 - b. If the Permittee has data indicating the actual performance of a capture system or addon control device (e.g., capture efficiency measured at a reduced flow rate or add-on control device efficiency measured at a reduced thermal oxidizer temperature) during a deviation, then these data may be used to support and document the Permittee's request to use these values for that period of deviation.
 - c. The organic HAP emission reduction achieved during each period of deviation for which the Division has approved the use of non-zero capture efficiency and add-on control device efficiency values is calculated using Equations 8, 8A and 8B of 40 CFR 63.3161(p).

- 5.2.36 The affected source is in continuous compliance with the applicable emission limit in Condition 2.3.1 all the requirements of this condition are meet: [40 CFR 63.3163]
 - a. The organic HAP emission rate for each compliance period, determined monthly according to the procedures in Conditions 5.2.34 and 5.2.35, is equal to or less than the applicable emission limit in Condition 2.3.1. A compliance period consists of one (1) month for each month after the end of the initial compliance period described in Condition 5.2.14 per 40 CFR 63.3160.

If the organic HAP emission rate for any compliance period exceeded the applicable emission limit in Condition 2.3.1, this is a deviation from the emission limitation for that compliance period and shall be reported as specified in Conditions 5.2.14 and 5.2.15 per 40 CFR 63.3110(c)(6) and 63.3120(a)(6).

- b. The Permittee demonstrates continuous compliance with each applicable operating limit required by Condition 2.3.4 per 40 CFR 63.3093 (ref, Table 1 to 40 CFR Part 63, Subpart IIII). If an operating parameter is out of the allowed range specified in Condition 2.3.4, the Permittee shall report the deviation as required Conditions 5.2.14 and 5.2.15 per 40 CFR 63.3110(c)(6) and 63.3120(a)(6), and assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation except as provided in Condition 5.2.35 per 40 CFR 63.3161(p).
- c. The Permittee shall meet the requirements for bypass lines in Condition 4.2.3 per 40 CFR 63.3168(b) for the HAP emission control devices used at this facility. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, the Permittee shall report the event as a deviation as required by Conditions 5.2.14 and 5.2.15 per 40 CFR 63.3110(c)(6) and 63.3120(a)(6). For the purposes of completing the compliance calculations specified in Condition 5.2.34 per 40 CFR 63.3161(k), the Permittee shall assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation.
- d. The Permittee shall demonstrate continuous compliance with the work practice standards in Conditions 2.3.5 and 2.3.6 per 40 CFR 63.3094. If the Permittee did not develop a work practice plan, did not implement the plan, or did not keep the records required by Condition 5.2.28 per 40 CFR 63.3130(n), this is a deviation from the work practice standards that shall be reported as specified in Conditions 5.2.14 and 5.2.15 per 40 CFR 63.3110(c)(6) and 63.3120(a)(6).

- e. If there were no deviations from the emission limitations, submit a statement as part of the semiannual compliance report that the affected source was in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in Condition 2.3.1, and the operating limits required by Condition 2.3.4 and the work practice standards required by Conditions 2.3.5 and 2.3.6 were met during each compliance period.
- f. During periods of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency, the Permittee operates in accordance with the SSMP required by Condition 5.2.13 per 40 CFR 63.3100(f).
- g. Consistent with 40 CFR 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are not violations if the Permittee demonstrate to the Division's satisfaction that the Permittee were operating in accordance with the SSMP. The Division will determine whether deviations that occur during a period the Permittee identify as a startup, shutdown, or malfunction are violations according to the provisions in § 63.6(e).
- h. The Permittee shall keep records as specified in Conditions 5.2.16, 5.2.23, 5.2.24, 5.2.25 and 5.2.29 per 40 CFR 63.3130 and 63.3131.

40 CFR Part 60, Subpart IIII & Georgia Rule (mmm) Record Keeping, Compliance Demonstration & Reporting Requirements for Emergency Stationary Diesel Engines/Generators

- 5.2.37 The Permittee shall maintain monthly operating records of each of the emergency stationary diesel generators and/or fire pump engines, including operating hours and reasons of the operation, i.e., emergency power generation and/or fire extinguishing, readiness testing and/or maintenance check. These records shall be kept available for inspection or submittal for five (5) years from the date of record. [40 CFR 60.4214(b) & 391-3-1-.02(2)(mmm)4.(i)]
- 5.2.38 The Permittee shall use the records required in Condition 5.2.37 to determine the total emergency power operating hours of each generator during each calendar month. All the calculations shall be kept as part of the records required in Condition 5.2.37. The Permittee shall notify the Division in writing if any of the monthly total emergency operating/power generating time exceeds 16.7 hours. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with operating time limit in Condition 2.4.6. [391-3-1-.02(2)(mmm)4.(i)]

- 5.2.39 The Permittee shall use monthly operating time data required by Condition 5.2.38 to calculate monthly the 12-month rolling total of the emergency operating/power generating time for each generator specified in Condition 5.2.37 for each 12-consecutive month period. All the calculations shall be kept as part of the records required in Condition 5.2.37. The Permittee shall notify the Division in writing if any of the 12 month rolling total emergency operating/power generating time exceeds 200 hours. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with Condition 2.4.6. [391-3-1-.02(2)(mmm)4.(i)]
- 5.2.40 The Permittee shall use monthly operating time records required by Condition 5.2.37 to calculate monthly the 12 month rolling total of the maintenance check and readiness testing time for each generator and fire pump engine specified in Condition 5.2.37 for each 12-consecutive month period. All the calculations shall be kept as part of the records required in Condition 5.2.37. The Permittee shall notify the Division in writing if any of the 12 month rolling total of maintenance check and readiness testing time exceeds 100 hours. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with Condition 2.3.13. [40 CFR 60.4211(e)]
- 5.2.41 The Permittee shall demonstrate compliance with the applicable emission limits in Condition 2.3.16 by purchasing a stationary diesel engine(s)/generators certified to the applicable emission standards in 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine shall be installed and configured according to manufacturer's specifications. [40 CFR 60.4211(c)]
- 5.2.42 The Permittee shall keep records verifying that each shipment of diesel fuel received for firing the emergency stationary diesel generators and fire pump engines complies with the applicable requirements in Condition 2.3.17. Verification shall consist of either the fuel oil receipts and/or fuel supplier certifications or results of analyses of the fuel oils conducted by methods of sampling and analysis which have been specified or approved by the EPA or the Division. These records shall be kept available for inspection or submittal for five (5) years from the date of record. [40 CFR 60.4207)]
- 5.2.43 The Permittee shall comply with all the applicable requirements of the General Provisions of 40 CFR Part 60 as listed in Table 8 to 40 CFR Part 60, Subpart IIII.[40 CFR 60.4218]
- 5.2.44 The Permittee shall furnish the Division written notification of the date of the initial startup of each of the emergency stationary diesel generators and fire pump engines within fifteen (15) days after such date.
 [391-3-1-.02(2)(c)]

Compliance Demonstration Requirements for BACT for Fuel Dispensing

- 5.2.45 The Permittee shall maintain records of gasoline storage tank vent design and construction to demonstrate compliance with 12 feet height requirement and records of vent valve specifications to demonstrate compliance with 8 ounce pressure and 0.5 ounce vacuum requirements as specified in Condition 2.2.14.
- 5.2.46 The Permittee shall maintain the design, construction and test records of the Stage I vapor recovery systems serving the gasoline storage tank(s) to demonstrate compliance with Condition 2.2.14.

Compliance Demonstration Requirements for BACT Emission Limits

5.2.47 The Permittee shall use the records required in Condition 5.2.1, the methods described in Condition 5.2.8, and the actual RTO destruction efficiency, capture efficiencies and paint spray transfer efficiencies determined in Conditions 3.2.2, 3.2.3, and 3.2.4, respectively to calculate the monthly average VOC emission rates from the each of the following operations, in the units specified in Conditions 2.2.3 through 2.2.9. All calculations shall be part of this record and shall be available upon request.

Surface Coating Operation	Unit ID
E-Coat (electrodeposition)	EDT1, EOV1, ECZ1
Guide Coat (primer-surfacer)	PSB1, POV1, PCZ1
Top Coat (includes basecoat and clearcoat)	BSB1, BSB2, BFD1, BFD2,
	CSB1, CSB2, TOV1, TOV2,
	TCZ1, TCZ2
Rocker Panel Primer (anti-chip coating)	RSB1, ROV1
Sealers, USB sealers, and deadeners	USB1
Cavity wax	CDW1
Blackout coating	CDW1

Table 5.2.47-1

For the purpose of this condition, the Permittee shall assume zero efficiency for or any VOC emission capture system or the RTO for any period of time a deviation from the applicable operating limit of Condition 2.3.4 occurs, unless other data is available indicating the actual efficiency of RTO and the use of these data is approved by the Division.

5.2.48 The Permittee shall notify the Division in writing if the monthly VOC emissions from any operation specified in Condition 5.2.47 exceeds the BACT limit as established in Conditions 2.2.3 through 2.2.9. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain compliance with the applicable limit.

Compliance Demonstration and Record Keeping Requirements for Plantwide VOC Limit

- 5.2.49 The Permittee shall maintain monthly usage records of all VOC containing materials for the entire facility. These records shall include all the information required for the calculation of the monthly plant-wide VOC emissions, such as the total weight of each VOC material used/processed and/or containerized VOC wastes disposed off-site, the VOC content of each VOC material and/or containerized VOC wastes disposed off-site (expressed as a weight percentage), the operation hours of the VOC control system(s), the overall VOC control efficiency of the VOC control system(s) approved by the Division, and periods during which the combustion chamber temperature of RTO is less than the excursion temperature defined by Condition 5.1.3.
- 5.2.50 The Permittee shall use the records required in Condition 5.2.49, fuel usage records required in Condition 5.2.52, and the emission factors for combustion specified in Application 17363 to calculate the monthly total VOC emissions from the entire facility for each calendar month. The Permittee shall notify the Division in writing if VOC emissions exceed 37.7 tons during any month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with Condition 1.2.2. All calculations should be kept as part of the monthly record required in Condition 5.2.49.
- 5.2.51 The Permittee shall use the monthly VOC emission data in Condition 5.2.50 to calculate the 12-month rolling total of VOC emissions from the entire facility, including the VPC for each calendar month. All calculations should be kept as part of the monthly record required in Conditions 5.2.1 and 6.2.1. Each 12-month rolling total shall be included in the report required by Condition 5.1.3. The Permittee shall notify the Division in writing if any of the 12-month rolling totals of VOC emissions exceeds 452 tons. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain future compliance with the emission limit in Condition 1.2.2.

Compliance Demonstration and Record Keeping Requirements for Plantwide NOx and CO Limits

5.2.52 The Permittee shall maintain monthly usage records of all natural gas, distillate oil, natural gas, and diesel fuel consumed at the facility. Separate records shall be maintained for the following groups: hot water heaters (HW01, HW02, and HW03), direct and indirect-fired process heaters listed in Condition 2.2.12, and all other external combustion sources including plant comfort heating, and internal combustion engines. The records shall include the total number of gallons of fuel oil and cubic feet of natural gas used in all the emissions units that burn these fuels. The Permittee shall calculate the combined 12-month rolling total for natural gas and fuel oil, for each calendar month and include it in each month's log. All calculations used to figure usages shall be kept as part of the monthly record. These records shall be kept available for inspection or submittal for five years from the date of record.

- 5.2.53 The Permittee shall use the records required in Condition 5.2.52 and the emission factors for each of the groups detailed in Condition 5.2.52, as provided in Application 17363, to calculate combined total monthly NOx and CO emissions from the entire facility. The Permittee shall notify the Division in writing if the combined total monthly NOx emissions exceed 9.1 tons during any calendar month, or if monthly CO emissions exceed 8.3 tons during any calendar month. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to maintain compliance with the emission limits in Conditions 1.2.3 or 1.2.4.
- 5.2.54 The Permittee shall use the monthly NOx and CO emission data calculated per Condition 5.2.53 to calculate the combined 12-month rolling total of NOx and CO emissions from the entire facility for each calendar month. The Permittee shall notify the Division in writing if the combined 12-month rolling total of NOx or CO emissions from the facility exceeds 109 tons or 99 tons, respectively. This notification shall be postmarked by the fifteenth day of the following month and shall include an explanation of how the Permittee intends to attain compliance with the emission limit in Condition No. 1.2.3 or 1.2.4.

PART 6.0 SPECIAL CONDITIONS

- 6.1.1 The Permittee shall submit a completed Title V permit application to the Division within 12 months of initial startup of the facility.
- 6.1.2 At any time that the Division determines that additional control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and welfare, the Division reserves the right to amend the provisions of this Permit pursuant to the Division's authority as established in the Georgia Air Quality Act and the rules adopted pursuant to that Act.
- 6.1.3 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Fees."