MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

NOVEMBER 24, 2020

PERMIT TO INSTALL 27-17C

ISSUED TO FCA US, LLC

STERLING HEIGHTS ASSEMBLY PLANT 38111 VAN DYKE ROAD STERLING HEIGHTS, MICHIGAN 48312

IN THE COUNTY OF MACOMB

STATE REGISTRATION NUMBER B7248

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:			
September 9, 2020			
DATE PERMIT TO INSTALL APPROVED:	SIGNATURE:		
November 24, 2020			
DATE PERMIT VOIDED:	SIGNATURE:		
DATE PERMIT REVOKED:	SIGNATURE:		

PERMIT TO INSTALL

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COMMON ACRONYMS

AQD Air Quality Division

BACT Best Available Control Technology

CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

COMS Continuous Opacity Monitoring System

Department/department/EGLE Michigan Department of Environment, Great Lakes, and Energy

EU Emission Unit FG Flexible Group

GACS Gallons of Applied Coating Solids

GC General Condition
GHGs Greenhouse Gases

HVLP High Volume Low Pressure*

ID Identification

IRSLInitial Risk Screening LevelITSLInitial Threshold Screening LevelLAERLowest Achievable Emission RateMACTMaximum Achievable Control TechnologyMAERSMichigan Air Emissions Reporting System

MAP Malfunction Abatement Plan MSDS Material Safety Data Sheet

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emission Standard for Hazardous Air Pollutants

NSPS New Source Performance Standards

NSR New Source Review
PS Performance Specification

PSD Prevention of Significant Deterioration

PTE Permanent Total Enclosure

PTI Permit to Install

RACT Reasonable Available Control Technology

ROP Renewable Operating Permit

SC Special Condition

SCR Selective Catalytic Reduction SNCR Selective Non-Catalytic Reduction

SRN State Registration Number

TBD To Be Determined

TEQ Toxicity Equivalence Quotient

USEPA/EPA United States Environmental Protection Agency

VE Visible Emissions

^{*}For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm Actual cubic feet per minute

BTU British Thermal Unit °C Degrees Celsius CO Carbon Monoxide

CO2e Carbon Dioxide Equivalent dscf Dry standard cubic foot dscm Dry standard cubic meter Pegrees Fahrenheit

gr Grains

HAP Hazardous Air Pollutant

Hg Mercury hr Hour

HP Horsepower Hydrogen Sulfide

kW Kilowatt

lb Pound

m Meter

mg Milligram

mm Millimeter

MM Million

MW Megawatts

NMOC Non-Methane Organic Compounds

NO_x Oxides of Nitrogen

ng Nanogram

PM Particulate Matter

PM10 Particulate Matter equal to or less than 10 microns in diameter PM2.5 Particulate Matter equal to or less than 2.5 microns in diameter

pph Pounds per hour ppm Parts per million

ppmv Parts per million by volume ppmw Parts per million by weight

psia Pounds per square inch absolute psig Pounds per square inch gauge

scf Standard cubic feet

sec Seconds SO₂ Sulfur Dioxide

TAC Toxic Air Contaminant

Temp Temperature

THC Total Hydrocarbons tpy Tons per year Microgram

μm Micrometer or Micron

VOC Volatile Organic Compounds

yr Year

GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). (R 336.1301)
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

	Emission Unit Description	Installation	
Emission Unit ID	(Including Process Equipment & Control Device(s))	Date / Modification Date	Flexible Group ID
EU-PHOSPHATE BOX	A series of dip tanks and rinses for the surface treatment of light-duty truck boxes followed by a drying oven. None of the materials used in EU-PHOSPHATE BOX contain VOC or HAP that are emitted from the process. This equipment is located at 38111 Van Dyke Road.	12/27/2017	FG-AUTO MACT FG-PAINT SHOP BOX LINE
EU-E COAT BOX	An electrodeposition coating process consisting of a series of dip tanks, rinses, followed by a curing oven and a sanding booth. Small amounts of flash (spot) prime may be used to repair defects in the E-coat in the sand booth. Emissions from the E-coat tanks are directed to the oven. VOC emissions from the oven are controlled by a Regenerative Thermal Oxidizer (RTO). This equipment is located at 38111 Van Dyke Road.	12/17/2017	FG-CONTROL, FG-AUTO MACT, FG-PAINT SHOP BOX LINE, FG-RTO and POWDER OVEN PM
EU-SEALER BOX	Manual and robotic applicators used to apply seam sealer, deadener, and underbody sealer to light-duty truck boxes. A portion of the sealers will be cured during baking in the sealer oven. This equipment is located at 38111 Van Dyke Road.	12/12/2017	FG-AUTO MACT, FG-PAINT SHOP BOX LINE
EU-POWDERCOAT BOX	A powder anti-chip coating which is electrostatically applied. The spray booth also includes the application of a colored powder basecoat for tutone truck boxes. The powder spray application is controlled by a particulate filtration system which is vented inside the plant. This equipment is located at 38111 Van Dyke Road.	12/12/2017	FG-AUTO MACT, FG-PAINT SHOP BOX LINE, FG-RTO and POWDER OVEN PM
EU-TOPCOAT 1 BOX	A color preparation sanding booth (topcoat sand), followed by 2 parallel topcoat lines, each consisting of: A water-borne basecoat application followed by a solvent borne clearcoat. All paint application will be performed by robotic and bell applicators (except in emergency back-up situations). A heated flash zone separates the basecoat and clearcoat sections. Once clearcoat application is complete, the light-duty truck box proceeds to the main bake oven. VOC emissions from the water-borne basecoat booths, heated flash zone, the clearcoat spray booths and topcoat cure oven are controlled by a Regenerative Thermal Oxidizer (RTO). This equipment is located at 38111 Van Dyke Road.	12/12/2017	FG-TOPCOAT BOX, FG-CONTROL, FG-AUTO MACT, FG-PAINT SHOP BOX LINE, FG-RTO and POWDER OVEN PM

	Emission Unit Description	Installation	
	Emission Unit Description (Including Process Equipment & Control	Date /	
Emission Unit ID	Device(s))	Modification Date	Flexible Group ID
EU-TOPCOAT 2 BOX	A color preparation sanding booth (topcoat sand), followed by 2 parallel topcoat lines, each consisting of: A water-borne basecoat application followed by a solvent borne clearcoat. All paint application will be performed by robotic and bell applicators (except in emergency back-up situations). A heated flash zone separates the basecoat and clearcoat sections. Once clearcoat application is complete, the light-duty truck box proceeds to the main bake oven. VOC emissions from the water-borne basecoat booths, heated flash zone, the clearcoat Spray booths and topcoat cure oven are controlled by a Regenerative Thermal Oxidizer (RTO). This equipment is located at 38111 Van Dyke Road.	12/12/2017	FG-TOPCOAT BOX, FG-CONTROL, FG-AUTO MACT, FG-PAINT SHOP BOX LINE, FG-RTO and POWDER OVEN PM
EU-MISC SOLVENTS BOX	Various solvent body wipes, cleaning solvents and purge solvents used in the manufacturing of light-duty truck boxes. This process is located at 38111 Van Dyke Road.	12/12/2017	FG-CONTROL, FG-AUTO MACT FG-PAINT SHOP BOX LINE, FG-RTO and POWDER OVEN PM
EU-SPOT REPAIR 1 BOX	A dry filter spot repair booth. The booths are equipped with air atomized applicators or equivalent technology with comparable or better transfer efficiency. This equipment is located at 38111 Van Dyke Road.	12/12/2017	FG-REPAIR BOX, FG-AUTO MACT, FG-PAINT SHOP BOX LINE
EU-SPOT REPAIR 2 BOX	A dry filter spot repair booth. The booths are equipped with air atomized applicators or equivalent technology with comparable or better transfer efficiency. This equipment is located at 38111 Van Dyke Road.	12/12/2017	FG-REPAIR BOX, FG-AUTO MACT, FG-PAINT SHOP BOX LINE
EU-HEAVY REPAIR BOX	A dry filter repair booth used for sanding, wiping and prep work prior to painting. No painting occurs in this area. This equipment is located at 38111 Van Dyke Road.	2/19/2018	FG-REPAIR BOX, FG-CONTROL, FG-AUTO MACT, FG-PAINT SHOP BOX LINE
EU-AST PRG BOX	An above ground, 10,000 gallon or less waste purge solvent storage tank. This equipment is located at 38111 Van Dyke Road.	12/12/2017	FG-AUTO MACT, FG-PAINT SHOP BOX LINE
EU-HWG 4	A natural gas-fired hot water generator with a maximum heat input of up to 18 MMBtu/hr. This equipment is located at 38111 Van Dyke Road.	10/23/2017	FG-NG BOX, FG- BOILER MACT 5D, FG-PAINT SHOP BOX LINE
EU-HWG 5	A natural gas-fired hot water generator with a maximum heat input of up to 18 MMBtu/hr. This equipment is located at 38111 Van Dyke Road.	10/23/2017	FG-NG BOX, FG- BOILER MACT 5D, FG-PAINT SHOP BOX LINE
EU-HWG 6	A natural gas-fired hot water generator with a maximum heat input of up to 18 MMBtu/hr. This equipment is located at 38111 Van Dyke Road.	10/23/2017	FG-NG BOX, FG-BOILER MACT 5D, FG-PAINT SHOP BOX LINE

	Emission Unit Description	Installation	
	(Including Process Equipment & Control	Date /	
Emission Unit ID	Device(s))	Modification Date	Flexible Group ID
EU-ENG BOX GEN 1	Emergency engine subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. A new/reconstructed emergency engine greater than 500 HP constructed on or after January 1, 2009. This equipment is	1/19/2018	FG-NSPS JJJJ, FG-NG BOX, FG-PAINT SHOP BOX LINE
	located at 38111 Van Dyke Road.		
EU-ENG BOX GEN 2	Emergency engine subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. A new/reconstructed emergency engine greater than 500 HP constructed on or after January 1, 2009. This equipment is located at 38111 Van Dyke Road.	1/19/2018	FG-NSPS JJJJ, FG-NG BOX, FG-PAINT SHOP BOX LINE
EU-SOBL APPLICATION	Multiple bays in which bedliner materials will be robotically sprayed onto fully assembled and painted trucks from the main assembly plant. Raw materials include cleaning solvents, a bonding agent, and a two (2) part polyurethane resin. This equipment is located at 7566 Metropolitan Parkway, directly across the street from the Box Paint Shop at the main assembly plant.	2/12/2018	FG-SOBL, FG-AUTO MACT
EU-SOBL NATGAS	Natural gas-fired space heating equipment to provide comfort and process heating for the spray-on bedliner facility. The equipment has a total combined maximum heat input capacity of 23.3 MMBtu/hr. This equipment is located at 7566 Metropolitan Parkway, directly across the street from the Box Paint Shop at the main assembly plant.	2/12/2018	FG-SOBL
EU-WAREHOUSE NAT GAS	Natural gas-fired space heating equipment to provide comfort heating at a storage warehouse, which is located across 17 Mile Road, approximately one-half mile north of the northern boundary of the main assembly plant. The equipment has a total combined maximum heat input capacity of 6.5 MMBtu/hr and are equipped with low NOx burners.	12/12/2017	NA

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

EU-PHOSPHATE BOX EMISSION UNIT CONDITIONS

DESCRIPTION

A series of dip tanks and rinses for the surface treatment of light-duty truck boxes. None of the materials used in EU-PHOSPHATE BOX contain VOC or HAP that are emitted from the process. This equipment is located at 38111 Van Dyke Road.

Flexible Group ID: FG-AUTO MACT, FG-PAINT SHOP BOX LINE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. None of the materials used in EU-PHOSPHATE BOX shall contain any VOC or HAP that are emitted from the process. (R 336.1225, R 336.1702)

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

 The permittee shall keep a record acceptable to the district supervisor, demonstrating that any VOC and/or HAP materials contained in the EU-PHOSPHATE BOX materials will not be emitted at the representative operating conditions. (R 336.1225, R 336.1702)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes: 1 This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EU-E COAT BOX EMISSION UNIT CONDITIONS

DESCRIPTION

An electrodeposition coating process consisting of a series of dip tanks, rinses, followed by a curing oven and a sanding booth. Small amounts of flash (spot) prime may be used to repair defects in the E-coat in the sand booth. Emissions from the E-coat tanks are directed to the oven. VOC emissions from the oven are controlled by a Regenerative Thermal Oxidizer (RTO). This equipment is located at 38111 Van Dyke Road.

Flexible Group ID: FG-CONTROL, FG-AUTO MACT, FG-PAINT SHOP BOX LINE, FG-RTO and POWDER OVEN PM

POLLUTION CONTROL EQUIPMENT

RTO for VOC control from tank and oven. Dry filters for particulate control from the e coat sanding booth.

I. <u>EMISSION LIMIT(S)</u>

	5		Time Period / Operating		Monitoring /	Underlying Applicable
	Pollutant	Limit	Scenario	Equipment	Testing Method	Requirements
1.	VOC	0.04 lb/GACS	Calendar month	EU-E COAT BOX	SC VI.4	R 336.1205,
			average			R 336.1702(a),
						R 336.2810,
						40 CFR 60,
						Subpart MM
2.	VOC, Acetone,	2.32 tpy	12-month rolling	EU-E COAT BOX	SC VI.4	R 336.1205,
	Methyl Acetate,		time period as			R 336.1224,
	and Tertiary		determined at the			R 336.1702(a),
	Butyl Acetate		end of each			R 336.2810
	(TBA)		calendar month			
	combined					

II. MATERIAL LIMIT(S)

 None of the coatings used in EU-E COAT BOX shall contain any lead or lead compounds. (R 336.1225, 40 CFR 52.21 (d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. All waste coatings and VOC, acetone, methyl acetate and TBA containing materials shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)
- 2. The permittee shall operate the electrocoat dip tank such that adequate positive flow of air into the electrocoat dip tank occurs whenever EU-E COAT BOX is in operation. Adequate positive flow of air into the dip tank shall be demonstrated according to a method acceptable to the AQD District Supervisor. In addition, the permittee shall keep all access doors and windows on the electrocoat dip tank closed whenever the electrocoat process is in operation. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R336.2810)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate EU–E COAT BOX unless the RTO is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of thermal oxidizer includes maintaining all firebox zones of the RTO at a minimum average temperature of 1,500°F or at the temperature established during the most recent control device performance test, which demonstrated compliance with a minimum of 95 percent destruction efficiency, based upon a three-hour average, and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, an average temperature of 1500°F (or at the most recent acceptable temperature established during the most recent performance test) based upon a three-hour rolling average may be used. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2810, 40 CFR 60.390)
- 2. The permittee shall not operate the E-coat sanding booth portion of EU-E COAT BOX unless the dry filter particulate control system is installed maintained and operated in a satisfactory manner. (R 336.1224, R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The VOC content, water content and density of the resin, pigment, and additives, as added to the Electrocoat tank, shall be determined using federal Reference Test Method 24. Alternatively, the VOC content, water content and density of the subject materials may be determined from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the Method 24 results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of the resin, pigment and additives as added to the Electrocoat tank shall be verified by testing using federal Reference Test Method 24. (R 336.1702(a), R 336.2003, R 336.2004, R 336.2810)
- 2. Within 365 days of saleable vehicle production and at least once every five years thereafter, unless the permittee maintains a yearly demonstration that the most recent acceptable test remains valid and representative, the permittee shall verify the EU–E COAT BOX dip tank and oven control device destruction efficiency, and verify positive inward flow of air into the enclosure(s), by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission limits includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.1224, R 336.1702(a), R 336.2001, R 336.2810)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.2810)
- 2. The permittee shall monitor and record the temperature in the EU–E COAT BOX RTO on a continuous (measurements made at equally spaced intervals, not to exceed 15 minutes per interval) basis in a manner and with instrumentation acceptable to the AQD District Supervisor. All temperature data shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 60.390)
- 3. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and material, including the weight percent of each component used in EU-E COAT BOX. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. The data shall be made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)

- 4. The permittee shall keep production, usage, VOC, solids content, and emission calculation records on a monthly basis for each coating or material used in EU–E COAT BOX. The records shall be kept in a format acceptable to the AQD District Supervisor, Air Quality Division, and as a minimum, shall indicate the following:
 - a) The monthly usage rate of each material or coating (in gallons with water).
 - b) For each coating or material:
 - i. The pounds of VOC per gallon as applied (with water).
 - The solids volume fraction.
 - c) The calculated average monthly VOC emission rate in pounds per gallon of applied coating solids.
 - d) The calculated VOC, acetone, methyl acetate, and TBA combined emission rate in tons per month and tons per year based upon a 12-month rolling time period as determined at the end of each calendar month.

All such records are for the purpose of compliance demonstration. All records shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1702(a), R 336.2810)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV-RTO	98.0	115.0	R 336.1225, R 336.2803,
				R 336.2804
2.	SV-SPOT PRIME (flash prime booth)	29.0	74.0	R 336.1225, R 336.2803, R 336.2804

3. The permittee shall discharge the exhaust gases from the E-coat sanding booth portion of EU-E COAT BOX into the general in-plant environment. (R 336.1225, R 336.2803, R 336.2804)

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63 Subpart A and Subpart IIII, as they apply to EU-E COAT BOX. (40 CFR Part 63, Subparts A and Subpart IIII)
- 2. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and MM, as they apply to EU-E COAT BOX. (40 CFR 60.390)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EU-SEALER BOX EMISSION UNIT CONDITIONS

DESCRIPTION

Manual and robotic applicators are used to apply seam sealer, deadener, and underbody sealer to light-duty truck boxes. A portion of the sealers will be cured during baking in the sealer oven. This equipment is located at 38111 Van Dyke Road.

Flexible Group ID: FG-AUTO MACT, FG-PAINT SHOP BOX LINE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

			Time Period /		Monitoring /	Underlying Applicable
	Pollutant	Limit	Operating Scenario	Equipment	Testing Method	Requirements
1.	VOC	0.25 lbs VOC	Instantaneous	EU-SEALER BOX	SC VI.3	R 336.1205,
		per gallon				R 336.1224,
		(minus water),				R 336.1702(a),
		as applied				R 336.2810
2.	VOC,	17.3 tpy	12-month rolling time	EU-SEALER BOX	SC VI.3	R 336.1205,
	Acetone,		period as determined at			R 336.1224,
	Methyl		the end of each calendar			R 336.1702(a),
	Acetate, and		month			R 336.2810
	TBA					
	combined					

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. All waste coatings and VOC, acetone, methyl acetate and TBA containing materials shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1205, R 336.1224, R 336.1702(a), R 336.2810)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The VOC content of any coating or material, as applied and as received shall be determined using federal Reference Test Method 24. Upon prior approval of the AQD District Supervisor, the VOC content of any coating may alternatively be determined from manufacturer's formulation data. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1702, R 336.2810)
- 2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and material, including the weight percent of each component used in EU-SEALER BOX. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. The data shall be made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)
- 3. The permittee shall keep usage and VOC emissions calculations records on a monthly basis for each material (as received or as applied if applicable) used in EU-SEALER BOX. The records shall be kept in a format acceptable to the AQD District Supervisor, and as a minimum shall indicate the following:
 - a) A description of the material and its VOC content in pounds per gallon (minus water and with water, where applicable).
 - b) The monthly usage rate of each material.
 - c) The amount of material reclaimed where applicable.
 - d) The VOC, acetone, methyl acetate and TBA combined emission calculations determining the total VOC mass emissions in tons per month and tons per year based on a 12-month rolling time period as determined at the end of each calendar month.

All such records are for the purpose of compliance demonstration. All records shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1702(a), R 336.2810)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-SEALER OVEN	40	60	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and IIII, as they apply to EU-SEALER BOX. (40 CFR Part 63 Subparts A and IIII)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EU-POWDERCOAT BOX EMISSION UNIT CONDITIONS

DESCRIPTION

A powder anti-chip coating, which is electrostatically applied. The spray booth also includes the application of a colored powder basecoat for tutone truck boxes. The powder spray application is controlled by a particulate filtration system which is vented inside the plant. This equipment is located at 38111 Van Dyke Road.

Flexible Group ID: FG-AUTO MACT, FG-PAINT SHOP BOX LINE, FG-RTO and POWDER OVEN PM

POLLUTION CONTROL EQUIPMENT

Particulate filtration system

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-POWDERCOAT unless the particulate filtration system is installed, maintained, and operated in satisfactory manner. Satisfactory operation of particulate filtration system includes exhausting the particulate filtration system within the in plant environment. (R 336.1224, R 336.1702(a), R 336.1910, 40 CFR 60.390)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall verify the presence of visible emissions by taking six-minute visible emission readings for EU-POWDERCOAT (powder oven stacks) a minimum of once per calendar week. If there is no opacity recorded for four (4) consecutive readings (4 weeks), the permittee may then conduct opacity readings on a monthly basis. However, if any opacity is observed the readings will then revert back to weekly. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. If the permittee observes any visible emissions, the permittee shall immediately implement the following procedures: (R 336.1301, R 336.1303)
 - a) The permittee shall perform the six-minute visible emission readings at least once every 30 minutes until emissions are no longer visible or until emissions have been observed for more than two hours.
 - b) If visible emissions have been observed for more than two hours, a certified reader shall determine the opacity using Federal Reference Test Method 9 (40 CFR Part 60, Appendix A).
 - c) If the results of the Federal Reference Test Method 9 visible emission observation indicate a violation of the opacity standard, the permittee shall immediately initiate corrective actions.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV-POWDERCOAT	39.4	60.5	R 336.1225,
	CURE OVEN-1			R 336.2803, R 336.2804
2.	SV-POWDERCOAT	39.4	60.5	R 336.1225,
	CURE OVEN-2			R 336.2803, R 336.2804

3. There shall be no external exhaust from EU-POWDERCOAT BOX other than the cure ovens listed above. (R 336.1225, R 336.2803, R 336.2804)

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63 Subpart A and Subpart IIII, as they apply to EU-POWDERCOAT. (40 CFR Part 63, Subparts A and Subpart IIII)
- 2. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and MM, as they apply to EU-POWDERCOAT. (40 CFR 60.390)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EU-MISC SOLVENTS BOX EMISSION UNIT CONDITIONS

DESCRIPTION

Various solvent body wipes, cleaning solvents and purge solvents used in the manufacturing of light-duty truck boxes. VOC emissions from the purge solvents used within topcoat booths are controlled by the RTO except when manifested in the waste collection system. This process is located at 38111 Van Dyke Road.

Flexible Group ID: FG-CONTROL, FG-AUTO MACT, FG-PAINT SHOP BOX LINE, FG-RTO and POWDER OVEN PM

POLLUTION CONTROL EQUIPMENT

RTO and purge solvent recovery system.

I. <u>EMISSION LIMIT(S)</u>

			Time Period /		Monitoring /	Underlying Applicable
	Pollutant	Limit	Operating Scenario	Equipment	Testing Method	Requirements
1.	VOC,	82.6 tpy	12-month rolling time	EU-MISC	SC VI.2	R 336.1205,
	Acetone,		period as determined at	SOLVENTS BOX		R 336.1224,
	Methyl		the end of each calendar			R 336.1702(a)
	Acetate, and		month			R 336.2810
	TBA					
	combined					
2.	VOC	0.2 tons per	12-month rolling time	EU-MISC	SC VI.2	R 336.1205,
		1000 saleable	period as determined at	SOLVENTS BOX		R 336.1702(a)
		truck boxes	the end of each calendar			R 336.2810
			month			

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. All waste coatings and VOC, acetone, methyl acetate and TBA containing materials shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)

IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. The applicant shall install, maintain, and operate a purge solvent recovery system on the clearcoat automatic robots within each of the two topcoat booths. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)
- 2. The permittee shall not operate topcoat purging operations portion of EU–MISC SOLVENTS BOX unless the RTO is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of thermal oxidizer includes maintaining all firebox zones of the RTO at a minimum average temperature of 1,500°F or at the temperature established during the most recent control device performance test which demonstrated compliance with a minimum of 95 percent destruction efficiency, based upon a three-hour average, and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, an average temperature of 1500°F (or at the most recent acceptable temperature established during the most recent performance test) based upon a three-hour rolling average may be used. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 60.390)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The VOC content of any coating or material, as applied and as received shall be determined using federal Reference Test Method 24. Upon prior approval of the AQD District Supervisor, the VOC content of any coating may alternatively be determined from manufacturer's formulation data. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The applicant shall maintain a current listing from the manufacturer of the chemical composition of each coating and material including the weight percent of each component used in EU-MISC SOLVENTS BOX. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. The data shall be kept on file and made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804)
- 2. The permittee shall monitor and record the temperature in the EU–MISC SOLVENTS BOX Thermal Oxidizer on a continuous (measurements made at equally spaced intervals, not to exceed 15 minutes per interval) basis in a manner and with instrumentation acceptable to the AQD District Supervisor. All temperature data shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 60.390)
- The applicant shall keep monthly records, acceptable to the AQD District Supervisor, of the following information for EU-MISC SOLVENTS BOX:
 - a) A record of the number of saleable truck boxes.
 - b) For each material used:
 - i. A description of the material, its purpose and its VOC, acetone, methyl acetate and TBA content in pounds per gallon.
 - ii. The total amount in gallons used and the amount used in the automatic zones of FG-TOPCOAT BOX.
 - iii. The amount in gallons reclaimed where applicable.
 - c) VOC, acetone, methyl acetate and TBA combined emission calculations determining the total mass emissions in tons per month and tons per year based upon a 12-month rolling time period as determined at the end of each calendar month. In performing these calculations, the actual tested control efficiency over FG-TOPCOAT BOX, by weight, shall be applied to the materials used in the controlled automatic zones.

All such records are for the purpose of compliance demonstration. All records shall be kept on file and made available to the Department upon request. (R 336.1205. R 336.1224. R 336.1702(a), and R 336.2810)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63 Subpart A and Subpart IIII, as they apply to EU-MISC SOLVENTS BOX. (40 CFR Part 63, Subparts A and Subpart IIII)

Footnotes

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

EU-WAREHOUSE NAT GAS EMISSION UNIT CONDITIONS

DESCRIPTION

Natural gas-fired space heating equipment to provide comfort heating at a storage warehouse, which is located across 17 Mile Road, approximately one-half mile north of the northern boundary of the main assembly plant. The equipment has a total combined maximum heat input capacity of 6.5 MMBtu/hr and are equipped with low NOx burners.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Low NOx burners on all natural gas-fired equipment

I. <u>EMISSION LIMIT(S)</u>

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall burn only pipeline quality natural gas in EU-WAREHOUSE NAT GAS. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810)
- 2. The total natural gas usage for EU-WAREHOUSE NAT GAS shall not exceed 45 MMcf per year on a 12-month rolling time period basis as determined at the end of each calendar month. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-WAREHOUSE NAT GAS unless the Low NOx burners are installed, maintained, and operated in a satisfactory manner. (R 336.1205, R 336.2810)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810)
- 2. The permittee shall keep, in a format acceptable to the AQD District Supervisor, monthly and 12-month rolling natural gas usage records in million cubic feet for EU-WAREHOUSE NAT GAS. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810)

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VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-TOPCOAT BOX	A color preparation sanding booth (topcoat sand), followed by 2 parallel topcoat lines, each consisting of: A water-borne basecoat application followed by a solvent borne clearcoat. All paint application will be performed by robotic and bell applicators (except in emergency back-up situations). A heated flash zone separates the basecoat and clearcoat sections. Once clearcoat application is complete, the light-duty truck box proceeds to the main bake oven. VOC emissions from the water-borne basecoat booths, the heated flash zone, the clearcoat spray booths and the topcoat cure oven are controlled by a Regenerative Thermal Oxidizer (RTO). This equipment is located at 38111 Van Dyke Road.	EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX
FG-REPAIR BOX	Spot and final repair operations for the paint shop used to paint truck boxes. This equipment is located at 38111 Van Dyke Road.	EU-SPOT REPAIR 1 BOX, EU-SPOT REPAIR 2 BOX, EU-HEAVY REPAIRBOX
FG-NG BOX	3 natural gas-fired hot water generators equipped with low NOx burners with a maximum heat input of up to 18 MMBtu/hr each. This flexible group also includes all natural gas combustion in all air supply houses, space heaters, heated flash, cure ovens, emergency engines (generators) and the RTO. This equipment is located at 38111 Van Dyke Road.	EU-E COAT BOX, EU-SEALER BOX, EU-POWDERCOAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-HWG 4, EU-HWG 5, EU-HWG 6, EU-ENG BOX GEN 1, EU-ENG BOX GEN 2
FG-CONTROL	This flexible group covers the Regenerative Thermal Oxidizer (RTO), the dry filter particulate control systems and the water wash particulate control system. This equipment is located at 38111 Van Dyke Road.	EU-E COAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-MISC SOLVENTS BOX, EU-SPOT REPAIR 1 BOX, EU-SPOT REPAIR 2 BOX, EU-HEAVY REPAIRBOX

Elevible Craus ID	Elevible Group Description	Associated
Flexible Group ID	Flexible Group Description	Emission Unit IDs
FG-AUTO MACT	Each new, reconstructed, or existing affected source as defined in Title 40 of the Code of Federal Regulations (CFR), Part 63.3082, that is located at a facility which applies topcoat to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks; AND/OR in which you choose to include, pursuant to 40 CFR 63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light-duty trucks or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light-duty trucks or other motor vehicles; and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAPs) except as provided in 63.3081(c). This includes equipment covered by other permits, grandfathered equipment, and exempt equipment.	EU-PHOSPHATE BOX, EU-E COAT BOX, EU-SEALER BOX, EU-POWDERCOAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-MISC SOLVENTS BOX, EU-SPOT REPAIR 1 BOX, EU-SPOT REPAIR 2 BOX, EU-HEAVY REPAIRBOX, EU-AST PRG BOX EU-SOBL APPLICATION
FG-BOILER MACT 5D	New boilers and process heaters subject to 40 CFR Part 63 Subpart DDDDD in the units designed to burn Gas 1 subcategory. The subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year, are included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply interruptions of any duration are also included in this definition. These units must comply with this subpart upon startup. This flexible group consists of three (3) 18 MMBtu/hr natural gas-fired hot water generator/boilers that will be utilized in the pretreatment operations of the paint shop.	EU-HWG 4, EU-HWG 5, EU-HWG 6
FG-PAINT SHOP BOX LINE	All process equipment associated with the new paint line/paint shop used for painting truck boxes. This equipment is located at 38111 Van Dyke Road.	EU-PHOSPHATE BOX, EU-E COAT BOX, EU-SEALER BOX, EU-POWDERCOAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-MISC SOLVENTS BOX, EU-SPOT REPAIR 1 BOX, EU-SPOT REPAIR 2 BOX, EU-HEAVY REPAIRBOX EU-HEAVY REPAIRBOX EU-HWG 4, EU-HWG 5, EU-HWG 6, EU-ENG BOX GEN 1, EU-ENG BOX GEN 2
FG-RTO and POWDER OVEN PM	Flexible group for PM, PM10 and PM2.5 emissions from the RTO and powder coat oven. This equipment is located at 38111 Van Dyke Road.	EU-E COAT BOX, EU-POWDERCOAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-MISC SOLVENTS BOX

		Associated
Flexible Group ID	Flexible Group Description	Emission Unit IDs
FG-NSPS JJJJ	Emergency engines subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. New/Reconstructed emergency engines greater than 500 HP constructed on or after January 1, 2009.	
FG-SOBL	Spray-on Bedliner facility where fully assembled and painted trucks from the main assembly plant will be routed into one of several booths in which bedliner materials will be robotically sprayed onto the truck beds. Raw materials include cleaning solvents, a bonding agent, and a two (2) part polyurethane resin. Natural gas-fired equipment will be used for process and space heating. This equipment is located at 7566 Metropolitan Parkway, directly across the street from the Box Paint Shop at the main assembly plant.	EU-SOBL APPLICATION, EU-SOBL NAT GAS

FG-TOPCOAT BOX FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A color preparation sanding booth (topcoat sand), followed by 2 parallel topcoat lines, each consisting of: A water-borne basecoat application followed by a solvent borne clearcoat. All paint application will be performed by robotic and bell applicators (except in emergency back-up situations). A heated flash zone separates the basecoat and clearcoat sections. Once clearcoat application is complete, the light-duty truck box proceeds to the main bake oven. VOC emissions from the water-borne basecoat booths, the heated flash zone, the clearcoat spray booths and the topcoat cure oven and controlled by a Regenerative Thermal Oxidizer (RTO). This equipment is located at 38111 Van Dyke Road.

Emission Unit: EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX

POLLUTION CONTROL EQUIPMENT

A water wash system for particulate control and an RTO for VOC control. A dry filter particulate control system for the topcoat sanding booth.

I. <u>EMISSION LIMIT(S)</u>

			Time Period /		Monitoring /	Underlying
	Pollutant	Limit	Operating Scenario	Equipment	Monitoring / Testing Method	Applicable Requirements
1.	VOC	2.32 lb/GACS	Calendar day	FG-TOPCOAT BOX	SC VI.4	R 336.1205,
			averaging			R 336.1702(a),
						R 336.2810,
						40 CFR 60,
						Subpart MM
2.	VOC, Acetone,	105.7 tpy		FG-TOPCOAT BOX	SC VI.4	R 336.1205,
	Methyl Acetate, and		time period as			R 336.1224,
	TBA combined		determined at			R 336.1702(a),
			the end of each			R 336.2810,
			calendar month			
3.	PM	0.0031 lbs per	Hourly	FG-TOPCOAT BOX	SC V.4	R336.1331
		1,000 lbs of		(each observation		
_		exhaust gasa		zone)		_
4.	PM10	0.11 lb/hr per	Hourly	FG-TOPCOAT BOX	SC V.4	R
		zone		base coat		336.1205(1)(a)&
				observation zone		(1)(b), 40 CFR
				(each line has 1		52.21 (c) & (d)
				base coat		
_	D1440	0.40 !! /!		observation zone)	00.17.4	-
5.	PM10	0.19 lb/hr per	Hourly	FG-TOPCOAT BOX	SC V.4	R
		zone		clear coat		336.1205(1)(a)&
				observation zone		(1)(b), 40 CFR
				(each line has 1		52.21 (c) & (d)
				clear coat		
6.	PM2.5	0.11 lb/hr per	Hourly	observation zone) FG-TOPCOAT BOX	SC V.4	R
Ο.	C.SIVI 7	zone	Hourly	base coat	3C V.4	336.1205(1)(a)&
		20116		observation zone		(1)(b),
				(each line has 1		R 336.2803,
				base coat		R 336.2804,
				observation zone)		R 336.2810
				observation zone)		N 330.2010

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements		
7.	PM2.5	0.19 lb/hr per	Hourly	FG-TOPCOAT BOX	SC V.4	R		
		zone		clear coat		336.1205(1)(a)&		
				observation zone		(1)(b),		
				(each line has 1		R 336.2803,		
				clear coat		R 336.2804,		
				observation zone)		R 336.2810		
а С	Calculated on a wet gas basis							

II. MATERIAL LIMIT(S)

1. The permittee shall not use any basecoat coating that exceeds uncontrolled total formaldehyde content of 0.1 percent by weight. Further, the melamine formaldehyde resin content of these coatings shall not exceed 18.0 percent by weight as determined from the supplier's MSDS. The permittee shall not use any clearcoat coating that exceeds uncontrolled total formaldehyde content of 0.3 percent by weight. Further, the melamine formaldehyde resin content of these coatings shall not exceed 20.0 percent by weight as determined from the supplier's MSDS. The uncontrolled total formaldehyde content is defined as the total of free formaldehyde in the coating formulation and any additional formaldehyde liberated from the melamine formaldehyde resin during curing, without any reduction for add-on VOC control equipment being taken. (R 336.1225(2))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. All waste coatings and VOC, acetone, methyl acetate and TBA containing materials shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1205, R 336.1224, R 336.1702(a), R 336.2810)
- 2. The permittee shall operate each automatic clearcoat section of the two topcoat booths, such that adequate positive flow of the air into the controlled zones occurs whenever the respective booth sections are in use. Adequate positive flow of air into the controlled zones shall be demonstrated according to a method acceptable to the AQD District Supervisor. This requirement does not apply during topcoat equipment validation resulting from robot maintenance during non-production periods. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2810)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate any of the topcoat painting, heated flash or curing equipment (basecoat spray zones, basecoat heated flashes, clearcoat spray zones, two topcoat curing ovens) within FG-TOPCOAT BOX unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of thermal oxidizer includes maintaining all firebox zones of the RTO at a minimum average temperature of 1,500°F or at the temperature established during the most recent control device performance test which demonstrated compliance with a minimum of 95 percent destruction efficiency, based upon a three-hour average, and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, an average temperature of 1500°F (or at the most recent acceptable temperature established during the most recent performance test) based upon a three-hour rolling average may be used. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2810, 40 CFR 60.390)
- The permittee shall not operate the topcoat sanding booth portion of FG-TOPCOAT BOX unless the dry filter particulate control system is installed maintained and operated in a satisfactory manner. (R 336.1224, R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The VOC content of any coating or materials, as applied and as received shall be determined using federal Reference Test Method 24. Upon prior approval of the AQD District Supervisor, the VOC content of any coating may alternatively be determined from manufacturer's formulation data. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810)
- 2. Within 365 days of saleable vehicle production the permittee shall conduct initial testing, and at least once every five years thereafter, unless the permittee documents annually that the most recent acceptable test remains valid and representative, the permittee shall verify the capture efficiency and destruction efficiency of the control equipment portions of FG-TOPCOAT BOX by testing at the owner's expense, in accordance with Department requirements and the U.S. EPA "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," September 2008, EPA-453/R-08-002, as amended. Testing shall be performed using an approved EPA Method listed in 40 CFR 51 Appendix M and 40 CFR 60 Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2810)
- 3. Within 365 days of saleable vehicle production the permittee shall conduct initial testing, and at least once every five years, unless the permittee maintains a yearly demonstration that the most recent acceptable test remains valid and representative, the permittee shall verify the transfer efficiency of FG-TOPCOAT BOX, by testing at owner's expense, in accordance with Department requirements, 40 CFR 51 Appendix M, and the U.S. EPA "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," September 2008, EPA-453/R-08-002, as amended. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810)
- 4. Within 365 days of saleable vehicle production, the permittee shall verify PM2.5, PM10, and PM emission rates from all observation zones portion of FG-TOPCOAT BOX, by testing at owner's expense, in accordance with Department requirements. The hourly emission rate during testing shall be determined by the average of the acceptable test runs per the method requirements. Testing shall be performed using an approved EPA Method listed in Reference Test Method Table 1. Testing shall be repeated at least once every five years, unless the permittee has submitted a demonstration that the most recent acceptable test remains valid and representative. Alternatively, the permittee may request approval from the AQD District Supervisor to use other similar test results for compliance purposes.

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1331, R 336.2001, R 336.2003, R 336.2804, R 336.2810, 40 CFR 52.21 (c) and (d))

Reference Test Method Table 1

Pollutant	Test Method Reference		
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules		
PM10/PM2.5	40 CFR Part 51, Appendix M		

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.2810)
- The permittee shall monitor and record the temperature in FG-TOPCOAT BOX RTO on a continuous (measurements made at equally spaced intervals, not to exceed 15 minutes per interval) basis in a manner and with instrumentation acceptable to the AQD District Supervisor. All temperature data shall be made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2810, 40 CFR 60.390)
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and material including the weight percent of each component used in FG-TOPCOAT BOX. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. The data shall be made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 60.390)
- 4. The permittee shall keep production, usage, VOC, solids content and emissions calculations records on a monthly basis for each coating and material used in FG-TOPCOAT BOX in accordance with the Auto Protocol (EPA-453/R-08-002). The records shall be kept in a format acceptable to the AQD District Supervisor, and as a minimum, shall indicate the following:
 - a) The daily and monthly number of jobs produced.
 - b) The coatings used, and the number of square feet coated with each coating in each spray booth determined daily.
 - c) The monthly usage rate of each material (in gallons with water).
 - d) For each coating material:
 - i. The calculated monthly analytical VOC content in pounds of VOC per gallon as applied.
 - ii. The calculated monthly formulation VOC content in pounds of VOC per gallon as applied.
 - iii. The calculated monthly formulation volume solids content as applied.
 - iv. The prior to control free formaldehyde content and the weight percent melamine resin based on the supplier's MSDS.
 - e) The calculated volume of each coating used each day by prorating the volume of that coating used in a month to each day in the month.
 - f) The total gallons of solids deposited on a daily basis.
 - g) The calculated average daily VOC emission rate in pounds per gallon of applied coating solids.
 - h) Calculated VOC, acetone, methyl acetate and TBA combined emission rates in tons per month and tons per year based upon a 12-month rolling time period as determined at the end of each calendar month.

All such records are for the purpose of compliance demonstration. All records shall be kept on file and made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810, 40 CFR 60.390)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV-BASE COAT OBSV 1	42.0	115.0	R 336.1225, R 336.2803, R 336.2804
2.	SV-BASE COAT OBSV 2	42.0	115.0	R 336.1225, R 336.2803, R 336.2804
3.	SV-CLEAR COAT OBSV 1	56.0	115.0	R 336.1225, R 336.2803, R 336.2804
4.	SV-CLEAR COAT OBSV 2	56.0	115.0	R 336.1225, R 336.2803, R 336.2804
5.	SV-RTO	98.0	115.0	R 336.1225, R 336.2803, R 336.2804

6. The permittee shall discharge the exhaust gases from the Topcoat sanding portion of FG-TOPCOAT BOX into the general in-plant environment. (R 336.1225, R 336.2803, R 336.2804)

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and IIII, as they apply to FG-TOPCOAT BOX. (40 CFR Part 63 Subparts A and IIII)
- 2. The permittee shall comply with all applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and MM, as they apply to FG-TOPCOAT BOX. (40 CFR 60.390)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-REPAIR BOX FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Spot and final repair operations for the paint shop used to paint truck boxes. This equipment is located at 38111 Van Dyke Road.

Emission Unit: EU-SPOT REPAIR 1 BOX, EU-SPOT REPAIR 2 BOX, EU-HEAVY REPAIR BOX

POLLUTION CONTROL EQUIPMENT

Dry filter particulate control system

I. EMISSION LIMIT(S)

			Time Period / Operating		Monitoring / Testing	Underlying Applicable
	Pollutant	Limit	Scenario	Equipment	Method	Requirements
1.	VOC	4.8 lb/gal (minus water), as applied	Daily volume weighted average	FG-REPAIR BOX	SC VI.3	R 336.1702(a), R336.2810
2.	VOC, acetone, methyl acetate and TBA combined	11.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-REPAIR BOX	SC VI.3	R 336.1224, R 336.1702(a), R336.2810
3.	PM	0.0031 lbs per 1,000 lbs of exhaust gas ^a	Hourly	FG-REPAIR BOX (combined spot repair booths)	SC V.2	R 336.1331
4.	PM10	0.052 lb/hr	Hourly	FG-REPAIR BOX (combined spot repair booths)	SC V.2	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
5.	PM2.5	0.052 lb/hr	Hourly	FG-REPAIR BOX (combined spot repair booths)	SC V.2	R 336.1205(1)(a)&(1)(b), R 336.2803, R 336.2804, R 336.2810
۲	alculated on a	a wet gas basis				

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. All waste coatings and VOC, acetone, methyl acetate and TBA containing materials shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1205, R 336.1224, R 336.1702(a), R 336.2810)

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the FG-REPAIR BOX unless the dry filter particulate control system(s) in each booth are installed maintained and operated in a satisfactory manner. (R 336.1224, R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The VOC content of any coating or material, as applied and as received shall be determined using federal Reference Test Method 24. Upon prior approval of the AQD District Supervisor, the VOC content of any coating may alternatively be determined from manufacturer's formulation data. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810)
- Within 180 days of issuance of this PTI, the permittee shall verify PM10 emission rates from the spot repair booth portion of FG-REPAIR BOX, by testing at owner's expense, in accordance with Department requirements. The hourly emission rate during testing shall be determined by the average of the acceptable test runs per the method requirements. Testing shall be performed using an approved EPA Method listed in Reference Test Method Table 2. Testing to verify PM10, PM2.5, and PM emission rates from the spot repair booth portion of FG-REPAIR BOX, by testing at owner's expense, in accordance with Department requirements, shall be repeated at least once every five years, unless the permittee has submitted a demonstration that the most recent acceptable test remains valid and representative. Alternatively, the permittee may request approval from the AQD District Supervisor to use other similar test results for compliance purposes.

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1331, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c) and (d))

Reference Test Method Table 2

Pollutant	Test Method Reference			
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules			
PM10/PM2.5	40 CFR Part 51, Appendix M			

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.2810)
- 2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating and material, including the weight percent of each component used in FG-REPAIR BOX. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. The data shall be made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)
- 3. The permittee shall keep usage and VOC emissions calculations records on a monthly basis for each material (as received or as applied if applicable) used in FG-REPAIR BOX. The records shall be kept in a format acceptable to the AQD District Supervisor, and as a minimum shall indicate the following:
 - a) A description of the material and its VOC content in pounds per gallon (minus water and with water, where applicable).
 - b) The monthly usage rate of each material.
 - c) The amount of material reclaimed where applicable.
 - d) The VOC, acetone, methyl acetate and TBA combined emission calculations determining the total VOC mass emissions in tons per calendar month and tons per year based on a 12-month rolling time period as determined at the end of each month.
 - e) Monthly calculations of the average daily pounds of VOC per gallon, unless all coatings contain less than 4.8 pounds VOC per gallon minus water, as applied.

All such records are for the purpose of compliance demonstration. All records shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SV-SPOT REPAIR 1 BOX SPOT REPAIR 2 BOX	70.0	74.0	R 336.1225, R 336.2803, R 336.2804
(Combined into 1 stack)			N 330.2003, N 330.2004

2. The permittee shall discharge the exhaust gases from the EU-HEAVY REPAIR BOX portion of FG-REPAIR BOX into the general in-plant environment. (R 336.1225, R 336.2803, R 336.2804)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and IIII, as they apply to FG-Repair. (40 CFR Part 63 Subparts A and IIII)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-NG BOX FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Three (3) natural gas-fired hot water generators equipped with low NOx burners with a maximum heat input of up to 18 MMBtu/hr each. This flexible group also includes all natural gas combustion in all air supply houses, space heaters, heated flash, cure ovens, emergency engines (generators) and the RTO. All air supply houses are direct fire units. This equipment is located at 38111 Van Dyke Road.

Emission Unit: EU-E COAT BOX, EU-SEALER BOX, EU-POWDERCOAT BOX, EU-TOPCOAT BOX 1, EU-TOPCOAT BOX 2, EU-HWG 4, EU-HWG 5, EU-HWG 6, EU-ENG BOX GEN 1, EU-ENG BOX GEN 2

POLLUTION CONTROL EQUIPMENT

Low NOx burners on all natural gas-fired equipment (excluding emergency engines)

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1	. NOx	27.6 tpy	12-month rolling time period as	FG-NG BOX	SC VI.2	R 336.1205(1)(a) & (3)
			determined at the end of each			
			calendar month			

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall burn only pipeline quality natural gas in FG-NG BOX. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 2. The total combined natural gas usage for FG-NG BOX shall not exceed 1,068 MMcf per year on a 12-month rolling time period basis as determined at the end of each calendar month. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate FG-NG BOX (excluding emergency engines) unless the Low NOx burners are installed, maintained, and operated in a satisfactory manner. (R 336.1205, R 336.2810)
- 2. The heat input capacity of each hot water generator in FG-NG BOX shall not exceed a maximum of 18 MMBtu per hour. (R 336.1205(1)(a) & (3), R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)
- 3. Each hot water generator in FG-NG BOX shall have a device to monitor and record the monthly natural gas usage. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 60.48c(g))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))
- 2. Based upon the records of the amount of natural gas burned and the US EPA AP-42 emission factor for NOx from the combustion of natural gas, the permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total NOx emissions for FG-NG BOX, as required by SC I.1. Upon agreement with the AQD District Supervisor an alternative emission factor or calculation method may be used. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (3))
- 3. The permittee shall keep, in a format acceptable to the AQD District Supervisor, monthly and 12-month rolling natural gas usage records in million cubic feet for FG-NG BOX. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

VII. REPORTING

- 1. Within 60 days of start-up, the permittee shall provide information acceptable to the AQD District Supervisor demonstrating the Hot Water Generators (HWG), the air supply houses and the space heaters are equipped with Low NOx burners. (R 336.1205(1)(a) & (3))
- 2. The permittee shall submit written notification of the date of construction of each Hot Water Generator in FG-NG BOX to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within 30 days after construction commences, as specified in 40 CFR 60.7. (40 CFR 60.7)
- 3. The permittee shall submit written notification of the actual date of initial startup for each Hot Water Generator in FG-NG BOX as provided by the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. Each notification shall include:
 - a) The design heat input capacity and identification of fuels to be combusted.
 - b) The annual capacity factor at which the permittee anticipates operating based on all fuels fired and based on each individual fuel fired.

The permittee shall submit these notifications to the AQD District Supervisor within 15 days after initial startup occurs. (40 CFR 60.7, 40 CFR 60.48c(a))

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
<u> </u>		, ,	•	
1.	SV-HWG 4	24.0	48.0	R 336.1225,
				R 336.2803, R 336.2804
2.	SV-HWG 5	24.0	48.0	R 336.1225,
				R 336.2803, R 336.2804
3.	SV-HWG 6	24.0	48.0	R 336.1225,
				R 336.2803, R 336.2804

4. The exhaust gases from the Deck Air Supply House portions of FG-NG BOX shall be released only into the general in-plant environment. (R 336.1205, 40 CFR 52.21(c) & (d))

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to each Hot Water Generator in FG-NG BOX. (40 CFR Part 60 Subparts A & Dc)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-CONTROL FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group covers the Regenerative Thermal Oxidizer (RTO), the dry filter particulate control systems and the water wash particulate control system. This equipment is located at 38111 Van Dyke Road.

Emission Unit: EU-E COAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-MISC SOLVENTS BOX, EU-SPOT REPAIR 1 BOX, EU-SPOT REPAIR 2 BOX, EU-HEAVY REPAIR BOX

POLLUTION CONTROL EQUIPMENT

RTO for control of VOC emissions from e-coat and topcoat. Dry filter particulate control for the sanding booth portions of e-coat, topcoat, spot repair and heavy repair. Water wash particulate control for topcoat.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FG-CONTROL unless a Malfunction Abatement Plan (MAP) has been submitted to the AQD District Supervisor for review and approval. The plan shall include the procedures for maintaining and operating in a satisfactory manner, the RTO, the water wash system, and the dry filter particulate filter system(s) add on control devices. If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the malfunction abatement plan within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor. The revised plan shall include procedures for maintaining and operating in a satisfactory manner, FG-CONTROL add-on air pollution control devices, and monitoring equipment during malfunction events, and a program for corrective action for such events. All records and activities associated with the MAP shall be made available to the Department upon request. (R 336.1225, R 336.702, R 336.1910, R 336.1911, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall install, maintain, and operate in a satisfactory manner, a combustion chamber temperature monitoring device for the thermal oxidizers in FG-CONTROL to monitor and record the temperature on a continuous basis during operation. Temperature data recording shall consist of measurements made at equally spaced intervals at least once every 15 minutes. All records shall be kept on file and made available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1910, R 336.2810, 40 CFR 60 Subpart MM)

- 2. The permittee shall maintain records of maintenance and repair activities for FG-CONTROL. Records shall identify the equipment inspected and the date of the inspection. The permittee shall also record any maintenance activities or corrective actions taken as a result of equipment inspections or due to malfunction. All records shall be kept on file and made available to the Department upon request. (R 336.1910)
- 3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections (except during weeks with no production) of each basecoat and clearcoat spray booths and monthly visual inspections of each heavy and spot repair booth and the E-coat sanding booth. The permittee shall keep records of visual inspections of each exhaust filter, wet eliminator, or water wash particulate control system which include the dates and results of the inspections, and the dates and reasons for repairs. All records shall be kept on file and made available to the Department upon request. (R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) and (d))
- 4. The permittee shall maintain a record of modifications to any add-on control equipment including any testing and monitoring to demonstrate satisfactory operation upon which compliance depends. All records shall be kept on file and made available to the Department upon request. (R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) and (d))
- 5. For the RTO, while in operation during production, the permittee shall conduct bypass monitoring for each bypass valve such that the valve or closure method cannot be opened without creating an alarm condition for which a record shall be made. Records of the bypass line that was open and the length of time the bypass was open shall be kept on file and made available to the Department upon request. (R 336.1702, R 336.1910, R 336.2810)
- 6. The permittee shall keep records of maintenance inspections which include the dates, results of the inspections and the dates and reasons for repairs if made. The following items shall be inspected for the RTO control device used to demonstrate compliance with the applicable VOC emission limits:
 - a) Validation of thermocouple accuracy or recalibration of each temperature thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.
 - b) Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months.
 - c) Perform an inspection of the valve seals condition and verify valve timing/synchronization a minimum of once every 18 months.

The requirement to address these items is also satisfied if a destruction efficiency test has been performed on the control device within the prior 18-month period. All records shall be kept on file and made available to the Department upon request. (R 336.1910, R 336.1911)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-RTO	98	115	R 336.1225,
			R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

NA

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-AUTO MACT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Each new, reconstructed, or existing affected source as defined in Title 40 of the Code of Federal Regulations (CFR), Part 63.3082, that is located at a facility which applies topcoat to new automobile or new light-duty truck bodies or body parts for new automobiles or new light-duty trucks; AND/OR in which you choose to include, pursuant to 40 CFR 63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light-duty trucks or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light-duty trucks or other motor vehicles; and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAPs) except as provided in 63.3081(c). This includes equipment covered by other permits, grandfathered equipment, and exempt equipment.

Emission Unit: EU-PHOSPHATE BOX, EU-E COAT BOX, EU-SEALER BOX, EU-POWEDERCOAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-MISC SOLVENTS BOX, EU-SPOT REPAIR 1 BOX, EU-SPOT REPAIR 2 BOX, EU-HEAVY REPAIR BOX, EU-AST PRG BOX, EU-SOBL APPLICATION

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

			Time Period /		Monitoring /	Underlying Applicable
	Pollutant	Limit	Operating Scenario	Equipment	Testing Method	Requirements
1.	Organic HAP	0.30 lb per	Calendar month	New –	Condition Nos.	40 CFR 63.3090
		GACS		FG-AUTO MACT	III.2, V.1 & VI.3	(a)
				WITH EU-E COAT		
				BOX		
2.	Organic HAP*	0.50 lb per	Calendar month	New -	Condition Nos.	40 CFR 63.3090
		GACS		FG-AUTO MACT	III.2, V.1 & VI.3	(b)
3.	Organic HAP	0.01 lb per lb	Calendar month	New -	Condition Nos.	40 CFR 63.3090
		of coating		SEALERS &	III.2, V.1 & VI.3	(c) or
		_		ADHESIVES		63.3091(c)
4.	Organic HAP	0.01 lb per lb	Calendar month	New -	Condition Nos.	40 CFR 63.3090
	-	of coating		Deadener Materials	III.2, V.1 & VI.3	(d) or 63.3091(d)

- **FG-AUTO MACT** includes Guidecoat, Topcoat, Final Repair, Glass Bonding Primer, and Glass Bonding Adhesive operations plus all coatings and thinners, except for deadener materials and adhesive and sealers not part of glass bonding systems.
- FG-AUTO MACT WITH EU-E COAT also includes Electrocoat operations in addition to all of the operations of FG-MACT.

SEALERS & ADHESIVES include only adhesives and sealers that are not part of glass bonding systems.

- * Permittee may choose to comply with this limit if the requirements of Condition No. I.5 are met.
- 5. The permittee may choose to comply with either Special Condition numbers I.1 or I.2. The permittee may choose to comply with Special Condition number I.2 only if Electrocoat system (EU-ECOAT) meets either of the following requirements. (40 CFR 63.3090)
 - a) Each individual material added to the Electrocoat system contains no more than 1.0 percent by weight of any organic HAP and no more than 0.10 percent by weight of any OHSA-defined carcinogenic organic HAP, or
 - b) The emissions from all Electrocoat bake ovens are captured and ducted to a CONTROL DEVICE having a minimum destruction or removal efficiency of at least 95 percent (by weight).

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall develop and implement a work practice plan to minimize the 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 for which an emission limit has been established under Special Condition Nos. I.1 through I.4. The work practice plan must specify practices and procedures to ensure that, at a minimum, the following elements are implemented consistent with the requirements of 40 CFR 63.3094: The permittee shall comply with the applicable work practice plans at all times.
 - All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers.
 - b) The risk of spills of organic-HAP containing coatings, thinners, cleaning materials, and waste materials must be minimized.
 - c) Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
 - d) Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
 - e) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.
 - f) Organic HAP emissions from cleaning and from purging of equipment associated with all coating operations subject to emission limits in Special Conditions Nos. I.1 through I.4 above must be minimized through a plan addressing:
 - i. Vehicle body wipe pursuant to 40 CFR 63.3094(c)(1)(i);
 - ii. Coating line purging pursuant to 40 CFR 63.3094(c)(1)(ii);
 - iii. Coating system flushing pursuant to 40 CFR 63.3094(c)(1)(iii);
 - iv. Cleaning of spray booth grates pursuant to 40 CFR 63.3094(c)(1)(iv);
 - v. Cleaning of spray booth walls pursuant to 40 CFR 63.3094(c)(1)(v);
 - vi. Cleaning of spray booth equipment pursuant to 40 CFR 63.3094(c)(1)(vi);
 - vii. Cleaning of external spray booth areas pursuant to 40 CFR 63.3094(c)(1)(vii);
 - viii. Additional housekeeping measures pursuant to 40 CFR 63.3094(c)(1)(viii).

The permittee may choose to comply with an alternative to the work practice standard, after receiving prior approval from the USEPA in accordance with 40 CFR 63.6(g). **(40 CFR 63.3100(c), 40 CFR 63.4493(b) and (c))**

2. The work practice plan shall not become part of the facility's Renewable Operating Permit (ROP). Revisions to the work practice plan likewise do not represent revisions to the facility's ROP. Copies of the current work practice plan and any earlier plan developed within the past 5 years are required to be made available for inspection and copying by the AQD upon request. (40 CFR 63.3094)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall perform the applicable performance tests and compliance demonstrations in accordance with 40 CFR 63.3150-3152, 40 CFR 63.3160-3161, 40 CFR 63.3163-3168, 40 CFR 63.3170-3171, and 40 CFR 63.3173. **(40 CFR, Part 63, Subpart IIII)**
- 2. The permittee may rely upon the results of transfer efficiency tests that have been previously conducted upon written approval from the AQD District Supervisor. Any such previous tests must meet the criteria identified in 40 CFR 63.3160(c)(1) through (3). **(40 CFR 63.3160)**

3. The permittee shall determine the mass fraction of each organic HAP for each material used according to the procedures established under 40 CFR 63.3151(a)(1) through (5). The permittee may use the USEPA Method ALT-017 as an alternative for any material used, after demonstrating that its use as an alternative test methodology for that material, has been approved by the USEPA pursuant to the requirements of 40 CFR 63.3151(a)(3) and 40 CFR 63.7. (40 CFR 63.7, 40 CFR 63.3151)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall compile all required records and complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the end of the calendar month following each compliance period unless otherwise specified in any monitoring/recordkeeping condition. (R 336.1213(3))
- 2. The permittee shall conduct an initial compliance demonstration for the initial compliance period described in 40 CFR 63.3150-3151, 40 CFR 63.3160-3161, and 40 CFR 63.3170-3171. The initial compliance period begins on the applicable compliance date specified in 40 CFR 63.3083 and ends on the last day of the month following the compliance date. If the initial date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next month. (40 CFR 63.3150, 40 CFR 63.3160, 40 CFR 63.3170, 40 CFR 63.3083(a) and (b))
- 3. The permittee shall keep all records as required by 40 CFR 63.3130 in the format and timeframes outlined in 40 CFR 63.3131. (40 CFR 63.3152(c), 40 CFR 63.3163(j))
- 4. The permittee shall maintain, at a minimum, the following records as of the applicable compliance date, for each compliance period:
 - a) A copy of each notification and report that is submitted to comply with 40 CFR, Part 63, Subpart IIII and the documentation supporting each notification and report. **(40 CFR 63.3130(a))**
 - b) A current copy of information provided by materials suppliers or manufactures, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP for each coating, thinner and cleaning material, the density for each coating and thinner, and the volume fraction of coating solids for each coating. (40 CFR 63.3130(b))
 - c) For each coating or thinner used in FG-AUTO MACT or FG-AUTO MACT WITH EU-E COAT BOX, the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids. (40 CFR 63.3130(c))
 - d) For each material used in EU-SEALERS & ADHESIVES, the mass used in each month and the mass organic HAP content. (40 CFR 63.3130(c))
 - e) Calculations of the organic HAP emission rate for FG-AUTO MACT or FG-AUTO MACT WITH EU-E COAT BOX in pounds per gallon of applied coating solids. If permittee chooses to comply with the option identified in Special Condition I.5.a., a record of the weight fraction of each organic HAP in each material added to the Electrocoat system. These calculations and records must include all raw data, algorithms, and intermediate calculations. If the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22) is used, all data input to this protocol must be recorded. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. (40 CFR 63.3130(c), 40 CFR 63.3163, 40 CFR 63.3173)
 - f) Calculation of the average monthly mass organic HAP content in pounds per pound of coating, separately for EU-SEALERS & ADHESIVES. (40 CFR 63.3130(c), 40 CFR 63.3152)
 - g) The name, volume, mass fraction organic HAP content and density of each cleaning material used. (40 CFR 63.3130(d) (f))

VII. REPORTING

1. The permittee shall submit all semiannual compliance reports as required by 40 CFR 63.3120(a). The first time period covered by these reports shall be shortened so as to end on either June 30 or December 31, whichever comes first. These reports shall be due March 15 for the reporting period July 1 to December 31 and September 15 for the reporting period January 1 to June 30. (40 CFR 63.3120(a))

2. The Permittee shall submit applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8(f)(4) and 63.9(b) through (e) and (h), as specified in 40 CFR 63.3110. **(40 CFR 63, Subparts A and IIII)**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart IIII for Surface Coating of Automobiles and Light-duty Trucks by the initial compliance date as they apply to FG-AUTO MACT. The permittee may choose an alternative compliance method not listed in FG-AUTO MACT by providing the appropriate notifications required under 40 CFR, Part 63.9(j), maintaining a log required by 40 CFR, Part 70.6(9), and by complying with all applicable provisions required by Subpart IIII for the compliance option chosen. (40 CFR 70.6(a)(9), 40 CFR Part 63.9(j), 40 CFR Part 63 Subparts A and IIII)

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-BOILER MACT 5D FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These new boilers or process heaters must comply with this subpart upon startup.

Emission Unit:

Less than 5 MMBtu/hr	NA
Equal to or greater	NA
than 5 MMBtu/hr and	
less than 10 MMBtu/hr	
Equal to or greater	EU-HWG 4, EU-HWG 5, EU-HWG 6
than 10 MMBtu/hr	

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only combust natural gas, refinery gas, and/or other gas 1 fuels in the boiler or process heater, except during periods of time as allowed in the *Unit designed to burn gas 1 subcategory* definition in 40 CFR 63.7575. **(40 CFR 63.7499(I))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating. (40 CFR 63.7500(a))
 - a) The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. (40 CFR 63.7500(a)(1))
 - b) At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.7500(a)(3))
- 2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. (40 CFR 63.7500(b))
- 3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. Boilers and process heaters in the units designed to burn gas 1 fuel subcategory with a heat input capacity: (40 CFR 63.7500(e))

- a) Of less than or equal to 5 MMBtu per hour must complete a tune-up every 5-years as specified in 40 CFR 63.7540, stated in SC IX.5. **(40 CFR 63.7500(e))**
- b) Greater than 5 MMBtu per hour and less than 10 MMBtu per hour must complete a tune-up every 2-years as specified in 40 CFR 63.7540, stated in SC IX.5. (40 CFR 63.7500(e))
- 4. The permittee must demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD within the applicable annual, biennial, or 5-year schedule as specified in 40 CFR 63.7515(d), stated in SC III.5, following the initial compliance date specified in 40 CFR 63.7495(a), stated in SC IX.1. Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in 40 CFR 63.7515(d), stated in SC III.5. (40 CFR 63.7510(g))
- 5. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must:
 - a) Conduct the first annual tune-up no later than 13-months after the initial startup of the new or reconstructed boiler or process heater, the first biennial tune-up no later than 25-months after the initial startup of the new or reconstructed boiler or process heater, or the first 5-year tune-up no later than 61-months after the initial startup of the new or reconstructed boiler or process heater.
 - b) Conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a; biennial performance tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.5.b; or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.5.c. Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13-months after the previous tune-up. Each biennial tune-up specified in 40 CFR 63.7540(a)(11) must be conducted no more than 25-months after the previous tune-up. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61-months after the previous tune-up. (40 CFR 63.7515(d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. <u>TESTING/SAMPLING</u>

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee must keep records according to paragraphs (a)(1) and (2) of 40 CFR 63.7555, as listed below. (40 CFR 63.7555(a))
 - a) A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.7555(a)(1))
 - b) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). (40 CFR 63.7555(a)(2))
- 2. If the permittee operates a unit in the unit designed to burn gas 1 subcategory that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, other gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 63 or Parts 60, Part 61, or Part 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. (40 CFR 63.7555(h))
- 3. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
- 4. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.7560(b))

5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. (40 CFR 63.7560(c))

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, and stated in Subpart A of 40 CFR Part 63. (40 CFR 63.7495(d))
- 5. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. (40 CFR 63.7545(a))
- 6. As specified in 40 CFR 63.9(b)(4) and (5), the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**
- 7. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of 40 CFR 63.7545, as listed below. (40 CFR 63.7545(f))
 - a) Company name and address. (40 CFR 63.7545(f)(1))
 - b) Identification of the affected unit. (40 CFR 63.7545(f)(2))
 - c) Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. (40 CFR 63.7545(f)(3))
 - d) Type of alternative fuel that the permittee intends to use. (40 CFR 63.7545(f)(4))
 - e) Dates when the alternative fuel use is expected to begin and end. (40 CFR 63.7545(f)(5))
- 8. If the permittee has switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the switch/change. The notification must identify: (40 CFR 63.7545(h))
 - a) The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. (40 CFR 63.7545(h)(1))
 - b) The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7545(h)(2))
 - c) The date upon which the fuel switch or physical change occurred. (40 CFR 63.7545(h)(3))
- 9. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. (40 CFR 63.7550(a))

- 10. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.12, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.5.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.5.c, and not subject to emission limits or operating limits, the permittee may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report. (40 CFR 63.7550(b))
 - a) The first semi-annual compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.1, and ending on December 31 after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.1. When submitting an annual, biennial, or 5-year compliance report, the first compliance report must cover the period beginning on the compliance date specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1, 2, or 5 years, as applicable, after the compliance date that is specified in 40 CFR 63.7495. (40 CFR 63.7550(b)(1))
 - b) The first semi-annual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495, stated in SC IX.1. The first annual, biennial, or 5-year compliance report must be postmarked or submitted no later than March 15. (40 CFR 63.7550(b)(2), 40 CFR 63.7550(b)(5))
 - c) Each subsequent semi-annual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Annual, biennial, and 5-year compliance reports must cover the applicable 1-, 2-, or 5-year periods from January 1 to December 31. (40 CFR 63.7550(b)(3))
 - d) Each subsequent semi-annual compliance report must be postmarked or submitted no later than September 15 or March 15, whichever date is the first date following the end of the semiannual reporting period. Annual, biennial, and 5-year compliance reports must be postmarked or submitted no later than March 15. (40 CFR 63.7550(b)(4), 40 CFR 63.7550(b)(5))
- 11. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. (40 CFR 63.7550(c))
 - a) If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (iv), and (xvii) of 40 CFR 63.7550. (40 CFR 63.7550(c)(1))
 - b) 40 CFR 63.7550(c)(5) is as follows:
 - i. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
 - ii. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
 - iii. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
 - iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.5.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.5.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.5.c. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. (40 CFR 63.7550(c)(5)(xiv))
 - v. 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. (40 CFR 63.7550(c)(5)(xvii))

- 12. The permittee must submit the reports according to the procedures specified in paragraph (h)(3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
 - a) The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. (40 CFR 63.7550(h)(3))

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

NA

IX. OTHER REQUIREMENT(S)

- 1. If the permittee has a new or reconstructed boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD upon startup of each boiler or process heater. (40 CFR 63.7495(a))
- 2. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7505(a))
- 3. For affected sources, as defined in 40 CFR 63.7490, that switch subcategory consistent with 40 CFR 63.7545(h), stated in SC VII.8, after the initial compliance date, the permittee must demonstrate compliance within 60 days of the effective date of the switch, unless the compliance demonstration for this subcategory has been conducted within the previous 12 months. (40 CFR 63.7510(k))
- 4. For affected sources (as defined in 40 CFR 63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.5.a, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.5.d, for units that are not operating at the time of their scheduled tune-up. (40 CFR 63.7515(g))
- 5. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
 - a) If the boiler or process heater has a heat input capacity of 10 MMBtu per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. The tune-up must be conducted while burning the type of fuel or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. (40 CFR 63.7540(a)(10))
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36-months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. (40 CFR 63.7540(a)(10)(i))

- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (40 CFR 63.7540(a)(10)(ii))
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36-months from the previous inspection. (40 CFR 63.7540(a)(10)(iii))
- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. (40 CFR 63.7540(a)(10)(iv))
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
 - (1) The concentrations of CO in the effluent stream in ppm by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. (40 CFR 63.7540(a)(10)(vi)(A))
 - (2) A description of any corrective actions taken as a part of the tune-up. (40 CFR 63.7540(a)(10)(vi)(B))
 - (3) The type and amount of fuel used over the 12-months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. (40 CFR 63.7540(a)(10)(vi)(C))
- b) If the boiler or process heater has a heat input capacity of less than 10 MMBtu per hour (except as specified in paragraph (a)(12) of 40 CFR 63.7540), the permittee must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. (40 CFR 63.7540(a)(11))
- c) If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 MMBtu per hour and the unit is in the units designed to burn gas 1 subcategory, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in paragraph (a)(10)(i) of 40 CFR 63.7540 until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72-months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. (40 CFR 63.7540(a)(12))
- d) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13))

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-PAINT SHOP BOX LINE FLEXIBLE GROUP CONDITIONS

DESCRIPTION

All process equipment associated with the new paint line/paint shop used for painting truck boxes. This equipment is located at 38111 Van Dyke Road.

Emission Unit: EU-PHOSPHATE BOX, EU-E COAT BOX, EU-SEALER BOX, EU-POWDERCOAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-MISC SOLVENTS BOX, EU-SPOT REPAIR 1 BOX, EU-SPOT REPAIR 2 BOX, EU-HEAVY REPAIR BOX, EU-AST PRG BOX, EU-HWG 4, EU-HWG 5, EU-HWG 6, EU-ENG BOX GEN 1, EU-ENG BOX GEN 2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not produce more than 407,000 saleable truck boxes per 12-month rolling time period (R 336.1205, R 336.1225, R 336.2803, R 336.2804)
- 2. The permittee shall not operate EU-ENG BOX GEN 1 and EU-ENG BOX GEN 2 for more than 600 hours per calendar year combined and either engine for more than 500 hours per calendar year. (R 336.1205, R 336.2803, R 336.2804, R 336.2810)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall keep a record, in a manner acceptable to the District Supervisor of the number of saleable truck boxes per calendar month. The permittee shall also keep a record of the number of saleable truck boxes produced on a 12-month rolling time period as determined at the end of each calendar month. (R 336.1205(1)((a) & (3), R 336.1224, R 336.1225)
- 2. The permittee shall keep a record of the hours of operation for each month and calendar year for each emergency generator individually and the combined total for both generators. (R 336.1205)

VII. REPORTING

- 1. Within seven days of starting production of saleable vehicles in FG-PAINT SHOP BOX LINE (i.e., the new emission units), the permittee shall notify the AQD District Supervisor, in writing, as to the date of the start of saleable vehicle production. (R 336.1205)
- 2. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the timeframes specified in 40 CFR 60.7. (40 CFR 60.7)
- 3. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FG-PAINT SHOP BOX LINE. (R 336.1216(1)(a)(v), R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV-ENG BOX GEN 1	7.5	15.0	R 336.1225,
				R 336.2803, R 336.2804
2.	SV-ENG BOX GEN 2	7.5	15.0	R 336.1225,
				R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

NA

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-RTO and POWDER OVEN PM FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Flexible group for PM, PM10 and PM2.5 emissions from the RTO and powder coat oven. This equipment is located at 38111 Van Dyke Road.

Emission Unit: EU-E COAT BOX, EU-POWDERCOAT BOX, EU-TOPCOAT 1 BOX, EU-TOPCOAT 2 BOX, EU-MISC SOLVENTS BOX

POLLUTION CONTROL EQUIPMENT

RTO

I. EMISSION LIMIT(S)

		Time Period /		Monitoring /			
		Operating		Testing	Underlying Applicable		
Pollutant	Limit	Scenario	Equipment	Method	Requirements		
1. PM	0.0034 lbs per	Hourly	RTO and Cure Oven portion	SC V.1	R 336.1205(1)(a) and		
	1,000 lbs of		of EU-POWDERCOAT BOX		(1)(b),		
	exhaust gasa				R 336.1331(1)(c)		
2. PM10	1.68 lb/hr	Hourly	RTO and Cure Oven portion	SC V.1	R 336.1205(1)(a) and		
			of EU-POWDERCOAT BOX		(1)(b),		
					40 CFR 52.21 (c) & (d)		
3. PM2.5	1.68 lb/hr	Hourly	RTO and Cure Oven portion	SC V.1	R 336.1205(1)(a) and		
			of EU-POWDERCOAT BOX		(1)(b), R 336.2803,		
					R 336.2804		
^a Calculated on a wet gas basis							

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Within 365 days of saleable vehicle production, the permittee shall verify PM2.5, PM10, and PM emission rates of the RTO and Cure Oven portion of EU-POWDERCOAT BOX, by testing at owner's expense, in accordance with Department requirements. The hourly emission rate during testing shall be determined by the average of the acceptable test runs per the method requirements. Testing shall be performed using an approved EPA Method listed in Reference Test Method Table 3. Testing shall be repeated at least once every five years, unless the permittee has submitted a demonstration that the most recent acceptable test remains valid and representative. Alternatively, the permittee may request approval from the AQD District supervisor to use other similar test results for compliance purposes.

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (c) and (d))

Reference Test Method Table 3

Pollutant	Test Method Reference		
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules		
PM10/PM2.5	40 CFR Part 51, Appendix M		

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall not operate any of the topcoat painting, heated flash or curing equipment (basecoat spray zones, basecoat heated flashes, clearcoat spray zones, two topcoat curing ovens) within FG-RTO and POWDER OVEN PM unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of thermal oxidizer includes maintaining all firebox zones of the RTO at a minimum average temperature of 1,500°F or at the temperature established during the most recent control device performance test which demonstrated compliance with a minimum of 95 percent destruction efficiency, based upon a three-hour average, and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, an average temperature of 1500°F based upon a three-hour rolling average may be used. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2810, 40 CFR 60.390)

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV-RTO	98.0	115.0	R 336.1225,
				R 336.2803, R 336.2804
2.	SV-POWDERCOAT	39.4	60.5	R 336.1225,
	CURE OVEN-1			R 336.2803, R 336.2804
3.	SV-POWDERCOAT	39.4	60.5	R 336.1225,
	CURE OVEN-2			R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

NA

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-NSPS JJJJ FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Emergency engines subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. New/Reconstructed emergency engines greater than 500 HP constructed on or after January 1, 2009.

Emission Unit: EU-ENG BOX GEN 1, EU-ENG BOX GEN 2

POLLUTION CONTROL EQUIPMENT

NA

I. <u>EMISSION LIMIT(S)</u>

		Time Period /		Monitoring /	Underlying Applicable
Pollutant	Limit	Operating Scenario	Equipment	Testing Method	Requirements
1. NOx ^A	2.0 g/HP-hr	Hourly	Each engine in FG-NSPS	SC VI.3	40 CFR
	OR		JJJJ	OR	60.4233(e)
	160 ppmvd			SC V.1	(Table 1)
2. CO ^A	4.0 g/HP-hr	Hourly	Each engine in FG-NSPS	SC VI.3	40 CFR
	OR		JJJJ	OR	60.4233(e)
	540 ppmvd			SC V.1	(Table 1)
3. VOC ^{A,B}	1.0 g/HP-hr	Hourly	Each engine in FG-NSPS	SC VI.3	40 CFR
	ÖR		JJJJ	OR	60.4233(e)
	86 ppmvd			SC V.1	(Table 1),
					R 336.2810

A Owners and operators of stationary *non-certified* SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂. (See Table 1 to 40 CFR 60 Subpart JJJJ.)

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in each engine in FG-NSPS JJJJ as defined in 40 CFR 60.4248. (R 336.1201(3), 40 CFR 60.4248)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. At all times, the permittee must operate and maintain any emergency stationary reciprocating internal combustion engine (RICE), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (40 CFR 60.4243(b))
- 2. The permittee may operate each engine in FG-NSPS JJJJ for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. These hours are included as part of the 500 hour per calendar year individual and 600 hour per calendar year combined limits listed under SC III.2 in FG-PAINT SHOP BOX LINE. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. (40 CFR 60.4243(d))

^B For purposes of this emission limit, when calculating emissions of VOC, emissions of formaldehyde should not be included. (See Table 1 to 40 CFR 60 Subpart JJJJ.)

- 3. Each engine in FG-NSPS JJJJ may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in §60.4243(d)(1) through (d)(3). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. (40 CFR 60.4243(d))
- 4. The permittee shall operate and maintain each engine in FG-NSPS JJJJ such that it meets the emission limits in SC I.1, SC I.2, and SC I.3 over the entire life of the engine. **(40 CFR 60.4234)**
- 5. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for each engine in FG-NSPS JJJJ:
 - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
 - b. Keep a maintenance plan and the permittee may only change those engine settings that are permitted by the manufacturer. If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and
 - c. Meet the requirements as specified in 40 CFR 1068 Subparts A through D, as applicable.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and be subject to testing to determine compliance with the emission limits. (40 CFR 60.4243(b)(1) & (2))

6. If any engine in FG-NSPS JJJJ is a non-certified engine or a certified engine operating in a non-certified manner, per 40 CFR Part 60 Subpart JJJJ, the permittee shall keep a maintenance plan for each engine in FG-NSPS JJJJ and shall, to the extent practicable, maintain and operate each engine in FG-NSPS JJJJ in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.4243(b)(2))

IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

1. The permittee shall equip and maintain each engine in FG-NSPS JJJJ with a non-resettable hours meter to track the operating hours. (40 CFR 60.4237(b))

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. If each engine in FG-NSPS JJJJ is a non-certified engine or a certified engine operating in a non-certified manner, per 40 CFR Part 60 Subpart JJJJ, the permittee must demonstrate compliance as follows:
 - a) Conduct an initial performance test to demonstrate compliance with the applicable emission standards in SC I.1, I.2, and I.3, within 1 year after each engine in FG-NSPS JJJJ is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer.
 - b) If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244.
 - c) Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years, whichever comes first, thereafter, to demonstrate compliance with the applicable emission standards.

If a performance test is required, no less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60 Subpart JJJJ)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall monitor and record the total hours of operation for each engine in FG-NSPS JJJJ per calendar year, recorded through the non-resettable hours meter, in a manner acceptable to the District Supervisor, AQD. The permittee shall document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. (R 336.1205(1)(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4243, 40 CFR 60.4245(b))
- 2. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 60.4243, 40 CFR 60.4245)
- 3. The permittee shall keep, in a satisfactory manner, the following records for each engine in FG-NSPS JJJJ:
 - a) If certified: The permittee shall keep records of the documentation from the manufacturer that each engine in FG-NSPS JJJJ is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
 - b) If non-certified: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a), R 336.2803, R 336.2804, 40 CFR 60.4233(e), 40 CFR 60.4243, 40 CFR 60.4245(a))

- 4. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine in FG-NSPS JJJJ:
 - a) If certified: The permittee shall keep the manufacturer's emission-related written instructions and records demonstrating that each engine in FG-NSPS JJJJ has been maintained according to them, as specified in SC III.8.
 - b) If non-certified: The permittee shall keep records of a maintenance plan, as required by 40 CFR 60.4243 and maintenance activities.

The permittee shall keep all records on file and make them available to the Department upon request. (40 CFR 60.4243, 40 CFR 60.4245(a), 40 CFR Part 60 Subpart JJJJ)

- 5. The permittee shall keep, in a satisfactory manner, either vendor emissions guarantees, or the testing required by this PTI, for each engine in FG-NSPS JJJJ. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a), R 336.2803, R 336.2804)
- 6. If any engine in FG-NSPS JJJJ does not meet the standards applicable to non-emergency engines for the applicable size and model year, then the permittee shall monitor and record the operation of each engine in FG-NSPS JJJJ in emergency and non-emergency service that are recorded through the non-resettable hours meter, in a manner acceptable to the District Supervisor, AQD. The permittee shall document the time of operation of the engine and the reason the engine was in operation during that time. (R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4243, 40 CFR 60.4245(b))
- 7. The permittee shall keep records of all notifications submitted to comply with 40 CFR Part 60 Subpart JJJJ, as required by this PTI, and all documentation supporting any notification. (40 CFR 60.4245(a))

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of any engine in FG-NSPS JJJJ. (R 336.1216(1)(a)(v), R 336.1201(7)(a))

- 2. The permittee shall submit a notification specifying whether each engine in FG-NSPS JJJJ will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of each engine in FG-NSPS JJJJ and within 30 days of switching the manner of operation. (40 CFR Part 60 Subpart JJJJ)
- 3. If each engine in FG-NSPS JJJJ has not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231, the permittee shall submit an initial notification as required in 40 CFR 60.7(a)(1), if applicable. The notification must include the following information:
 - a) Name and address of the owner or operator.
 - b) The address of the affected source.
 - c) Information for each engine in FG-NSPS JJJJ including make, model, engine family, serial number, model year, maximum engine power, and engine displacement.
 - d) Emission control equipment for each engine in FG-NSPS JJJJ; and
 - e) Fuel used in each engine in FG-NSPS JJJJ.

The notification must be postmarked no later than 30 days after construction commenced for FG-NSPS JJJJ. (40 CFR 60.7(a)(1), 40 CFR 60.4245(c))

- 4. The permittee shall submit an initial notification as required in 40 CFR 63.6645(f) for each engine in FG-NSPS JJJJ. The notification must include the information in 40 CFR 63.9(b)(2)(i)-(v):
 - a) The name and address of the owner or operator.
 - b) The address (i.e., physical location) of the affected source.
 - c) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date.
 - d) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and
 - e) A statement of whether the affected source is a major source or an area source.

The notification must also include a statement that each engine in FG-NSPS JJJJ has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions). (40 CFR 63.9(b)(2)(i)-(v), 40 CFR 63.6590(b)(1), 40 CFR 63.6645(f))

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV-ENG BOX GEN 1	7.5	15.0	R 336.1225,
				R 336.2803, R 336.2804
2.	SV-ENG BOX GEN 2	7.5	15.0	R 336.1225,
				R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart JJJJ, as they apply to FG-NSPS JJJJ. (40 CFR Part 60 Subparts A & JJJJ)
- 2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to FG-NSPS JJJJ, upon startup. **(40 CFR Part 63 Subparts A and ZZZZ)**

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-SOBL FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Spray-on Bedliner facility where fully assembled and painted trucks from the main assembly plant will be routed into one of several booths in which bedliner materials will be robotically sprayed onto the truck beds. Raw materials include cleaning solvents, a bonding agent, and a two (2) part polyurethane resin. Natural gas-fired equipment will be used for process and space heating. This equipment is located at 7566 Metropolitan Parkway, directly across the street from the Box Paint Shop at the main assembly plant.

Emission Unit: EU-SOBL APPLICATION, EU-SOBL NAT GAS

POLLUTION CONTROL EQUIPMENT

Two-stage dry filtration system to control particulate emissions from the spray-on bedliner application bays.

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1	. VOC and methyl acetate combined	8.8 tpy	12-month rolling time period as determined at the end of each calendar month		SC VI.2, SC VI.3	R 336.1224, R 336.1702(a), R 336.2810

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)
- 2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. (R 336.1224, R 336.1370)
- 3. The permittee shall handle all VOC, methyl acetate and/or HAP containing materials, including solvents, bonding agents, resins, and coatings in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)
- 4. The permittee shall burn only pipeline quality natural gas in the EU-SOBL NAT GAS portion of FG-SOBL. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810)
- 5. The total natural gas usage for the EU-SOBL NAT GAS portion of FG-SOBL shall not exceed 176.0 MMcf per year on a 12-month rolling time period basis as determined at the end of each calendar month. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810)

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall not operate any of the spray-on bedliner application bays in FG-SOBL unless all respective exhaust filters are installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1301, R 336.1910)
- 2. The permittee shall equip and maintain each spray-on bedliner application bay in FG-SOBL with robotic airless high pressure applicators or comparable technology with equivalent transfer efficiency. (R 336.1205, R 336.1702(a), R 336.2810)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1224, R 336.1225, R 336.1702(a), R 336.2810)
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702, R 336.2810)
- 3. The permittee shall keep the following information on a monthly basis for FG-SOBL:
 - a) Gallons of each material used.
 - b) VOC and methyl acetate content of each material as applied.
 - VOC and methyl acetate mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC and methyl acetate mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.2810)

- 4. The permittee shall keep in a format acceptable to the AQD District Supervisor, monthly and 12-month rolling natural gas usage records in million cubic feet for the EU-SOBL NAT GAS portion of FG-SOBL. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) & (d))
- 5. The permittee shall monitor the condition each particulate control system through monthly visual inspections of each spray-on bedliner application bay in FG-SOBL. The permittee shall keep records of visual inspections of each two-stage dry filtration system which include the dates and results of the inspections, and the dates and reasons for repairs. All records shall be kept on file and made available to the Department upon request. (R 336.1224, R 336.1301, R 336.1910)

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FG-SOBL. (R 336.1216(1)(a)(v), R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SV-SOBL1	42	47	R 336.1225, R 336.2803, R 336.2804
SV-SOBL2	42	47	R 336.1225, R 336.2803, R 336.2804
SV-SOBL3	42	47	R 336.1225, R 336.2803, R 336.2804
SV-SOBL4	42	47	R 336.1225, R 336.2803, R 336.2804
SV-SOBL5	42	47	R 336.1225, R 336.2803, R 336.2804
SV-SOBL6	42	47	R 336.1225, R 336.2803, R 336.2804
SV-SOBL7	42	47	R 336.1225, R 336.2803, R 336.2804

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63 Subpart A and Subpart IIII, as they apply to FG-SOBL as an effected source. (40 CFR Part 63, Subparts A and Subpart IIII)

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).