

**PERMIT TO INSTALL**

**Table of Contents**

COMMON ACRONYMS ..... 2  
POLLUTANT / MEASUREMENT ABBREVIATIONS..... 3  
GENERAL CONDITIONS ..... 4  
EMISSION UNIT SPECIAL CONDITIONS..... 6  
    EMISSION UNIT SUMMARY TABLE ..... 6  
    EUPRETREATWEST ..... 11  
    EUECOATWEST ..... 13  
    EUPRIMERWEST ..... 16  
    EUTOPCOATWEST ..... 21  
    EUPURGECLEANWEST ..... 26  
    EUBODYWIPEWEST..... 29  
    EUSPOTREPAIRWEST ..... 31  
    EUECOATEAST ..... 34  
    EUPWDRPRMEAST ..... 38  
    EUPURGECLEANEAST ..... 41  
    EUSPOTREPAIREAST..... 44  
    EUSEALERS ..... 47  
    EUFINALREPAIR..... 50  
    EUFLUIDFILL ..... 53  
    EUTRIMBOILER ..... 55  
FLEXIBLE GROUP SPECIAL CONDITIONS..... 57  
    FLEXIBLE GROUP SUMMARY TABLE ..... 57  
    FGTOPCOATEAST ..... 60  
    FGCONTROLS ..... 71  
    FGSPOTPRIMEWEST..... 74  
    FGRTOWEST ..... 77  
    FGRTOEAST ..... 80  
    FGBOILERS ..... 83  
    FGAUTOMACT ..... 85  
    FGBOILERMACTHWG ..... 89  
    FGNGWEST ..... 96  
    FGNEWNGEAST ..... 99  
    FGTANKS ..... 101  
    FG-OLDMACT ..... 103  
    FGNGEMENG ..... 105  
    FGPSWEST/NEWEAST ..... 110  
FGFACILITY CONDITIONS..... 112  
APPENDIX 7. .... 115  
    Appendix 7. Emission Calculations..... 115

### 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
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan 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
CO <sub>2</sub> e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H <sub>2</sub> S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO <sub>x</sub>	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
SO <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	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 ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUPRETREATWEST	A series of dip tanks and rinses for the surface treatment of automobiles.	TBD	FGAUTOMACT, FGNGWEST, FGPSWEST/NEWEAST
EUECOATWEST	An electrodeposition (E-coat) coating process consisting of a series of dip tanks, rinses, a curing oven, a cooling tunnel, followed by a primer prep booth (light sanding) for repairs of surface blemishes. Emissions from the E-coat tanks are directed to the curing oven and then to the new west RTO for control.	TBD	FGCONTROLS, FGAUTOMACT, FGRTOWEST, FGNGWEST, FGPSWEST/NEWEAST
EUPRIMERWEST	A prep tunnel, two (2) automatic primer booths, one for solvent borne main primer and one for solvent borne tintone coloring primer, a primer observation zone, an ambient flash-off area, a natural gas-fired primer curing oven, and a cooling tunnel, followed by two booths (color prep booth and heavy reprocess sand) for repair of surface blemishes.	TBD	FGCONTROLS, FGAUTOMACT, FGRTOWEST, FGNGWEST, FGPSWEST/NEWEAST
EUTOPCOATWEST	An automatic topcoat spray application process consisting of a water borne basecoat coating booth, a basecoat observation zone, a basecoat ambient flash-off area, a basecoat heated flash-off area, a solvent borne clearcoat coating booth, a clearcoat observation zone, a clearcoat ambient flash-off area, and a natural gas-fired curing oven. Approximately 85% of the air from the spray zones is recirculated back into the process and 15% is exhausted to the concentrator and RTO.	TBD	FGCONTROLS, FGAUTOMACT, FGRTOWEST, FGNGWEST, FGPSWEST/NEWEAST
EUPURGE CLEANWEST	Various cleaning solvents and purge solvents used in the west paint shop. VOC emissions from the solvent-based purge materials used within EUPRIMERWEST and the clearcoat booth portion of EUTOPCOATWEST are controlled by the west concentrator and west RTO except when collected in the purge collection system.	TBD	FGCONTROLS, FGAUTOMACT, FGRTOWEST, FGPSWEST/NEWEAST
EUBODYWIPEWEST	Body wipes used throughout the west paint shop.	TBD	FGAUTOMACT, FGPSWEST/NEWEAST

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUSPOTREPAIRWEST	Rapid reprocess repair booth after the west paint shop topcoat process.	TBD	FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST
EUECOATEAST	Formerly EU-UNIPRIME. An electro-deposition (E-coat) coating process consisting of a series of dip tanks, rinses, a curing oven, and a cooling tunnel. The curing oven is currently controlled by an existing RTO, which will be replaced by the new east RTO, which will control both the tank and curing oven portions of EUECOATEAST.	7/31/1984, Date of PTI	FGCONTROLS, FGAUTOMACT, FGRTOEAST, FGNEWNGEAST, FGPSWEST/NEWEAST
EUPWDRPRMEAST	A powder anti-chip coating application process in the east paint shop which is electrostatically applied. The spray booth also includes the application of a colored powder basecoat for tutone applications. The powder spray application is controlled by a particulate filtration system which is vented inside the plant.	01/01/1996, Date of PTI	FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST
EUPURGECELEANEAST	Formerly EU-SOLVENT-WIPE. Emissions from purge solvent, solvent wipes, and body wipe cleaners throughout the body shop, east paint shop, and final assembly portion of the plant. After installation of the east concentrator and east RTO, VOC emissions from the solvent-based purge materials used within the basecoat and clearcoat booths are controlled except when collected in the purge collection system.	7/31/1984 / Date of PTI	FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST
EUSPOTREPAIREAST	Spot repair process in the east paint shop, prior to the topcoat application.	TBD	FGAUTOMACT, FGCONTROLS, FGPSWEST/NEWEAST
EUSEALERS	Formerly EU-SEALERS&ADHESIVES. Various manual and robotic sealer and adhesive application stations/booths. Sealers and adhesives are applied at various decks in both west and east paint shops (some of which are cured in the sealer oven), the body shop, and the final assembly areas of the facility.	7/31/1984, Date of PTI	FGAUTOMACT, FGPSWEST/NEWEAST
EUFINALREPAIR	Formerly EU-FINAL-REPAIR: Final repair operations including a coating area. Prep booths or sanding booths are equipped with side-draft dry filter particulate control systems. Spray booths are equipped with downdraft dry filter particulate control system.	7/22/1996, Date of PTI	FGCONTROLS, FGPSWEST/NEWEAST, FGAUTOMACT
EUFLUIDFILL	Formerly EU-FLUID-FILL: Each vehicle will be filled with various fluids such as gasoline, antifreeze, transmission fluid, power steering fluid, and windshield washer fluid.	7/31/1984, Date of PTI	FGPSWEST/NEWEAST

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EU-COLOR-ONE	Color1 line (one of two identical topcoat lines) consists of spray booths for applying topcoat to vehicle bodies and oven for curing. Downdraft Water Wash System for particulate control on the spray booths and Thermal Oxidizer for VOC control on the bake oven. After installation of the control equipment, the spray booth portions will be controlled by the east concentrator and east RTO.	07/31/1984, Date of PTI	FGAUTOMACT, FGTOPCOATEAST, FGCONTROLS, FGRTOEAST, FGNEWNGEAST, FGPSWEST/NEWEAST
EU-COLOR-TWO	Color2 line (one of two identical topcoat lines) consists of spray booths for applying topcoat to vehicle bodies and oven for curing. Downdraft Water Wash System for particulate control on the spray booths and Thermal Oxidizer for VOC control of the bake oven.	07/31/1984	FGAUTOMACT, FGTOPCOATEAST
EU-REPROCESS (High-bake)	Reprocess is high bake repair operation that consists of spray booths for topcoat application to repair vehicle bodies and oven for curing. Water Wash System for particulate control on the spray booths and Thermal Oxidizer for VOC control of the bake oven.	07/31/1984	FGAUTOMACT, FGCONTROLS, FGTOPCOATEAST
EU-BOILER3	152 million BTU heat input per hour (Babcox & Wilcox Boiler3, installed 7/11/98) natural gas only boiler equipped with low NOx burners.	07/11/1998	FG-BOILERS, FG-BOILER-MACT5D
EU-BOILER4	106 million BTU heat input per hour (Babcox & Wilcox Boiler4, installed 7/11/98) natural gas only boiler equipped with low NOx burners.	07/11/1998	FG-BOILERS, FG-BOILER-MACT5D
EU-BOILER5	152 million BTU heat input per hour (Wickes Boiler5, installed 9/1/96) natural gas only boiler equipped with low NOx burners.	09/01/1996	FG-BOILERS, FG-BOILER-MACT5D
EU-BOILER6	192 million BTU heat input per hour (Riley Stoker Boiler6, installed 10/29/84) natural gas only boiler equipped with oxygen trim system but not low NOx burners.	10/29/1984	FG-BOILERS, FG-BOILER-MACT5D
EU-TRIMBOILER	A 37 million BTU heat input per hour (Cleaver Brooks) natural gas only boiler, equipped with low NOx burners.	TBD	FGBOILERMACTHWG, FGPSWEST/NEWEAST
EUHWG1	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG2	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG3	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST



<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUHWG4	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG5	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG6	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG7	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUHWG8	Hot water generator with a maximum heat input rating of 5 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUDSBCHWG	Hot water generator with a maximum heat input rating of 4 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUDSSBHWG	Hot water generator with a maximum heat input rating of 4 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EUDSCCHWG	Hot water generator with a maximum heat input rating of 4 MMBtu/hr. This unit is equipped with a low NOx burner.	TBD	FGBOILERMACTHWG, FGNGWEST, FGPSWEST/NEWEAST
EU-UNLEADEDGAS1	TK1 25,000-gallon gasoline storage tank – above-ground storage tank with spill containment.	03/19/2013	FGTANKS
EUMETANK	8,000-gallon bulk storage tank for the storage of windshield washer fluid.	01/01/2014	FGTANKS
EUNEWNGASSEMBLY	Natural gas-fired air supply housing and space heating (51.0 MMBtu/hr capacity) in the assembly portion of the facility added as part of the west paint shop project.	TBD	FGNGWEST, FGCONTROLS, FGPSWEST/NEWEAST
EUNEWNGPSEAST	Natural gas-fired air supply housing (8.3 MMBtu/hr capacity) installed in the east paint shop as part of the west paint shop project.	TBD	FGNEWNGEAST, FGCONTROLS, FGPSWEST/NEWEAST
EUDIESELTANK1	8,000-gallon storage tank for the storage of diesel fuel.	01/01/2014	FGTANKS
EUANTIFREEZETANK	10,000-gallon storage tank for the storage of antifreeze.	01/01/2014	FGTANKS
EUBRAKEFLUIDTANK	8,000-gallon storage tank for the storage of brake fluid.	01/01/2014	FGTANKS
EUAUTOTRANS	8,000-gallon storage tank for the storage of automatic transmission fluid.	01/01/2014	FGTANKS
EUDIESELEXTANK	5,000-gallon storage tank for the storage of diesel exhaust fluid.	01/01/2014	FGTANKS
EUGASTANK2	1,000-gallon storage tank for the storage of gasoline.	01/01/2014	FGTANKS
EUDIESELTANK2	1,000-gallon storage tank for the storage of diesel fuel.	01/01/2014	FGTANKS

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUPURSOLVTANK	8,000-gallon storage tank for the storage of purge solvent.	01/01/2014	FGTANKS
EUDIESELTANK3	1,000-gallon storage tank for the storage of diesel fuel.	01/01/2014	FGTANKS
EUNGEMENG1	An 850-HP natural gas-fired emergency engine.	TBD	FGNGEMENG, FGPSWEST/NEWEAST
EUSPOTPRIMEWEST1	A spot prime repair process in the west paint shop. This process is after the E-coat process and prior to primer application.	TBD	FGAUTOMACT, FGCONTROLS, FGSPOTPRIMEWEST, FGPSWEST/NEWEAST
EUSPOTPRIMEWEST2	A spot prime repair process in the west paint shop. This process is after primer application and prior to topcoat application.	TBD	FGAUTOMACT, FGCONTROLS, FGSPOTPRIMEWEST, FGPSWEST/NEWEAST

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.

<b>EUPRETREATWEST EMISSION UNIT CONDITIONS</b>
--

**DESCRIPTION**

A series of dip tanks and rinses for the surface treatment of automobiles.

**Flexible Group ID:** FGAUTOMACT, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. No materials in EUPRETREATWEST shall contain any VOCs or HAPs that are emitted from the process. **(R 336.1702, R 336.2908)**

**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))**

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component as used in EUPRETREATWEST. The data may consist of 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 336.1702, R 336.2908)**
2. The permittee shall keep a record, acceptable to the AQD district supervisor, demonstrating that any VOC and/or HAP compounds contained in the EUPRETREATWEST materials will not be emitted at the representative operating conditions. **(R 336.1225, R 336.1702, R 336.2908)**

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVENTRYAIRSEAL	18	113	40 CFR 52.21(c) & (d)
2. SVSTAGE2B	26	113	40 CFR 52.21(c) & (d)
3. SVSTAGE5	30	75	40 CFR 52.21(c) & (d)
4. SVSTAGE9	20	113	40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

**EUECOATWEST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

An electrodeposition (E-coat) coating process consisting of a series of dip tanks, rinses, a curing oven, a cooling tunnel, followed by a primer prep booth (light sanding) for repairs of surface blemishes. Emissions from the E-coat tanks are directed to the curing oven and then to the new west RTO for control.

**Flexible Group ID:** FGCONTROLS, FGAUTOMACT, FGNGWEST, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

The west RTO for VOC control from the tank and oven. Dry filters for particulate control from the prep booth.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	0.04 lb/GACS	Monthly Average	EUECOATWEST	SC VI.5	R 336.1205, R 336.1702(a), R 336.2908, 40 CFR 60 Subpart MM
2. VOC	1.1 tpy	12-month rolling time period as determined at the end of each calendar month	EUECOATWEST	SC VI.5	R 336.1205, R 336.1702(a), R 336.2908

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. All waste coatings and VOC 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 336.2908)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate the electrodeposition tank and curing oven portions of EUECOATWEST unless the west RTO is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the west RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the RTO combustion chamber temperature shall be maintained at the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1225, R 336.1702, R 336.1910, R 336.2908)**
2. The permittee shall not operate the prep booth portion of EUECOATWEST unless the respective dry filter particulate controls are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dry filter particulate controls includes conducting the required monitoring and recordkeeping pursuant to SC VI.3. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

## **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 EUECOATWEST tank, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the District Supervisor, the VOC content, water content and density of the resin, pigment and additives as added to the EUECOATWEST tank shall be verified by testing using federal Reference Test Method 24. **(R 336.2004, R 336.2040, R 336.2041, R 336.2908)**
2. Within 365 days of saleable vehicle production, and at least once every five years from the last testing date thereafter unless the permittee documents annually that the most recent acceptable test remains valid and representative, the permittee shall verify the capture efficiency of the dip tank and oven portions of EUECOATWEST, by testing at owner's expense, in accordance with Department requirements and 40 CFR 51 Appendix M. Testing shall be performed using an approved EPA Method listed in 40 CFR 60 Appendix A and 40 CFR 63 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 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 336.2908)**
3. 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 destruction efficiency of the west RTO in EUECOATWEST by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 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 336.2908)**

## **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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUECOATWEST. The data may consist of 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 336.1225, R 336.1702(a))**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter system, 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, 40 CFR 52.21(c) & (d))**

4. The permittee shall install, maintain, and operate in a satisfactory manner, a combustion chamber temperature monitoring device for the west RTO in EUECOATWEST to monitor and record the combustion chamber 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 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2908, 40 CFR 60.390)**
5. The permittee shall keep production, usage, VOC, solids content, and emissions calculation records on a monthly basis for each coating and material used in EUECOATWEST. The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and at 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).
    - ii. The solids volume fraction.
  - c) The calculated average daily VOC emission rate in pounds per gallon of applied coating solids.
  - d) The calculated VOC 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 336.1225, R 336.1702(a), R 336.2908)**

## **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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVRTOWEST	58	113	R 336.1225, 40 CFR 52.21(c) & (d)

2. The primer prep booth shall not be directly discharged to the ambient air at any time. **(R 336.1225, 40 CFR 52.21(c) & (d))**

## **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 EUECOATWEST. **(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 EUECOATWEST. **(40 CFR 60.390)**

### **Footnotes:**

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

**EUPRIMERWEST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A prep tunnel, two (2) automatic primer booths, one for solvent borne main primer and one for solvent borne tutone coloring primer, a primer observation zone, an ambient flash-off area, a natural gas-fired primer curing oven, and a cooling tunnel, followed by two booths (color prep booth and heavy reprocess sand) for repair of surface blemishes.

**Flexible Group ID:** FGCONTROLS, FGAUTOMACT, FGNGWEST, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

Dry filter particulate controls on the prep booth and reprocess heavy sand booth where the air is recirculated and not exhausted into the ambient air. Coating booth overspray is controlled by a waterwash particulate control system. A portion of the primer coating booth exhaust will be filtered and recirculated to the booth air make-up system. The primer coating booth and flash-off area emissions are exhausted through a bank of particulate filters prior to venting to the west concentrator and the west RTO. Oven emissions are exhausted through a bank of filters and then to the west RTO. Emissions from the observation zone are controlled by a particulate control system and exhausted to the ambient air.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	2.92 lb/GACS	Calendar Day Averaging	EUPRIMERWEST	SC VI.6	R 336.1205, R 336.1702(a), R 336.2908, 40 CFR 60 Subpart MM
2. VOC	21.4 tpy	12-month rolling time period as determined at the end of each calendar month	EUPRIMERWEST	SC VI.6	R 336.1205, R 336.1702, R 336.2908
3. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	EUPRIMERWEST (observation zone)	SC V.5	R336.1331
4. PM10	0.143 pph	Hourly	EUPRIMERWEST (observation zone)	SC V.5	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
5. PM2.5	0.143 pph	Hourly	EUPRIMERWEST (observation zone)	SC V.5	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)

<sup>a</sup>Calculated on a wet gas basis

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA



#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate the coating booth, ambient flash, or curing oven portions of EUPRIMERWEST unless the west concentrator and west RTO portions of FGCONTROLS are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the west concentrator includes maintaining a minimum desorption gas inlet temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the desorption gas inlet temperature shall be maintained within 15 degrees of the most recent acceptable performance test and can be based upon a three-hour average. Satisfactory operation of the west RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed; after which the RTO combustion chamber temperature shall be maintained at or above the temperature established during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1225, R 336.1702, R 336.2908)**
2. The permittee shall not operate the primer spray booth, flash-off area, and observation zone portions of EUPRIMERWEST unless the waterwash systems are installed, maintained, and operated in a satisfactory manner. The permittee shall not operate the spray booth, flash-off area, and curing oven portions of EUPRIMERWEST unless the pre-concentrator/oxidizer particulate control systems are installed, maintained, and operated in a satisfactory manner. The permittee shall not operate the primer prep booth, and heavy sand booth portions of EUPRIMERWEST unless the respective dry filter particulate control systems are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the water wash and dry filter system particulate controls includes conducting the required monitoring and recordkeeping pursuant to SC VI.3. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

#### **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 any coating or material as applied in EUPRIMERWEST, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2908)**
2. Within 365 days of saleable vehicle production, and at least once every five years from the last testing date thereafter unless the permittee documents annually that the most recent acceptable test remains valid and representative, the permittee shall verify the capture efficiency of the spray booth, flash-off area, observation zone, and oven portions of EUPRIMERWEST, 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. Testing shall be performed using an approved EPA Method listed in 40 CFR 60 Appendix A and 40 CFR 63 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 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2908)**
3. 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 removal efficiency of the concentrator and destruction efficiency of the RTO in EUPRIMERWEST by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 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 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2908)**

4. 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 overall transfer efficiency of EUPRIMERWEST, by testing at 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. No less than 30 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 336.2908)**
5. Within 365 days after 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 PM, PM10, and PM2.5 emission rates from the observation zone portion of EUPRIMERWEST, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A
PM10 / PM2.5	40 CFR Part 51, 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 30 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) & (d))**

## **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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUPRIMERWEST. The data may consist of 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 336.1225, R 336.1702)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter system, 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, 40 CFR 52.21(c) & (d))**

4. The permittee shall monitor and record the combustion chamber temperature in the west 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 Air Quality Division. All temperature data shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R336.1910, 40 CFR 52.21, 40 CFR 60.390, 40 CFR 64.6(c)(1)(i & ii))**
5. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a temperature monitoring device to determine the west concentrator desorption gas inlet temperature on a continuous basis, during operation of EUPRIMERWEST. Gas temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. **(R 336.1702(a), R 336.1910, R 336.2908)**
6. The permittee shall keep production, usage, VOC, solids content, and emissions calculation records on a monthly basis for each coating and material used in EUPRIMERWEST. These records shall also contain data, test documentation, and annual reviews which are necessary to perform calculations in the publication entitled "Protocol for Determining the Daily Volatile Compound Emission Rate of Automobile and Light-duty Truck Topcoat Operations," EPA-453/R-08-002, or as amended. (The Auto Protocol). The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and at 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.
  - 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 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 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2908, 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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVPRMOBSWEST	44	113	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBTHCONCWEST	68	113	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVRTOWEST	58	113	R 336.1225, 40 CFR 52.21(c) & (d)

4. The exhaust gases from the prep booth and the reprocess heavy sand booth portions of EUPRIMERWEST shall not be directly discharged to the ambient air at any time. **(R 336.1225, 40 CFR 52.21(c) & (d))**

**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 EUPRIMERWEST. **(40 CFR Part 63, Subpart 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 EUPRIMERWEST. **(40 CFR 60.390)**

**Footnotes:**

- <sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**EUTOPCOATWEST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

An automatic topcoat spray application process consisting of a water borne basecoat coating booth, a basecoat observation zone, a basecoat ambient flash-off area, a basecoat heated flash-off area, a solvent borne clearcoat coating booth, a clearcoat observation zone, a clearcoat ambient flash-off area, and a natural gas-fired curing oven. Approximately 85% of the air from the spray zones is recirculated back into the process and 15% is exhausted to the concentrator.

**Flexible Group ID:** FGCONTROLS, FGAUTOMACT, FGNGWEST, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

Booth overspray will be controlled by a waterwash particulate control system. A portion of the basecoat and clearcoat exhaust will be filtered and recirculated to the booth air make up system. The coating booth and flash-off area emissions are exhausted through a bank of particulate filters prior to venting to the west concentrator and the west RTO. Oven emissions are exhausted through a bank of particulate filters and then to the RTO. Solvent-based robots (clearcoat) will capture and recover coatings and cleaning solvents in a purge collection system. Emissions from the observation zones are controlled by a particulate control system and exhausted to atmosphere.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	3.53 lb/GACS	Calendar Day Averaging	EUTOPCOATWEST	SC VI.6	R 336.1205, R 336.1702(a), R 336.2908, 40 CFR 60 Subpart MM
2. VOC	75.3 tpy	12-month rolling time period as determined at the end of each calendar month	EUTOPCOATWEST	SC VI.6	R 336.1205, R 336.1702(a), R 336.2908
3. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	EUTOPCOATWEST (base coat observation zone)	SC V.5	R 336.1331
4. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	EUTOPCOATWEST (clear coat observation zone)	SC V.5	R 336.1331
5. PM10	0.103 pph	Hourly	EUTOPCOATWEST (base coat observation zone)	SC V.5	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
6. PM10	0.153 pph	Hourly	EUTOPCOATWEST (clear coat observation zone)	SC V.5	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
7. PM2.5	0.103 pph	Hourly	EUTOPCOATWEST (base coat observation zone)	SC V.5	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
8. PM2.5	0.153 pph	Hourly	EUTOPCOATWEST (clear coat observation zone)	SC V.5	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)

<sup>a</sup> Calculated on a wet gas basis

## **II. MATERIAL LIMIT(S)**

NA

## **III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

## **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate the coating booth, ambient flash, or curing oven portions of EUTOPCOATWEST unless the west concentrator and west RTO portions of FGCONTROLS are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the west concentrator includes maintaining a minimum desorption gas inlet temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the desorption gas inlet temperature shall be maintained within 15 degrees of the most recent acceptable performance test and can be based upon a three-hour average. Satisfactory operation of the west RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed; after which the RTO combustion chamber temperature shall be maintained at or above the temperature established during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1225, R 336.1702, R 336.2908)**
2. The permittee shall not operate the spray booth, flash-off area, and observation zone portions of EUTOPCOATWEST unless the water wash system is installed, maintained, and operated in a satisfactory manner. The permittee shall not operate the spray booth, flash-off areas, observation zone, and curing oven portions of EUTOPCOATWEST unless the particulate control systems prior to the west concentrator and west RTO are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the water wash and dry filter system particulate controls includes conducting the required monitoring and recordkeeping pursuant to SC VI.3. **(R 336.1205, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

## **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 any coating or material as applied in EUTOPCOATWEST, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2908)**
2. Within 365 days of saleable vehicle production, and at least once every five years from the last testing date thereafter unless the permittee documents annually that the most recent acceptable test remains valid and representative, the permittee shall verify the capture efficiency of the spray booth, flash-off area, observation zone, and oven portions of EUTOPCOATWEST, 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. Testing shall be performed using an approved EPA Method listed in 40 CFR 60 Appendix A and 40 CFR 63 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 336.2908)**

3. 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 removal efficiency of the concentrator and destruction efficiency of the RTO in EUTOPCOATWEST by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 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 336.2908)**
4. 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 overall transfer efficiency VOC loading of EUTOPCOATWEST, by testing at 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. No less than 30 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 336.2908)**
5. Within 365 days after 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 PM, PM10, and PM2.5 emission rates from the observation zones, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A
PM10/PM2.5	40 CFR Part 51, 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 30 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 336.1301, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

## **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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUTOPCOATWEST. The data may consist of 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 336.1225, R 336.1702)**

3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter, 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, 40 CFR 52.21(c) & (d))**
4. The permittee shall monitor and record the combustion chamber temperature in the west 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 Air Quality Division. All temperature data shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.2908, 40 CFR 60.390)**
5. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a temperature monitoring device to determine the west concentrator desorption gas inlet temperature on a continuous basis, during operation of EUTOPCOATWEST. Gas temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. **(R 336.1702(a), R 336.1910, R 336.2908)**
6. The permittee shall keep production, usage, VOC, solids content, and emissions calculation records on a monthly basis for each coating and material used in EUTOPCOATWEST. These records shall also contain data, test documentation, and annual reviews which are necessary to perform calculations in the publication entitled "Protocol for Determining the Daily Volatile Compound Emission Rate of Automobile and Light-duty Truck Topcoat Operations," EPA-453/R-08-002, or as amended. (The Auto Protocol). The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and at 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.
  - 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 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 336.1205, R 336.1225, R 336.1702(a), R 336.2908, 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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVBCOBSWEST (BC Observation Zone)	36	113	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVCCOBSWEST (CC Observation Zone)	40	113	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVBTHCONCWEST	68	113	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVRTOWEST	58	113	R 336.1225, 40 CFR 52.21(c) & (d)

**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 EUTOPCOATWEST. **(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 EUTOPCOATWEST. **(40 CFR 60.390)**

**Footnotes:**

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

**EUPURGECLEANWEST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Various cleaning solvents and purge solvents used in the west paint shop. VOC emissions from the solvent-based purge materials used within EUPRIMERWEST and the clearcoat booth portion of EUTOPCOATWEST are controlled by the west concentrator and west RTO except when collected in the purge collection system.

**Flexible Group ID:** FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

Solvent-Based robots (EUPRIMERWEST and the clearcoat portion of EUTOPCOATWEST) will capture and recover coatings and cleaning solvents in a purge collection system. Water borne basecoat purge is not controlled. Primer and clearcoat purge solvents not captured in the collection system will be controlled by the west concentrator and west RTO.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	69.3 tpy	12-month rolling time period as determined at the end of each calendar month	EUPURGECLEANWEST	SC VI.5	R 336.1205, R 336.1702(a), R 336.2908

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- The permittee shall capture all waste coatings and VOC-containing materials and shall store them in closed containers. The permittee shall dispose of all waste coatings and VOC-containing materials 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 336.2908)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

- The permittee shall not process solvent borne purge materials in the coating booth portions of EUPRIMER and the clearcoat coating booth portions of EUTOPCOATWEST unless the west concentrator and west RTO portions of FGCONTROLS are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the west concentrator includes maintaining a minimum desorption gas inlet temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the desorption gas inlet temperature shall be maintained within 15 degrees of the most recent acceptable performance test and can be based upon a three-hour average. Satisfactory operation of the west RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed; after which the RTO combustion chamber temperature shall be maintained at or above the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1225, R 336.2908(3))**

## **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 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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUPURGECLEANWEST. The data may consist of 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 336.1225, R 336.1702, R 336.2908)**
3. The permittee shall monitor and record the combustion chamber temperature in the west 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 336.1225, R 336.1702(a), R 336.2908, 40 CFR 60.390)**
4. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a temperature monitoring device to determine the concentrator desorption gas inlet temperature on a continuous basis, during operation of EUPURGECLEANWEST. Gas temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. All records shall be kept on file and made available to the Department upon request. **(R 336.1702(a), R 336.1910, R 336.2908)**
5. The applicant shall keep monthly records, acceptable to the AQD District Supervisor, of the following information for EUPURGECLEANWEST. The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and at a minimum, shall indicate the following:
  - a) For each material used:
    - i. A description of the material, its purpose and its VOC content in pounds per gallon.
    - ii. The total amount of purge and clean-up solvent used.
    - iii. The amount used in the automatic zones of EUPRIMERWEST and EUTOPCOATWEST, both in gallons.
    - iv. The amount in gallons reclaimed, where applicable.
  - b) VOC 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 EUPRIMERWEST and EUTOPCOATWEST, 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 336.1702(a), R 336.2908)**

## **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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVBTHCONCWEST	68	113	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVRTOWEST	58	113	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

**EUBODYWIPEWEST  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Body wipes used throughout the west paint shop.

**Flexible Group ID:** FGAUTOMACT, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	17.1 tpy	12-month rolling time period as determined at the end of each calendar month	EUBODYWIPEWEST	SC VI.3	R 336.1205, R 336.1702(a), R 336.2908

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. All waste coatings and VOC 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 336.1225, R 336.1702(a), R 336.2908)**

**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 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 336.1225, R 336.1702, R 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUBODYWIPEWEST. The data may consist of 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 336.1225, R 336.1702, R 336.2908)**

3. The applicant shall keep monthly records, acceptable to the AQD District Supervisor, of the following information for EUBODYWIPEWEST. The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and as a minimum, shall indicate the following:
- a) For each material used:
    - i. A description of the material, its purpose, and its VOC content in pounds per gallon.
    - ii. The total amount of body wipe solvent used.
    - iii. The amount in gallons reclaimed, where applicable.
  - b) VOC 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.

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 336.1702(a), R 336.2908)**

**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:**

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

**EUSPOTREPAIRWEST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Rapid reprocess repair booth after the west paint shop topcoat process.

**Flexible Group ID:** FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

Dry filter particulate controls are exhausted to the atmosphere.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	4.8 lb/gal (minus water), as applied	Daily volume weighted average	EUSPOTREPAIRWEST	SC VI.4	R 336.1702(a), R336.2908
2. VOC	0.5 tpy	12-month rolling time period as determined at the end of each calendar month	EUSPOTREPAIRWEST	SC VI.4	R 336.1702(a), R336.2908
3. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	EUSPOTREPAIRWEST	SC V.2	R 336.1331
4. PM10	0.026 pph	Hourly	EUSPOTREPAIRWEST	SC V.2	R 336.1205(1)(a) & (b), 40 CFR 52.21 (c) & (d)
5. PM2.5	0.026 pph	Hourly	EUSPOTREPAIRWEST	SC V.2	R 336.1205(1)(a) & (b), 40 CFR 52.21 (c) & (d)

<sup>a</sup>Calculated on a wet gas basis

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- The permittee shall capture all waste coatings and VOC-containing materials and shall store them in closed containers. The permittee shall dispose of all waste coatings and VOC-containing materials 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 336.2908)

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

- The permittee shall not operate EUSPOTREPAIRWEST unless the respective dry filter particulate controls are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the particulate controls includes conducting the required monitoring and recordkeeping pursuant to SC VI.3. (R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))

## **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 any coating or material, as applied and as received, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2908)**
2. Within 365 days after 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 PM, PM10, and PM2.5 emission rates from a representative booth in EUSPOTREPAIRWEST, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
PM	40 CFR Part 60, Appendix A
PM10 / PM2.5	40 CFR Part 51, 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 30 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) & (d))**

## **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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUSPOTREPAIRWEST. The data may consist of 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 336.1225, R 336.1702)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter, 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, 40 CFR 52.21(c) & (d))**
4. 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 EUSPOTREPAIRWEST. The records shall be kept in a format acceptable to the AQD District Supervisor, and at 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 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 336.2908)

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVRPDRPCS	56	75	R 336.1225, 40 CFR 52.21(c) & (d)

**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 EUSPOTREPAIRWEST. (40 CFR Part 63, Subparts A and Subpart IIII)

**Footnotes:**

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

**EUECOATEAST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Formerly EU-UNIPRIME. An electrodeposition (E-coat) coating process consisting of a series of dip tanks, rinses, a curing oven, and a cooling tunnel. The curing oven is currently controlled by an existing RTO, which will be replaced by the new east RTO, which will control both the tank and curing oven portions of EUECOATEAST.

**Flexible Group ID:** FGCONTROLS, FGAUTOMACT, FGNEWNGEAST, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

An existing RTO for VOC control from the curing oven. The east RTO will control VOC emissions from the tank and curing oven portions after installation.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	14.5 pph <sup>β,C</sup>	Hour	EUECOATEAST (dip tank)	SC V.1, SC VI.4	R 336.2902 (formerly, R 336.1220)
2. VOC	31.23 tpy <sup>C</sup>	12-month rolling time period	EUECOATEAST (dip tank)	SC V.1, SC VI.4	R 336.2902 (formerly, R 336.1220)
3. VOC	8.2 pph <sup>β,C</sup>	Hour	EUECOATEAST (oven)	SC V.1, SC VI.4	R 336.2902 (formerly, R 336.1220)
4. VOC	17.66 tpy <sup>C</sup>	12-month rolling time period	EUECOATEAST (oven)	SC V.1, SC VI.4	R 336.2902 (formerly, R 336.1220)
5. VOC	1.34 lb/GACS <sup>C</sup>	Monthly average	EUECOATEAST (dip tank and oven)	SC V.1, SC VI.4	40 CFR 60.392, Subpart MM
6. VOC	0.04 lb/GACS <sup>B</sup>	Monthly Average	EUECOATEAST (dip tank and oven)	SC VI.4	R 336.1205, R 336.1702(a), R 336.2908, 40 CFR 60 Subpart MM
7. VOC	2.01 tpy <sup>B</sup>	12-month rolling time period as determined at the end of each calendar month	EUECOATEAST (dip tank and oven)	SC VI.4	R 336.1205, R 336.1702(a), R 336.2908

<sup>β</sup>Based upon monthly values using methods acceptable to the AQD.

<sup>B</sup>This emission limit shall become applicable when the requirements in FGPSWEST/NEWEAST SC IX.2 are met.

<sup>C</sup>This emission limit is applicable until the requirements in FGPSWEST/NEWEAST SC IX.2 are met and SC I.6 and SC I.7 become applicable.

**II. MATERIAL LIMIT(S)**

NA

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. All waste coatings and VOC 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 336.2908)**

### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. Until installation of the east RTO, the permittee shall not operate EU-ECOATEAST unless the associated existing RTO for the bake ovens is installed and operating properly. Proper operation of the RTO includes maintaining a minimum 3-hour average combustion chamber temperature at the average combustion chamber temperature during the most recent acceptable performance test that demonstrated the equivalent destruction efficiency and has been accepted by the AQD District Supervisor. **(R 336.1910)**
2. Once the requirements in FGPSWEST/NEWEAST SC IX.2 are met, the permittee shall not operate the electrodeposition tank and curing oven portions of EU-ECOATEAST unless the east RTO is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the east RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the RTO combustion chamber temperature shall be maintained at or above the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1225, R 336.1702, R 336.1910, R 336.2908)**

### **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 EU-ECOATEAST tank, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the District Supervisor, the VOC content, water content and density of the resin, pigment and additives as added to the EU-ECOATEAST tank shall be verified by testing using federal Reference Test Method 24. **(R 336.2004, R 336.2040, R 336.2041, R 336.2908)**
2. Within 365 days of beginning control of the tank and oven portions of EU-ECOATEAST and exhausting to the east RTO, and at least once every five years from the last testing date thereafter unless the permittee documents annually that the most recent acceptable test remains valid and representative, the permittee shall verify the capture efficiency of the dip tank and oven portions of EU-ECOATEAST, by testing at 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 60 Appendix A and 40 CFR 63 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 336.2908)**
3. Within 365 days of beginning control of the tank and oven portions of EU-ECOATEAST and exhausting to the new RTO, 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 destruction efficiency of the east RTO by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 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 336.2908)**

## **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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUECOATEAST. The data may consist of 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 336.1225, R 336.1702(a))**
3. The permittee shall install, maintain, and operate in a satisfactory manner, a combustion chamber temperature monitoring device for the east RTO in EUECOATEAST to monitor and record the combustion chamber 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 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2908, 40 CFR 60.390)**
4. The permittee shall keep production, usage, VOC, solids content, and emissions calculation records on a monthly basis for each coating and material used in EUECOATEAST. The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor, 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).
    - ii. The solids volume fraction.
  - c) The calculated average daily VOC emission rate in pounds per gallon of applied coating solids.
  - d) The calculated VOC 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 336.1225, R 336.1702(a), R 336.2908)**

## **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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVRTOEAST	60	114	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVSMB-B-05-01	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVSMB-B-05-02	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVSMB-B-13-01	NA	46	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVSMB-B-22-02	NA	46	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVSMB-C-02-01	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVSMB-C-08-01	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVSMB-C-08-02	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVSMB-C-08-03	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVSMB-C-09-01	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVSMB-C-10-01	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVSMB-C-10-02	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
13. SVSMB-C-10-03	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
14. SVSMB-C-11-01	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
15. SVSMB-C-11-02	NA	42	R 336.1225, 40 CFR 52.21(c) & (d)
16. SV-UNIPRIMERTO	NA	NA	R 336.1225, 40 CFR 52.21(c) & (d)
Stacks listed in SC VIII.2 through SC VIII.16 shall be replaced by SVRTOEAST after the requirements in FGPSWEST/NEWEAST SC IX.2 have been met.			

**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 ECOATEAST. **(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 ECOATEAST. **(40 CFR 60.390)**

**Footnotes:**

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

**EUPWDRPRMEAST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A powder anti-chip coating application process in the east paint shop which is electrostatically applied. The spray booth also includes the application of a colored powder basecoat for tutone applications. The powder spray application is controlled by a particulate filtration system which is vented inside the plant.

**Flexible Group ID:** FGCONTROLS, FGAUTOMACT, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

Dry filter particulate controls on the powder application booth.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	0.05 lb/GACS	Calendar Day Averaging	EUPWDRPRMEAST	SC VI.4	R 336.1205, R 336.1702(a), R 336.2908, 40 CFR 60 Subpart MM
2. VOC	3.5 tpy	12-month rolling time period as determined at the end of each calendar month	EUPWDRPRMEAST	SC VI.4	R 336.1205, R 336.1702(a), R 336.2908

3. There shall be no visible emissions from the anti-chip curing oven stacks listed in SC VIII.1 and VIII.2 (R 336.1301, 40 CFR 52.21 (c) & (d))

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate EUPWDRPRMEAST unless the dry filter particulate control systems are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dry filter system particulate controls includes conducting the required monitoring and recordkeeping pursuant to SC VI.3 and exhausting the particulate control system within the in-plant environment. (R 336.1224, R 336.1910, 40 CFR 52.21(c) & (d))

## **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 any coating or material as applied in EUPWDRPRMEAST, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2908)**

## **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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUPWDRPRMEAST. The data may consist of 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 336.1225, R 336.1702)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter system, 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, 40 CFR 52.21(c) & (d))**
4. The permittee shall keep production, usage, VOC, solids content, and emissions calculation records on a monthly basis for each coating and material used in EUPWDRPRMEAST. These records shall also contain data, test documentation, and annual reviews which are necessary to perform calculations in the publication entitled "Protocol for Determining the Daily Volatile Compound Emission Rate of Automobile and Light-duty Truck Topcoat Operations," EPA-453/R-08-002, or as amended. (The Auto Protocol). The records shall be kept in a format acceptable to the AQD District Supervisor, and as a minimum, shall indicate the following (as applicable to powder coatings):
  - 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).
  - d) For each coating material:
    - i. The calculated monthly VOC content in pounds of VOC per gallon as applied.
    - ii. The calculated monthly formulation volume solids content as applied.
  - 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 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 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2908, 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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVDSANTIOVEN1	54	90	R 336.1225, 40 CFR 52.21 (c) & (d)
2. SVDSANTIOVEN2	54	90	R 336.1225, 40 CFR 52.21 (c) & (d)

3. There shall be no external exhaust from EUPWDRPRMEAST other than the anti-chip cure ovens listed in SC VIII.1 and VIII.2. **(R 336.1225, 40 CFR 52.21(c) & (d))**

**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 EUPWDRPRMEAST. **(40 CFR Part 63, Subpart 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 EUPWDRPRMEAST. **(40 CFR 60.390)**

**Footnotes:**

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



**EUPURGECLEANEAST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Formerly EU-SOLVENT-WIPE. Emissions from purge solvent, solvent wipes, and body wipe cleaners throughout the body shop, east paint shop, and final assembly portions of the plant. After installation of the east concentrator and east RTO, VOC emissions from the solvent-based purge materials used within the basecoat and clearcoat booths are controlled except when collected in the purge collection system.

**Flexible Group ID:** FGACTOMACT, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

After installation of the east concentrator and east RTO, VOC emissions from the solvent-based purge materials used within the basecoat and clearcoat booths are controlled except when collected in the purge collection system.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	488.6 pph <sup>β,D</sup>	Per hour operated in a calendar month	EUPURGECLEANEAST	SC VI.5	R 336.2902 (formerly R 336.1220)
2. VOC	1502.58 tpy <sup>D</sup>	12-month rolling time period as determined at the end of each calendar month	EUPURGECLEANEAST	SC VI.5	R 336.2902 (formerly R 336.1220)
3. VOC	440.0 pph <sup>β,C</sup>	Per hour operated in a calendar month	EUPURGECLEANEAST	SC VI.5	R 336.2908
4. VOC	555.0 tpy <sup>C</sup>	12-month rolling time period as determined at the end of each calendar month	EUPURGECLEANEAST	SC VI.5	R 336.2908
5. VOC	245.1 tpy <sup>E</sup>	12-month rolling time period as determined at the end of each calendar month	EUPURGECLEANEAST	SC VI.6	R 336.2908

<sup>β</sup> Based upon monthly values using methods acceptable to the AQD.  
<sup>C</sup> This emission limit shall become applicable based on the requirements in SC IX.1, unless the requirements in FGPSWEST/NEWEAST SC IX.2 are met and SC I.5 is applicable.  
<sup>D</sup> These emission limits are applicable until the requirements in SC IX.1 are met and SCs I.3 and I.4 become applicable, unless the requirements in FGPSWEST/NEWEAST SC IX.2 are met and SC I.5 is applicable.  
<sup>E</sup> This emission limit shall become applicable when the requirements in FGPSWEST/NEWEAST SC IX.2 are met.

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall capture all waste coatings and VOC-containing materials and shall store them in closed containers. The permittee shall dispose of all waste coatings and VOC-containing materials 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 336.2908)**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. Once the requirements in FGPSWEST/NEWEAST SC IX.2 are met, the permittee shall not process solvent borne purge materials in the coating booth portions of EU-COLOR-ONE unless the east concentrator and east RTO portions of FGCONTROLS are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the east concentrator includes maintaining a minimum desorption gas inlet temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the desorption gas inlet temperature shall be maintained within 15 degrees of the most recent acceptable performance test and can be based upon a three-hour average. Satisfactory operation of the east RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed; after which the RTO combustion chamber temperature shall be maintained at or above the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1225, R 336.2908(3))**

#### **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 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 336.2908)**
2. 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 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 336.1225, R 336.1702, R 336.2908)**
3. Once the requirements in FGPSWEST/NEWEAST SC IX.2 are met, the permittee shall monitor and record the combustion chamber temperature in the east 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 336.1225, R 336.1702(a), R 336.2908, 40 CFR 60.390)**
4. Once the requirements in FGPSWEST/NEWEAST SC IX.2 are met, the permittee shall install, calibrate, maintain, and operate in a satisfactory manner a temperature monitoring device to determine the concentrator desorption gas inlet temperature on a continuous basis, during operation of EUPURGE/CLEANEAST. Gas temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. **(R 336.1702(a), R 336.1910, R 336.2908)**
5. Until the requirements in FGPSWEST/NEWEAST SC IX.2 are met, the permittee shall keep the following records/calculations using mass balance or an alternate method and format acceptable to the AQD District Supervisor. The permittee shall compile all required records and complete all required calculations and make them available within 30 days following the end of each calendar month for which records are required to be kept. **(R 336.2902, R 336.2908)**
  - a) The plant production hours, monthly records.
  - b) The quantity of materials used, monthly records.
  - c) The material identification.
  - d) Material VOC content; in pounds per unit quantity.
  - e) Calculations showing the VOC mass emission rates, in pounds per hour and tons per 12-month rolling time period, as determined at the end of each calendar month as outlined in Appendix 7, or an alternative that is acceptable to the District Supervisor.

All records/calculations shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.2902, R 336.2908)**

6. Once the requirements in FGPSWEST/NEWEAST SC IX.2 are met. the applicant shall keep monthly records, acceptable to the AQD District Supervisor, of the following information for EUPURGECLEANEAST. The records shall be kept using mass balance or an alternate method and format acceptable to the AQD District Supervisor, and as a minimum, shall indicate the following:
  - a) For each material used:
    - i. A description of the material, its purpose, and its VOC content in pounds per gallon.
    - ii. The total amount used, and the amount used in the automatic zones of EU-COLOR-ONE, both in gallons.
    - iii. The amount in gallons reclaimed, where applicable.
  - b) The total amount of purge solvent used in gallons per month and gallons per 12-month rolling time period as determined at the end of each calendar month.
  - c) VOC 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 EU-COLOR-ONE, 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 336.1702(a), R 336.2908)**

**VII. REPORTING**

1. Quarterly reporting of VOC emissions and solvent/coating usage data (the usage data need not be submitted but shall be kept on file) within 30 days following the end of the quarter in which the data were collected. **(R 336.1201(3))**
2. The permittee shall send written notification to the AQD District Supervisor within 30 days of the startup of the automotive assembly line associated with PTI #14-19A for FCA USA LLC, Detroit Assembly Complex Mack. Startup of the automotive assembly line is considered to be the start of an emission unit in PTI #14-19A. **(R 336.1201(7))**

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVBTHCONCEAST	60	106	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVRTOEAST	60	114	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. EUPURGECLEANEAST shall become subject to the emission limits listed in SC I.3 & SC I.4 and no longer subject to SC I.1 & SC I.2 upon startup of the automotive assembly line associated with PTI #14-19A for FCA USA LLC, Detroit Assembly Complex Mack. Startup of the automotive assembly line is considered to be the start of an emission unit in PTI #14-19A. **(R 336.2908)**
2. Once the requirements of FGPSWEST/NEWEAST SC IX.2 are met, EUPURGECLEANEAST shall become subject to the emission limit listed in SC I.5 and no longer subject to the emission limits in SC I.1, SC I.2, SC I.3, and SC I.4. **(R 336.2908)**

**Footnotes:**

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

**EUSPOTREPAIREAST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Spot repair process in the east paint shop, prior to the topcoat application.

**Flexible Group ID:** FGAUTOMACT, FGCONTROLS, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

Dry filter particulate controls on the spot repair process, which is then exhausted to the atmosphere.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	4.8 lbs VOC per gallon (minus water), as applied	Calendar Month Average	EUSPOTREPAIREAST	SC VI.4	R 336.1205, R 336.1702(a), R 336.2908
2. VOC	0.5 tpy	12-month rolling time period as determined at the end of each calendar month	EUSPOTREPAIREAST	SC VI.4	R 336.1205, R 336.1702(a), R 336.2908
3. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	EUSPOTREPAIREAST	SC V.2	R 336.1331
4. PM10	0.026 pph	Hourly	EUSPOTREPAIREAST	SC V.2	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
5. PM2.5	0.026 pph	Hourly	EUSPOTREPAIREAST	SC V.2	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)

<sup>a</sup>Calculated on a wet gas basis

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- The permittee shall capture all waste coatings and VOC-containing materials and shall store them in closed containers. The permittee shall dispose of all waste coatings and VOC-containing materials 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 336.2908)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

- The permittee shall not operate EUSPOTREPAIREAST unless the respective dry filter particulate controls are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the particulate controls includes conducting the required monitoring and recordkeeping pursuant to SC VI.3. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

**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 any coating or material, as applied in EUSPOTREPAIREAST, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2908)**
2. Within 365 days after 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 PM, PM10, and PM2.5 emission rates from a representative station of EUSPOTREPAIREAST, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A
PM10 / PM2.5	40 CFR Part 51, 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 30 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 336.1301, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

**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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUSPOTREPAIREAST. The data may consist of 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 336.1225, R 336.1702)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter system, 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, 40 CFR 52.21(c) & (d))**
4. 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 EUSPOTREPAIREAST. 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) VOC 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 336.2908)

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVDS_SPOTEAST	41	106	R 336.1225, 40 CFR 52.21(c) & (d)

**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 EUSPOTREPAIREAST. (40 CFR Part 63, Subparts A and Subpart IIII)

**Footnotes:**

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

**EUSEALERS  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Formerly EU-SEALERS&ADHESIVES. Various manual and robotic sealers and adhesive (including glass bonding) application stations/booths. Sealers and adhesives are applied at various decks in both west and east paint shops (some of which are cured in the sealer oven), the body shop, and the final assembly areas of the facility.

**Flexible Group ID:** FGACTOMACT, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/ Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	0.25 lbs VOC per gallon (minus water), as applied	Calendar Month Average	EUSEALERS	SC VI.3	R 336.1205, R 336.1702(a), R 336.2908
2. VOC	26.8 tpy	12-month rolling time period as determined at the end of each calendar month	EUSEALERS	SC VI.3	R 336.1205, R 336.1702(a), R 336.2908
3. VOC	11.1 tpy	12-month rolling time period as determined at the end of each calendar month	Sealers and adhesives used in the west Paint Shop portion of EUSEALERS	SC VI.3	R 336.1205, R 336.1702(a), R 336.2908

4. There shall be no visible emissions from SVSLROVENEAST (R 336.1301, 40 CFR 52.21 (c) & (d))

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. All waste coatings and VOC 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 336.2908)

**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, water content and density of any sealer or adhesive as applied in EUSEALERS, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the District Supervisor, the VOC content, water content and density of any sealer, adhesive, or deadener material shall be verified by testing using federal Reference Test Method 24. (R 336.2004, R 336.2040, R 336.2041, R 336.2908)

**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 336.1702, R 336.2908)
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUSEALERS. The data may consist of 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 336.1225, R 336.1702)
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 EUSEALERS. The records shall be kept using mass balance or an alternate method and 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) VOC emission calculations determining the total VOC mass emissions for materials used in the West Paint Shop portion of EUSEALERS 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.
  - e) VOC 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 336.2908)

**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. SVSLROVENEAST	48	90	R 336.1225, 40 CFR 52.21(c) & (d)



2. Sealers applied in the west paint shop shall not be directly discharged to the ambient air at any time.<sup>1</sup>  
**(R 336.1225)**

**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 EUSEALERS. **(40 CFR Part 63 Subparts A and IIII)**

**Footnotes:**

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

**EUFINALREPAIR  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Formerly EU-FINAL-REPAIR: Final repair operations including a coating area. Prep booths or sanding booths are equipped with side-draft dry filter particulate control systems. Spray booths are equipped with downdraft dry filter particulate control system. Emissions are exhausted to the general in-plant environment.

**Flexible Group ID:** FGACTOMACT, FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

Side-draft dry filter particulate controls on sanding booths. Downdraft dry filter particulate control systems on spray booths.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	4.8 lb/gal (minus water), as applied	Daily volume weighted average	EUFINALREPAIR	SC V.1, VI.4	R 336.1702(a), R 336.2908
2. VOC	1.2 tpy	12-month rolling time period as determined at the end of each calendar month	EUFINALREPAIR	SC V,1, VI.4	R 336.1702(a), R 336.2908

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- The permittee shall capture all waste coatings and VOC-containing materials and shall store them in closed containers. The permittee shall dispose of all waste coatings and VOC-containing materials 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 336.2908)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

- The permittee shall not operate EUFINALREPAIR unless the respective dry filter particulate controls are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the particulate controls includes conducting the required monitoring and recordkeeping pursuant to SC VI.3. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

## **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 any coating or material, as applied and as received, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2908)**

## **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 336.1225, R 336.1702, R 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in EUFINALREPAIR. The data may consist of 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 336.1225, R 336.1702)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter, 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, 40 CFR 52.21(c) & (d))**
4. 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 EUFINALREPAIR. 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) VOC 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 336.2908)**

## **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:

1. The exhaust gases from EUFINALREPAIR shall not be directly discharged to the ambient air at any time. **(R 336.1225, 40 CFR 52.21(c) & (d))**

**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 EUFINALREPAIR. **(40 CFR Part 63, Subparts A and Subpart IIII)**

**Footnotes:**

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

**EUFLUIDFILL  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Formerly EU-FLUID-FILL: Each vehicle will be filled with various fluids such as gasoline, antifreeze, transmission fluid, power steering fluid, and windshield washer fluid.

**Flexible Group ID:** FGPSWEST/NEWEAST

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOC	2.7 tpy	12-month rolling time period as determined at the end of each calendar month	EUFLUIDFILL	VI.3	R 336.1205, R 336.1702(a), R 336.2908

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not add gasoline to any vehicle without an Onboard Re-fueling Vapor Recovery system. **(R 336.1702(a), R 336.2908)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not load or allow the loading of gasoline from a delivery vessel into any new stationary vessel of more than 2,000 gallons (7.57 cubic meters or 7,571 liters) capacity unless such stationary vessel is equipped with a permanent submerged fill pipe. **(R 336.1703(1), R 336.2908)**
2. The permittee shall not load or allow the loading of gasoline from a delivery vessel into any new stationary vessel of more than 2,000 gallons (7.57 cubic meters or 7,571 liters) capacity unless such stationary vessel is equipped with a vapor balance system or an equivalent control system approved by the Department. The vapor balance system shall capture displaced gasoline vapor and air via a vaportight collection line and shall be designed to return not less than 90% by weight of the displaced gasoline vapor from the stationary vessel to the delivery vessel. The respective stationary vessels shall be equipped, maintained, or controlled with the following: **(R 336.1703(2), R 336.2908)**
  - a) An interlocking system or procedure to ensure that the vaportight collection line is connected before any gasoline can be loaded.
  - b) A device to ensure that the vaportight collection line shall close upon disconnection so as to prevent release of gasoline vapor.

**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 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 336.2908)**
2. 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 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 336.1225, R 336.1702)**
3. The permittee shall keep the following records on a monthly basis using mass balance or an alternate method and format acceptable to the AQD District Supervisor. The permittee shall compile all required records and complete all required calculations and make them available within 30 days following the end of each calendar month for which records are required to be kept. **(R 336.1702, R 336.2908)**
  - a) The quantity of materials used.
  - b) The material identification.
  - c) Material VOC content; in pounds per unit quantity.
  - d) Calculations showing the VOC emission rate in tons per month and tons per 12-month rolling time period, as determined at the end of each calendar month.

All records/calculations shall be kept on file for a period of at least five years and made available to the Department upon request.

## **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:**

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

## **EUTRIMBOILER EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

A 37 million BTU heat input per hour (Cleaver Brooks) natural gas only boiler, equipped with low NO<sub>x</sub> burners.

**Flexible Group ID:** FGBOILERMACTHWG, FGPSWEST/NEWEAST

### **POLLUTION CONTROL EQUIPMENT**

Low NO<sub>x</sub> burner

#### **I. EMISSION LIMIT(S)**

NA

#### **II. MATERIAL LIMIT(S)**

1. The permittee shall burn only natural gas in EUTRIMBOILER. . (R 336.1225, R 336.1702(a))

#### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The maximum design heat input capacity for EUTRIMBOILER shall not exceed 37 MMBTU/hr on a fuel heat input basis. (R 336.1225, 40 CFR 52.21(c) & (d))
2. The permittee shall not operate EUTRIMBOILER unless low NO<sub>x</sub> burners are installed, maintained, and operated in a satisfactory manner. (R 336.1910, 40 CFR 52.21(c) & (d))

#### **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 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) & (b), R 336.1225, R 336.1702)
2. The permittee shall keep monthly natural gas usage records, in a format acceptable to the AQD District Supervisor, indicating the amount of natural gas used, in cubic feet, on a calendar month basis, and a 12-month rolling time period basis. The records must indicate the total amount of natural gas used in EUTRIMBOILER. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1)(a) & (b), 40 CFR 60.48c(g))
3. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions. This information shall include, but shall not be limited to the following:
  - a) Monitoring data.
  - b) Verification of heat input capacity required to show compliance with SC IV.1.
  - c) Identification, type, and the amounts of fuel combusted in EUTRIMBOILER on a calendar month basis.
  - d) All records required by 40 CFR 60.7 and 40 CFR 60.48c.

All of the above information shall be stored in a format acceptable to the AQD and shall be consistent with the requirements of 40 CFR 60.7(f). **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 60.7(f))**

**VII. REPORTING**

1. The permittee shall provide written notification of the date construction commences and actual startup of EUTRIMBOILER, in accordance with 40 CFR 60.7 and 40 CFR 60.48c. The notification shall include the design heat input, an identification of the fuels to be combusted and the annual capacity factor for EUTRIMBOILER. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7, 40 CFR 60.48c)**

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVTRMBOIL	32	65	R 336.1225, 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 EUTRIMBOILER. **(40 CFR Part 60, Subparts A & Dc)**

**Footnotes:**

<sup>1</sup> 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
FGTOPCOATEAST	Formerly FG-TOPCOAT: Two topcoat lines (EU-COLOR-ONE & EU-COLOR-TWO) and one high bake-repair operation (EU-REPROCESS), which is a part of the topcoat system. Each topcoat line consists of spray booths for applying topcoat to vehicle bodies and oven for curing. Reprocess is high bake-repair operation that consists of spray booths for topcoat application to repair vehicle bodies and oven for curing. While Color1 (36 JPH) and Color2 (36 JPH) lines are identical topcoat lines (72 JPH), reprocess line is shorter and slower.	EU-COLOR-ONE, EU-COLOR-TWO, EU-REPROCESS
FGCONTROLS	Concentrators and RTOs used for control of VOC emissions as applicable from the paint spray booths, flash-off areas, and curing ovens. Waterwash or dry filter particulate control on paint spray booths and sanding/repair booths and as pre-filtration to VOC control devices.	EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EU-COLOR-ONE, EU-REPROCESS, EUPURGECLEANEAST, EUSPOTREPAIREAST, EUFINALREPAIR, EUNEWNGASSEMBLY, EUNEWNGPSEAST, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2
FGSPOTPRIMEWEST	Two spot prime processes in the west paint shop. One that is placed after the E-coat process and prior to the primer application process, and one that is located after the primer process and prior to topcoat application.	EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2
FGRTOWEST	This flexible group covers NOx, PM, PM10, and PM2.5 emissions from the west paint shop concentrator and west RTO.	EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST
FGRTOEAST	This flexible group covers NOx, PM, PM10, and PM2.5 emissions from the east paint shop concentrator and RTO associated with EUECOATEAST, EUPURGECLEANEAST, and the refurbished spray booth portion of EU-COLOR-ONE	EUECOATEAST, EU-COLOR-ONE, EU-PURGECLEANEAST
FGBOILERS	Four (4) natural gas fired boilers to produce steam and heat located in the powerhouse. Boiler Nos. 3, 4 and 5 are equipped with low NOx burners, Boiler No. 6 (with oxygen trim system) is a high efficiency boiler but not low NOx.	EUBOILER3, EUBOILER4, EUBOILER5, EUBOILER6

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGAUTOMACT	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.	EUPRETREATWEST, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGE CLEANWEST, EUBODYWIPEWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EUPURGE CLEANEAST, EUSPOTREPAIREAST, EUSEALERS, EU-COLOR-ONE, EU-COLOR-TWO, EU-REPROCESS, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2
FGBOILERMACTHWG	This FG is for the eleven hot water generators and the Trim Boiler associated with the installation of the west paint shop and modernization of the east paint shop. 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 the applicable provisions of this subpart upon startup.	EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8, EUDSBCHWG, EUDSSBHWG, EUDSCCHWG, EU-TRIMBOILER
FGNGWEST	All natural gas-fired equipment associated with the installation of west paint shop portion of the Warren Truck Assembly Plant, except the emergency generator, including ten hot water generators, air supply houses, space heaters, heated flash, cure ovens, the carbon concentrator, and the RTO. In addition, this FG includes new air supply houses and space heating in the assembly area.	EUPRETREATWEST, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUNEWNGASSEMBLY, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8
FGNEWNGEAST	All natural new gas-fired equipment associated with the refurbishment of east paint shop portion of the Warren Truck Assembly Plant, including hot water generators, air supply houses, space heaters, cure ovens, the carbon concentrator, and the RTO.	EUECOATEAST, EU-COLOR-ONE, EUDSBCHWG, EUDSSBHWG, EUDSCCHWG, EUNEWNGPSEAST
FGTANKS	Any existing (placed into operation before 7/1/79), new (placed into operation on or after 7/1/79) or modified storage tank, including those that are exempt from the requirements of R 336.1201 pursuant to R 336.1284.	EU-UNLEADEDGAS1, EUMETANK, EUDIESEL TANK1, EUANTIFREEZETANK, EUBRAKEFLUIDTANK, EUAUTOTRANS, EUDIESELEXTANK, EUGASTANK2, EUDIESEL TANK2, EUPURSOLVTANK, EUDIESEL TANK3

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-OLDMACT	<p>FG-OLDMACT: The affected source is each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is located at, or is part of a major source of hazardous air pollutant (HAP) emissions. The affected source is comprised of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to this subpart. Equipment that is part of an affected source under another NESHAP is excluded from the affected source. <b>(40 CFR 63.2338(c))</b></p> <p>These conditions specifically cover existing (construction pre dates April 2, 2002) liquid storage tanks which hold more than 5,000 gallons but less than 50,000 gallons and/or new liquid storage tanks which hold more than 5,000 gallons but less than 10,000 gallons of methanol/windshield washer fill solvents that are dispensed to newly assembled vehicles.</p>	EUMETANK
FGNGEMENG	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.	EUNGGEN1
FGPSWEST/NEWEAST	All process equipment associated with the installation of the west paint shop and modernization of the east paint shop, body shop, and final assembly.	EUPRETREATWEST, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUBODYWIPEWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EUPURGECLEANEAST, EUSEALERS, EUSPOTREPAIREAST, EUFINALREPAIR, EUFLUIDFILL, EU-COLOR-ONE, EU-REPROCESS, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8, EUDSBCHWG, EUDSSBHWG, EUDSSCHWG, EUNEWNGASSEMBLY, EUNEWNGPSEAST, EUNGGEN1, EU-TRIMBOILER

**FGTOPCOATEAST  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Formerly FG-TOPCOAT: Two topcoat lines (EU-COLOR-ONE & EU-COLOR-TWO) and one high bake-repair operation (EU-REPROCESS), which is a part of the topcoat system. Each topcoat line consists of spray booths for applying topcoat to vehicle bodies and oven for curing. Reprocess is high bake repair operation that consists of spray booths for topcoat application to repair vehicle bodies and oven for curing. While Color1 (36 JPH) and Color2 (36 JPH) lines are identical topcoat lines (72 JPH), reprocess line is shorter and slower.

**Emission Unit:** EU-COLOR-ONE, EU-COLOR-TWO, EU-REPROCESS

**POLLUTION CONTROL EQUIPMENT**

Downdraft water wash system for the spray booths of EU-COLOR-ONE. A thermal oxidizer for bake oven of EU-COLOR-ONE. Downdraft water wash system for the spray booths of EU-COLOR-TWO. A thermal oxidizer for bake oven of EU-COLOR-TWO. Downdraft water wash system for the spray booths of EU-REPROCESS. A thermal oxidizer for bake oven of EU-REPROCESS. The east concentrator and east RTO control the spray booth portions of EU-COLOR-ONE after installation.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. VOCs	1.47 <sup>θ</sup> kg per liter of applied coating solids (12.3 lb/GACS)	Calendar month average	FGTOPCOATEAST	SC V.2, SC VI.3, SC VI.5	R 336.1702(a) 40 CFR 60 Subpart MM
2. VOCs	270.2 pph <sup>β,D</sup>	Per hour operated in a calendar month	Spray booths of EU-COLOR-ONE	SC VI.4, SC VI.5	R 336.2902 (formerly, R 336.1220)
3. VOCs	582.11 tpy <sup>D</sup>	12-month rolling time period as determined at the end of each calendar month	Spray booths of each topcoat line (EU-COLOR-ONE, EU-COLOR-TWO)	SC VI.5	R 336.2902 (formerly, R 336.1220)
4. VOCs	6.8 pph <sup>β</sup>	Per hour operated in a calendar month	Bake Ovens of each topcoat line (EU-COLOR-ONE, EU-COLOR-TWO)	SC V.3, SC V.4, SC VI.3, SC VI.4, SC VI.5	R 336.2902 (formerly, R 336.1220)
5. VOCs	15.67 tpy	12-month rolling time period as determined at the end of each calendar month	Bake Ovens of each topcoat line (EU-COLOR-ONE, EU-COLOR-TWO)	SC VI.5	R 336.2902 (formerly, R 336.1220)
6. VOCs	89.9 pph <sup>β,D</sup>	Per hour operated in a calendar month	High Bake Repair spray booths (EU-REPROCESS)	SC VI.4, SC VI.5	R 336.2902 (formerly, R 336.1220)
7. VOCs	193.74 tpy <sup>D</sup>	12-month rolling time period as determined at the end of each calendar month	High Bake Repair spray booths (EU-REPROCESS)	SC VI.5	R 336.2902 (formerly, R 336.1220)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
8. VOCs	2.3 pph <sup>β</sup>	Per hour operated in a calendar month	High Bake Repair bake oven (EU-REPROCESS)	SC VI.4, SC VI.5	R 336.2902 (formerly, R 336.1220)
9. VOCs	5.22 tpy	12-month rolling time period as determined at the end of each calendar month	High Bake Repair bake oven (EU-REPROCESS)	SC VI.5	R 336.2902 (formerly, R 336.1220)
10. VOCs	45.0 pph <sup>β,C</sup>	Per hour operated in a calendar month	High Bake Repair spray booths (EU-REPROCESS)	SC VI.3, SC VI.4, SC VI.5	R 336.2908
11. VOCs	40.0 tpy <sup>C</sup>	12-month rolling time period as determined at the end of each calendar month	High Bake Repair spray booths (EU-REPROCESS)	SC V.1, SC VI.7	R 336.2908
12. VOCs	193.0 tpy <sup>C</sup>	12-month rolling time period as determined at the end of each calendar month	Spray booths of EU-COLOR-ONE	SC VI.5	R 336.2908
13. VOCs	270.2 pph <sup>β,E</sup>	Per hour operated in a calendar month	Spray booths of EU-COLOR-TWO	SC VI.4, SC VI.5	R 336.2902 (formerly, R 336.1220)
14. VOCs	430.0 tpy <sup>F</sup>	12-month rolling time period as determined at the end of each calendar month	Spray booths of EU-COLOR-TWO	SC VI.5	R 336.2908
15. VOCs	3.53 lb/GACS <sup>θ,H</sup>	Calendar month average	EU-COLOR-ONE (spray booths and oven)	SC VI.3, SC VI.5	R 336.1702(a), R 336.2908, 40 CFR 60 Subpart MM
16. VOCs	201.6 tpy <sup>H</sup>	12-month rolling time period as determined at the end of each calendar month	EU-COLOR-ONE (spray booths and oven)	SC VI.5	R 336.1702(a), R 336.2908
17. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>G,I</sup>	Hourly	EU-COLOR-ONE (base coat observation zone)	SC V.4	R 336.1331
18. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>G,I</sup>	Hourly	EU-COLOR-ONE (clear coat observation zone)	SC V.4	R 336.1331
19. PM10	0.218 pph <sup>I</sup>	Hourly	EU-COLOR-ONE (base coat observation zone)	SC V.4	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
20. PM10	0.173 pph <sup>I</sup>	Hourly	EU-COLOR-ONE (clear coat observation zone)	SC V.4	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
21. PM2.5	0.218 pph <sup>I</sup>	Hourly	EU-COLOR-ONE (base coat observation zone)	SC V.4	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
22. PM2.5	0.173 pph <sup>I</sup>	Hourly	EU-COLOR-ONE (clear coat observation zone)	SC V.4	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
<p><sup>g</sup>Per the EPA Protocol (VI(4) &amp; (5))</p> <p><sup>h</sup>Based upon monthly values using methods acceptable to AQD.</p> <p><sup>c</sup>This emission limit shall become applicable based on the requirements in SC IX.2.</p> <p><sup>d</sup>This emission limit shall be applicable until the requirements in SC IX.3 are met and SCs I.10, I.11, I.12, I.14 become applicable.</p> <p><sup>e</sup>This emission limit shall be applicable until the permanent shut down of EU-COLOR-TWO as required by SC IX.5.</p> <p><sup>f</sup>This emission limit shall become applicable based on the requirements in SC IX.2 and shall be applicable until the permanent shut down of EU-COLOR-TWO as required by SC IX.5.</p> <p><sup>g</sup>Calculated on a wet gas basis.</p> <p><sup>h</sup>This emission limit shall be applicable upon startup of any emission unit in the West Paint Shop.</p> <p><sup>i</sup>This emission limit shall be applicable upon startup of the refurbished EU-COLOR-ONE after control equipment has been installed.</p>					

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate the bake oven portions of FGTOPCOATEAST unless the respective associated thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer(s) includes maintaining a minimum oxidizer combustion chamber temperature at the temperature determined 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. **(R 336.1910)**
2. The permittee shall not operate FGTOPCOATEAST unless the associated water wash systems are installed and operating properly. Satisfactory operation of the water wash system includes conducting the required monitoring and recordkeeping pursuant to SC VI.3. **(R 336.1910)**
3. Upon startup of the automotive assembly line associated with PTI #14-19A for FCA USA, LLC, Detroit Assembly Complex Mack, the permittee shall not operate the spray booth portions of EU-COLOR-ONE unless the east concentrator and east RTO portions of FGCONTROLS are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the east concentrator includes maintaining a minimum desorption gas inlet temperature at the manufacturer’s recommended temperature until an acceptable performance test has been performed, after which the desorption gas inlet temperature shall be maintained within 15 degrees of the most recent acceptable performance test and can be based upon a three-hour average. Satisfactory operation of the east RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer’s recommended temperature until an acceptable performance test has been performed; after which the RTO combustion chamber temperature shall be maintained at or above the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1225, R 336.2908(3))**

**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 any coating or material as applied and as received, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer’s formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance.

Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.2004, R 336.2040, R 336.2041)**

2. Verification of the Transfer Efficiency (TE) rates of each topcoat line (TE test on one of the identical lines is sufficient if the permittee can demonstrate that the topcoat lines are identical) by testing, at owners' expense, is required according to the following schedule:
  - a) Within 180 days of issuance of the permit, if an acceptable Transfer Efficiency (TE) test has not been conducted within five years prior to the issuance of the permit, unless the permittee has submitted an acceptable demonstration that the most recent acceptable test remains valid and representative.
  - b) Within 180 days of making any changes in operating conditions which necessitate reevaluation of the transfer efficiency, as required by the EPA Protocol.

Verification of the Transfer Efficiency (TE) rate includes the submittal (within 60 calendar days following the last date of the sampling to both the AQD District Supervisor and the Technical Programs Unit Supervisor, Air Quality Division, in a format acceptable to AQD) of a complete report of the test results. No less than 30 days prior to testing, a complete testing plan must be submitted to AQD. The final plan must be approved by AQD prior to testing. Not less than seven days before any test are conducted, the permittee shall notify the AQD District Supervisor, in writing, of the time and place of the test and who will be conducting it. **(R 336.2001(3))**

3. Verification of Oven Exhaust Control Device VOC Loading rates of each Topcoat line (OECD loading test on one of the identical lines is sufficient if the permittee can demonstrate that the topcoat lines are identical) and high bake repair operation by testing, at owner expense, is required according to the following schedule:
  - a) Within 180 days of issuance of the permit, if an Oven Exhaust Control Device VOC Loading test has not been conducted within five years prior to the issuance of the permit, unless the permittee has submitted an acceptable demonstration that the most recent acceptable test remains valid and representative, and at least once during the term.
  - b) Within 180 days of making any changes in operating conditions which necessitate reevaluation of the Oven Exhaust Control Device VOC Loading rates.

Verification of Oven Exhaust Control Device VOC Loading rates includes the submittal (within 60 calendar days following the last date of the sampling to both the AQD District Supervisor and the Technical Programs Unit Supervisor, Air Quality Division, in a format acceptable to AQD) of a complete report of the test results. No less than seven days before any tests are conducted, the permittee shall notify AQD District Supervisor, in writing, of the time and place of the test and who will be conducting it. **(R 336.2001(3))**

4. Verification of Destruction Efficiency (DE) of the Thermal Oxidizer for the associated oven of each topcoat line and high bake repair operation by testing, at owner expense, is required according to the following schedule:
  - a) Within 180 days of issuance of the permit, if Destruction Efficiency (DE) test of the Thermal Oxidizer for the oven has not been conducted within five years prior to the issuance of the permit, unless the permittee has submitted an acceptable demonstration that the most recent acceptable test remains valid and representative, and at least once during the term.
  - b) Within 180 days of making any changes in operating conditions which necessitate reevaluation of the Destruction Efficiency (DE) of the Thermal Oxidizer.

Verification of Destruction Efficiency (DE) of the Thermal Oxidizer for the oven includes the submittal (within 60 calendar days following the last date of the sampling to both the AQD District Supervisor and the Technical Programs Unit Supervisor, Air Quality Division, in a format acceptable to AQD) of a complete report of the test results. No less than seven days before any tests are conducted, the permittee shall notify AQD District Supervisor, in writing, of the time and place of the test and who will be conducting it. **(R 336.2001(3))**

5. Within 365 days of commencing operation of control equipment, and at least once every five years from the last testing date thereafter unless the permittee documents annually that the most recent acceptable test remains valid and representative, the permittee shall verify the capture efficiency of the spray booth, flash-off area, observation zone, and oven portions of EU-COLOR-ONE to the east concentrator and east RTO, by testing at 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 60 Appendix A and 40 CFR 63 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 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2908)**

6. Within 365 days of commencing operation of control equipment, 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 removal efficiency of the east concentrator and destruction efficiency of the east RTO in the spray booth portion of EU-COLOR-ONE by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 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 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2908)**

#### **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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in FGTOPCOATEAST. The data may consist of 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 336.1225, R 336.1702)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter system, 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, 40 CFR 52.21(c) & (d))**
4. The permittee shall install, calibrate (in accordance with manufacturer's recommendation), and maintain measurement and recording devices to monitor each thermal oxidizer temperature. A temperature measurement device shall have an accuracy of greater than  $\pm 0.75$  percent of the temperature being measured expressed in degree Celsius or  $\pm 2.5$  °C. The temperature measurement device shall be equipped with recording device so that permanent, continuous record of the thermal oxidizer temperature is produced. **(R 336.1201(3) & 40 CFR Part 60 Subpart MM 60.394)**
5. Records of the following data, test documentation, and annual reviews which are necessary to perform the calculations in accordance with the publication entitled "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-duty Truck Topcoat Operations," EPA-453/R-08-002, or as amended (The EPA Protocol): **(R 336.2902, R 336.2908)**
  - a) For each type of coating used during the calendar month:
    - i. Coating identification.
    - ii. Analytical VOC content as determined by EPA Reference Test Method 24.
    - iii. Formulation VOC and volume solids content.
    - iv. Coating usage (daily or monthly), including withdrawals.
    - v. Dilution solvent usage and density.



- b) Number of vehicles coated per production day by body style, coating color, and square footage coated (or equivalent unit), unless daily coating records are kept.
  - c) Transfer Efficiency (TE):
    - i. Value(s) used in protocol calculations.
    - ii. Value(s) from most recent test.
    - iii. Annual review of operating conditions to demonstrate that the transfer efficiency remains valid.
  - d) Oven exhaust control device VOC loading (booth/oven split):
    - i. Value(s) used in protocol calculations.
    - ii. Value(s) from most recent test.
    - iii. Annual review of operating conditions to demonstrated that the oven exhaust control device VOC loading remains valid.
  - e) Destruction Efficiency (DE)of the control devices:
    - i. Value(s) used in protocol calculations.
    - ii. Value(s) derived from most recent test.
6. Plant production hours: Monthly records. **(R 336.2902, R 336.2908)**
  7. Records of the VOC mass emission rates (pounds per hour, tons per month, and tons per 12-month rolling time period) shall be calculated according to the method in Appendix 7 or an alternative method that is acceptable to AQD. **(R 336.2902, R 336.2908)**
  8. The permittee shall install, maintain, and operate in a satisfactory manner, combustion chamber temperature monitoring devices for the RTO in the spray booth portions of EU-COLOR-ONE, and the thermal oxidizer in the bake oven portions of EU-COLOR-ONE, EU-COLOR-TWO, and EU-REPROCESS, to monitor and record the combustion chamber 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 336.1910, R 336.2908(3))**
  9. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner, temperature monitoring devices for the concentrator in the spray booth portions of EU-COLOR-ONE to monitor and record the desorption gas inlet temperature on a continuous basis during operation. Gas 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 336.1910, R 336.2908(3))**
  10. The permittee shall maintain records of maintenance and repair activities for FGTOPCOATEAST. 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)**
  11. 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 336.2908, 40 CFR 52.21(c) and (d))**
  12. For the RTO and concentrator portions of EU-COLOR-ONE, 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 336.2908)**
  13. 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 concentrator and RTO control devices used to demonstrate compliance with the applicable VOC emission limits: **(R 336.1910, R 336.1911)**
    - 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. (Both RTO and concentrator).

- b. Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months for the RTO.
- c. Perform an inspection of the valve seals condition and verify valve timing/synchronization a minimum of once every 18 months for the RTO.
- d. Perform quarterly pressure drop readings across the concentrator.

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.

## **VII. REPORTING**

1. Quarterly reporting of the emissions data with an acceptable format to AQD. Due within 30 days of the end of the quarter in which the data were collected. **(NSPS 40 CFR, Part 60 Subparts A & MM)**
2. The permittee shall send written notification to the AQD District Supervisor within 30 days of the start of production of the automotive assembly line associated with PTI #14-19A for FCA USA, LLC, Detroit Assembly Complex Mack. **(R 336.1201(7))**
3. The permittee shall send written notification to the AQD District Supervisor within 30 days of temporarily shutting down EU-COLOR-ONE for repair operations and installation of control equipment. **(R 336.1201(7))**
4. The permittee shall send written notification to the AQD District Supervisor within 30 days of commencing operation of control equipment on EU-COLOR-ONE. **(R 336.1201(7))**
5. The permittee shall send written notification to the AQD District Supervisor within 30 days of permanently shutting down EU-COLOR-TWO. **(R 336.1201(7))**

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVBC1OBEAST1	41	106	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBC1OBEAST2	41	106	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVBC1OBEAST3	41	106	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVCC1OBEAST1	34	106	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVCC1OBEAST2	33	106	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVBTHCONCEAST	60	106	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVRTOEAST	60	114	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVEXC1INC	36	95	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVHIBKTO	36	90	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVHIBKBTH	41	106	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVSMB-G-03-01 <sup>C</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVSMB-G-03-01 <sup>C</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
13. SVSMB-G-03-01 <sup>C</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
14. SVSMB-G-03-01 <sup>C</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
15. SVSMB-G-10-01 <sup>C</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
16. SVSMB-G-12-01 <sup>C</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
17. SVSMB-G-13-C1-01 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
18. SVSMB-G-13-C1-02 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
19. SVSMB-G-13-C1-03 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
20. SVSMB-G-13-C1-04 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
21. SVSMB-G-14-C1-01 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
22. SVSMB-G-14-C1-02 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
23. SVSMB-G-14-C1-03 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
24. SVSMB-G-14-C1-04 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
25. SVSMB-G-15-C1-01 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
26. SVSMB-G-15-C1-02 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
27. SVSMB-G-15-C1-03 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
28. SVSMB-G-15-C1-01 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
29. SVSMB-G-16-C1-02 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
30. SVSMB-G-16-C1-03 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
31. SVSMB-G-16-C1-04 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
32. SVSMB-G-17-C1-01 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
33. SVSMB-G-17-C1-02 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
34. SVSMB-G-17-C1-03 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
35. SVSMB-G-17-C1-04 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
36. SVSMB-G-18-C1-01 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
37. SVSMB-G-18-C1-02 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
38. SVSMB-G-18-C1-03 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
39. SVSMB-G-19-C1-01 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
40. SVSMB-G-19-C1-02 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
41. SVSMB-G-19-C1-03 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
42. SVSMB-G-19-C1-04 <sup>D</sup>	NA	105 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
43. SVSMB-H-02-01 <sup>E</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
44. SVSMB-H-03-01 <sup>E</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
45. SVSMB-H-03-02 <sup>E</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
46. SVSMB-H-08-02 <sup>E</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
47. SVSMB-H-10-02 <sup>E</sup>	NA	42 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
48. SVSMB-H-12-02 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
49. SVSMB-H-14-C2-01 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
50. SVSMB-H-14-C2-02 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
51. SVSMB-H-14-C2-03 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
52. SVSMB-H-14-C2-04 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
53. SVSMB-H-15-C2-01 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
54. SVSMB-H-15-C2-02 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
55. SVSMB-H-15-C2-03 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
56. SVSMB-H-16-C2-01 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
57. SVSMB-H-16-C2-02 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
58. SVSMB-H-16-C2-03 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
59. SVSMB-H-16-C2-04 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
60. SVSMB-H-17-C2-01 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
61. SVSMB-H-17-C2-02 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
62. SVSMB-H-17-C2-03 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
63. SVSMB-H-17-C2-04 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
64. SVSMB-H-18-C2-01 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
65. SVSMB-H-18-C2-02 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
66. SVSMB-H-18-C2-03 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
67. SVSMB-H-19-C2-01 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
68. SVSMB-H-19-C2-02 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
69. SVSMB-H-19-C2-03 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
70. SVSMB-H-19-C2-04 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
71. SVSMB-H-20-C2-01 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)
72. SVSMB-H-20-C2-02 <sup>E</sup>	NA	90 <sup>1</sup>	R 336.1225, 40 CFR 52.21(c) & (d)

<sup>C</sup>These stacks are existing stacks for the EU-COLOR-ONE oven and incinerator and will be replaced with SVEXC1INC upon completion of construction.

<sup>D</sup>These stacks are existing EU-COLOR-ONE spray booth stack. These stacks will be replaced by SVBC1OBEAST, SVCC1OBEAST, SVBTHCONCEAST, and SVRTOEAST upon completion of construction on EU-COLOR-ONE.

<sup>E</sup>These stacks are existing EU-COLOR-TWO stacks and will no longer be in use after permanent shutdown of EU-COLOR-TWO as required in SC IX.5.

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with New Source Performance Standards (NSPS), 40 CFR, Part 60, Subpart MM (Standards of Performance for Automobile and Truck Surface Coating Operations) and Subpart A (General Provisions). **(40 CFR Part 60 Subpart MM)**
2. The following Emission Limits in FGTOPCOATEAST shall become applicable upon startup of the automotive assembly line associated with PTI #14-19A for FCA USA, LLC, Detroit Assembly Complex Mack. Startup of the automotive assembly line is considered to be the start of an emission unit in PTI #14-19A: **(R 336.2908)**
  - a. SC I.10 and SC I.11 for EU-REPROCESS.
  - b. SC I.12 for EU-COLOR-ONE.
  - c. SC I.14 for EU-COLOR-TWO.
3. The following Emission Limits in FGTOPCOATEAST shall no longer be applicable upon startup of the automotive assembly line associated with PTI #14-19A for FCA USA, LLC, Detroit Assembly Complex Mack. Startup of the automotive assembly line is considered to be the start of an emission unit in PTI #14-19A: **(R 336.2908)**
  - a. SC I.3 for EU-COLOR-ONE and EU-COLOR-TWO.
  - b. SC I.6 and SC I.7 for EU-REPROCESS.
4. The permittee shall temporarily shut down EU-COLOR-ONE on or before July 31, 2020, for repair operations and installation of a concentrator and RTO. Thereafter, EU-COLOR-ONE shall not be operated unless the control equipment is operating in a satisfactory manner. **(R 336.2908)**
5. The permittee shall permanently shut down EU-COLOR-TWO on or before September 30, 2021. **(R 336.2908)**

**Footnotes:**

- <sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

## **FGCONTROLS FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Concentrators and RTOs used for control of VOC emissions as applicable from the paint spray booths, flash-off areas, and curing ovens. Waterwash or dry filter particulate control on paint spray booths and sanding/repair booths and as pre-filtration to VOC control devices.

**Emission Units:** EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EU-COLOR-ONE, EU-REPROCESS, EUPURGECLEANEAST, EUSPOTREPAIREAST, EUFINALREPAIR, EUNEWNGASSEMBLY, EUNEWNGPSEAST, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2

### **POLLUTION CONTROL EQUIPMENT**

The west concentrator and west RTO used for control of VOC emissions from EUPRIMERWEST spray booth and flash-off areas, EUTOPCOATWEST spray booth and flash-off areas, and solvent borne purge materials from west primer and west clearcoat booths not captured in the purge collection system. The west RTO only used for control of VOC emissions from the EUECOATWEST tank and curing oven, EUPRIMERWEST curing oven, and EUTOPCOATWEST curing oven. The east concentrator and east RTO used for control of VOC emissions from EU-COLOR-ONE spray booth and flash-off areas. The east RTO only used for control of VOC emissions from EUECOATEAST tank and curing oven. A thermal oxidizer used for control of VOC emissions from the EU-COLOR-ONE cure oven. A thermal oxidizer used for control of VOC emissions from the EU-REPROCESS. Waterwash particulate control systems on all paint spray booths and observation zones. Dry filter particulate control systems on all sanding and repair booths and all flash-off areas. Dry filter particulate control systems on all air supply housing (ASH), air handling units (AHU), space heating units, and all curing ovens in the E-coat, primer, and topcoat operations.

### **I. EMISSION LIMIT(S)**

NA

### **II. MATERIAL LIMIT(S)**

NA

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not operate FGCONTROLS unless a malfunction abatement plan (MAP) is implemented and maintained as described in Rule 911(2), for the concentrators, RTOs, water wash, and dry filter particulate system add on control devices. The MAP shall be submitted to the AQD District Supervisor for review and approval. The MAP shall, at a minimum, specify the following:
  - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District

Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.2908, 40 CFR 52.21(c) & (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, combustion chamber temperature monitoring devices for the thermal oxidizers in FGCONTROLS to monitor and record the combustion chamber 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 336.1910, R 336.2908(3))**
2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner, temperature monitoring devices for the concentrators in FGCONTROLS to determine the concentrator inlet and outlet temperatures on a continuous basis during operation. Gas 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 336.1910)**
3. The permittee shall maintain records of maintenance and repair activities for FGCONTROLS. 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)**
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 336.2908, 40 CFR 52.21(c) and (d))**
5. Each temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of +/- 5 percent of the temperature being measured expressed in degrees Celsius or +/- 2.5 °C. **(R 336.1910, 40 CFR 60.394(b))**
6. For the thermal oxidizers, 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 336.2908)**
7. 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 thermal oxidizer control device(s) used to demonstrate compliance with the applicable VOC emission limits: **(R 336.1910, R 336.1911)**
  - 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.
- d) Perform quarterly pressure drop readings across the concentrator.

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.

**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:**

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

**FGSPOTPRIMEWEST  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Two spot prime processes in the west paint shop. One that is placed after the E-coat process and prior to the primer application process, and one that is located after the primer process and prior to topcoat application

**Emission Unit IDs:** EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2

**POLLUTION CONTROL EQUIPMENT**

Dry filter particulate controls on the west spot prime booths 1 and 2 are exhausted to the atmosphere.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	1.0 ton per month	Calendar Month	Each emission unit in FGSPOTPRIMEWEST	SC VI.3	R 336.1702(d), R336.2908
2. VOC	1.36 tpy	12-month rolling time period as determined at the end of each calendar month	FGSPOTREPAIRWEST	SC VI.3	R 336.1702(a), R336.2908
3. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	EUSPOTPRIMEWEST1	SC V.2	R 336.1331
4. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	EUSPOTPRIMEWEST2	SC V.2	R 336.1331
5. PM10	0.026 pph	Hourly	Each emission unit in FGSPOTPRIMEWEST	SC V.2	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)
6. PM2.5	0.026 pph	Hourly	Each emission unit in FGSPOTPRIMEWEST	SC V.2	R 336.1205(1)(a)&(1)(b), 40 CFR 52.21 (c) & (d)

<sup>a</sup>Calculated on a wet gas basis

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- The permittee shall capture all waste coatings and VOC-containing materials and shall store them in closed containers. The permittee shall dispose of all waste coatings and VOC-containing materials 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 336.2908)**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

- The permittee shall not operate any emission unit in FGSPOTPRIMEWEST unless the respective dry filter particulate controls are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the particulate controls includes conducting the required monitoring and recordkeeping pursuant to SC VI.4. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

**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 any coating or material, as applied and as received, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2908)**
2. Within 365 days after 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 PM, PM10, and PM2.5 emission rates from a representative emission unit in FGSPOTPRIMEWEST, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A
PM10 / PM2.5	40 CFR Part 51, 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 30 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 336.1301, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

**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 336.2908)**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component used in FGSPOTPRIMEWEST. The data may consist of 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 336.1225, R 336.1702)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter system, 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, 40 CFR 52.21(c) & (d))**
4. 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 FGSPOTPRIMEWEST. The records shall be kept using mass balance or an alternate method and 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 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.

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 336.2908)

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVSPOTPRMWEST1	26	75	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVSPOTPRMWEST2	44	113	R 336.1225, 40 CFR 52.21(c) & (d)

**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 FGSPOTPRIMEWEST. **(40 CFR Part 63, Subparts A and Subpart IIII)**

**Footnotes:**

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

**FGRTOWEST  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

This flexible group covers NOx, PM, PM10, and PM2.5 emissions from the west paint shop concentrator and west RTO.

**Emission Unit:** EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST

**POLLUTION CONTROL EQUIPMENT**

EUPRIMERWEST coating booth overspray is controlled by a waterwash particulate control system. A portion of the EUPRIMERWEST coating booth exhaust will be filtered and recirculated to the booth air make-up system. EUPRIMERWEST coating booth and flash-off area emissions are exhausted through a bank of particulate filters, the west concentrator, and the west RTO. EUPRIMERWEST oven emissions are exhausted through a bank of filters and directly to the west RTO. EUTOPCOATWEST booth and flash-off exhausts are routed through a bank of particulate filters, the west concentrator, and the west RTO. EUTOPCOATWEST oven emissions are exhausted directly to the west RTO. Dry filter particulate control systems on all direct-fire air supply housing (ASH), air handling units (AHU), and curing ovens in EUECOATWEST, EUPRIMERWEST, and EUTOPCOATWEST.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.0032 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	RTO portion of FGRTOWEST	SC V.1	R 336.1205(1)(a) and (1)(b), R 336.1331(1)(c)
2. PM10	0.518 pph	Hourly	RTO portion of FGRTOWEST	SC V.1	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21 (c) & (d)
3. PM2.5	0.518 pph	Hourly	RTO portion of FGRTOWEST	SC V.1	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21 (c) & (d)
4. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	Concentrator portion of FGRTOWEST	SC V.1	R 336.1205(1)(a) and (1)(b), R 336.1331(1)(c)
5. PM10	0.123 pph	Hourly	Concentrator portion of FGRTOWEST	SC V.1	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21 (c) & (d)
6. PM2.5	0.123 pph	Hourly	Concentrator portion of FGRTOWEST	SC V.1	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21 (c) & (d)
7. NOx	3.29 pph	Hourly	Concentrator and RTO portions of FGRTOWEST, combined	SC V.2	40 CFR 52.21 (c) & (d)

<sup>a</sup> 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 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 PM2.5, PM10, and PM emission rates of the concentrator and RTO portions of FGRTOWEST, 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 the following Reference Test Method Table. 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**

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

2. Within 365 days after 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 combined NOx emission rate from the west concentrator and the west RTO portion of FGRTOWEST, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 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 336.1205, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

**VI. MONITORING/RECORDKEEPING**

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

NA

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVRTOWEST	58	113	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBTHCONCWEST	68	113	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

**FGRTOEAST  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

This flexible group covers NOx, PM, PM10, and PM2.5 emissions from the east paint shop concentrator and RTO associated with EUECOATEAST, EUPURGECLEANEAST, and the refurbished spray booth portion of EU-COLOR-ONE

**Emission Unit:** EUECOATEAST, EU-COLOR-ONE, EU-PURGECLEANEAST

**POLLUTION CONTROL EQUIPMENT**

EU-COLOR-ONE coating booth overspray is controlled by a waterwash particulate control system. A portion of the EU-COLOR-ONE coating booth exhaust is filtered and recirculated to the booth air make-up system. EU-COLOR-ONE coating booth and flash-off area emissions are exhausted through a bank of particulate filters, the east concentrator, and the east RTO. Dry filter particulate control systems on all direct-fire air supply housing (ASH) and air handling units (AHU) in EUECOATEAST and EU-COLOR-ONE.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.0032 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	RTO portion of FGRTOEAST	SC V.1	R 336.1205(1)(a) and (1)(b), R 336.1331(1)(c)
2. PM10	0.518 pph	Hourly	RTO portion of FGRTOEAST	SC V.1	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21 (c) & (d)
3. PM2.5	0.518 pph	Hourly	RTO portion of FGRTOEAST	SC V.1	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21 (c) & (d)
4. PM	0.0029 lbs per 1,000 lbs of exhaust gas <sup>a</sup>	Hourly	Concentrator portion of FGRTOEAST	SC V.1	R 336.1205(1)(a) and (1)(b), R 336.1331(1)(c)
5. PM10	0.148 pph	Hourly	Concentrator portion of FGRTOEAST	SC V.1	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21 (c) & (d)
6. PM2.5	0.148 pph	Hourly	Concentrator portion of FGRTOEAST	SC V.1	R 336.1205(1)(a) and (1)(b), 40 CFR 52.21 (c) & (d)
7. NOx	6.39 pph	Hourly	Concentrator and RTO portions of FGRTOEAST, combined	SC V.2	40 CFR 52.21 (c) & (d)

<sup>a</sup> 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, 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 PM<sub>2.5</sub>, PM<sub>10</sub>, and PM emission rates of the concentrator and RTO portions of FGRTOEAST, 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 the following Reference Test Method Table. 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**

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM <sub>10</sub> /PM <sub>2.5</sub>	40 CFR Part 51, Appendix M

2. Within 365 days after 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 combined NO<sub>x</sub> emission rate from the east concentrator and the east RTO portion, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 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 336.1205, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

#### **VI. MONITORING/RECORDKEEPING**

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

NA

#### **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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVBTHCONCEAST	60	106	40 CFR 52.21(c) & (d)
2. SVRTOEAST	60	114	40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

**FGBOILERS  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Four (4) natural gas fired boilers to produce steam and heat located in the powerhouse. Boiler Nos. 3, 4 and 5 are equipped with low NOx burners, Boiler No. 6 (with oxygen trim system) is a high efficiency boiler but not low NOx.

**Emission Unit:**

1. EU-BOILER3: 152 million BTU heat input per hour (Babcox & Wilcox Boiler3, installed 7/11/98) natural gas only boiler equipped with low NOx burners.
2. EU-BOILER4: 106 million BTU heat input per hour (Babcox & Wilcox Boiler4, installed 7/11/98) natural gas only boiler equipped with low NOx burners.
3. EU-BOILER5: 152 million BTU heat input per hour (Wickes Boiler5, installed 9/1/96) natural gas only boiler equipped with low NOx burners.
4. EU-BOILER6: 192 million BTU heat input per hour (Riley Stoker Boiler6, installed 10/29/84) natural gas only boiler equipped with oxygen trim system but not low NOx burners.

**POLLUTION CONTROL EQUIPMENT**

Boiler Nos. 3, 4 and 5 are equipped with low NOx burners, Boiler No. 6 (with oxygen trim system) is a high efficiency boiler but not low NOx.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	119.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGBOILERS	SC V.1	R 336.1201(3)
2. NOx <sup>A</sup>	5.43 pph	Hourly	EU-BOILER3	SC V.1	40 CFR 52.21 (c) & (d)
3. NOx <sup>A</sup>	6.61 pph	Hourly	EU-BOILER4	SC V.1	40 CFR 52.21 (c) & (d)
4. NOx <sup>A</sup>	9.59 pph	Hourly	EU-BOILER5	SC V.1	40 CFR 52.21 (c) & (d)
5. NOx <sup>A</sup>	27.86 pph	Hourly	EU-BOILER6	SC V.1	40 CFR 52.21 (c) & (d)

<sup>A</sup>This emission limit becomes applicable upon startup of the west paint shop.

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas	1,305 Million (MM) standard cubic feet per year	12-month rolling time period	FGBOILERS	SC VI.1	R 336.1201(3)

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall only burn pipeline quality sweet natural gas in FG-BOILERS. **(R 336.1201(3))**

#### **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 from the west paint shop, the permittee shall conduct initial testing, and at least once every five years from the last testing date thereafter unless the permittee documents annually that the most recent acceptable test remains valid and representative, the permittee shall verify NOx emission rates from each boiler in FGBOILERS 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 40 CFR Part 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 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

#### **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, in a satisfactory manner, the natural gas usage for FGBOILERS on a monthly basis. **(R 336.1201(3))**
2. The permittee shall conduct and record routine and scheduled preventative maintenance programs for FGBOILERS. **(R 336.1910)**

#### **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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVPH-C-08-B-03	71	74	40 CFR 52.21 (c) & (d)
2. SVPH-C-11-B-04	71	74	40 CFR 52.21 (c) & (d)
3. SVPH-C-13-B-05	71	74	40 CFR 52.21 (c) & (d)
4. SVPH-C-15-B-06	48	73	40 CFR 52.21 (c) & (d)

#### **IX. OTHER REQUIREMENT(S)**

NA

#### **Footnotes:**

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

**FGAUTOMACT  
 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:** EUPRETREATWEST, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUBODYWIPEWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EUPURGECLEANEAST, EUSPOTREPAIREAST, EUSEALERS, EUFINALREPAIR, EU-COLOR-ONE, EU-COLOR-TWO, EU-REPROCESS, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2

**POLLUTION CONTROL EQUIPMENT**

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Organic HAP	0.30 lb per GACS	Calendar Month	<b>New/Reconstructed</b> —FGAUTOMACT with EUECOATWEST and EUECOATEAST	SC III.3, SC V.1, SC VI.3	40 CFR 63.3090(a)
2. Organic HAP*	0.5 lb per GACS	Calendar Month	<b>New/Reconstructed</b> —FGAUTOMACT	SC III.3, SC V.1, SC VI.3	40 CFR 63.3091(b)
3. Organic HAP	0.01 lb per lb of coating	Calendar Month	<b>New/Reconstructed</b> —SEALERS & ADHESIVES	SC III.3, SC V.1, SC VI.3	40 CFR 63.3090(c) or 63.3091(c)
4. Organic HAP	0.01 lb per lb of coating	Calendar Month	<b>New/Reconstructed</b> —Deadener Materials	SC III.3, SC V.1, SC VI.3	40 CFR 63.3090(d) or 63.3091(d)
<ul style="list-style-type: none"> <li>• <b>FGAUTOMACT</b> includes Primer, 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.</li> <li>• <b>FGAUTOMACT WITH EUECOATWEST and EUECOATEAST</b> also includes all Electrocoat operations in addition to all of the operations of FGAUTOMACT.</li> <li>• <b>SEALERS &amp; ADHESIVES</b> include only adhesives and sealers that are not part of glass bonding systems.</li> </ul>					
* Permittee may choose to comply with this limit if the requirements of Condition No. I.5 is met.					

5. The permittee may choose to comply with either SC I.1 or 2. SC I.2 may be chosen only if EUECOATWEST and EUECOATEAST meet either of the following requirements. **(40 CFR 63.3092)**
- Each individual material added to EUECOATWEST and EUECOATEAST contains no more than 1.0 percent by weight of any organic HAP and no more than 0.10 percent by weight of any OSHA-defined carcinogenic organic HAP.
  - The emissions from all EUECOATWEST and EUECOATEAST bake ovens are captured and ducted to the oven thermal oxidizer which achieves a minimum destruction 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 Conditions 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.
  - Spills of organic-HAP containing coatings, thinners, cleaning materials, and waste materials must be minimized.
  - Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
  - 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.
  - Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.
  - Organic HAP emissions from cleaning and from purging of equipment associated with all coating operations subject to emission limits in Special Conditions I.1 through I.4 above must be minimized by addressing:
    - Vehicle body wipe pursuant to 40 CFR 63.3094(c)(1)(i).
    - Coating line purging pursuant to 40 CFR 63.3094(c)(1)(ii).
    - Coating system flushing pursuant to 40 CFR 63.3094(c)(1)(iii).
    - Cleaning of spray booth grates pursuant to 40 CFR 63.3094(c)(1)(iv).
    - Cleaning of spray booth walls pursuant to 40 CFR 63.3094(c)(1)(v).
    - Cleaning of spray booth equipment pursuant to 40 CFR 63.3094(c)(1)(vi).
    - Cleaning of external spray booth areas pursuant to 40 CFR 63.3094(c)(1)(vii).
    - 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 capture, destruction or 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 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 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))**
2. 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))**
3. 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 manufacturers, 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 FGAUTOMACT or FGAUTOMACT with EUECOATWEST and EUECOATEAST, 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 EUSEALERS, 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 FGAUTOMACT or FGAUTOMACT with EUECOATWEST and EUECOATEAST 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 systems. 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 EUSEALERS. **(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))**

- h) Any additional records pertaining to deviations; startup, shutdown or malfunctions; emission capture systems; performance testing; capture and control efficiency determinations; transfer efficiency determinations; work practice plans; and design and operation of control and monitoring systems for any emission capture system or add-on control device upon which compliance with any of the emission limits in Special Conditions I.1 through I.4 depends, pursuant to 40 CFR 63.3130(g) through (o). **(40 CFR 63.3130(g) – (o))**
- i) Records pertaining to the design and operation of control and monitoring systems for any emission capture system or add-on control device upon which compliance with any of the emission limits in Special Conditions I.1 through I.4 depends must be maintained on-site for the life of the equipment in a location readily available to plant operators and inspectors. **(40 CFR 63.3130(o))**

## **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 FGAUTOMACT. The permittee may choose an alternative compliance method not listed in FGAUTOMACT 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)**



**FGBOILERMACTHWG  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

This FG is for the 11 hot water generators and the Trim Boiler associated with the installation of the west paint shop and modernization of the east paint shop. 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 the applicable provisions of this subpart upon startup.

**Emission Units:**

Less than 5 MMBtu/hr	NA
Equal to or greater than 5 MMBtu/hr and less than 10 MMBtu/hr	EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8, EUDSBCHWG, EUDSSBHWG, EUDSCCHWG
Equal to or greater than 10 MMBtu/hr	EU-TRIMBOILER

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall only burn fuels 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 applicable 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, stated in SC IX.1), 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 five years as specified in 40 CFR 63.7540, stated in SC IX.8. **(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 two years as specified in 40 CFR 63.7540, stated in SC IX.8. **(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.4. 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.8.a; biennial performance tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.8.b; or 5-year performance tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.8.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)**

1. The heat input capacity of each hot water generator in FGBOILERMACT shall not exceed a maximum of 10 MMBtu per hour. **(40 CFR Part 63, Subpart DDDDD)**

#### **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 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 60 or Parts 61, Part 63, 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 five 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 two 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 three years. **(40 CFR 63.7560(c))**

## **VII. REPORTING**

1. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.6 through SC VII.8, and in Subpart A of 40 CFR Part 63. **(40 CFR 63.7495(d))**
2. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII.9. **(40 CFR 63.7540(b))**
3. 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))**
4. As specified in 40 CFR 63.9(b)(2), if the permittee starts up the affected source before January 31, 2013, the permittee must submit an Initial Notification not later than 120 days after January 31, 2013. **(40 CFR 63.7545(b))**
5. As specified in 40 CFR 63.9(b)(4) and (5), if the permittee starts up the new or reconstructed affected source on or after January 31, 2013, 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))**
6. 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))**
7. If the permittee intends to commence or recommence combustion of solid waste, the permittee must provide 30 days prior notice of the date upon which the permittee will commence or recommence combustion of solid waste. The notification must identify: **(40 CFR 63.7545(g))**
  - a) The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice. **(40 CFR 63.7545(g)(1))**
  - b) The currently applicable subcategories under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(g)(2))**
  - c) The date on which the permittee became subject to the currently applicable emission limits. **(40 CFR 63.7545(g)(3))**
  - d) The date upon which the permittee will commence combusting solid waste. **(40 CFR 63.7545(g)(4))**
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, stated in SC IX.1, 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.8.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.8.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.8.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.3, and ending on December 31 after the compliance date that is specified for the source in 40 CFR 63.7495, stated in SC IX.3. 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.3. 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), (xiv), 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.8.a, biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.8.b, or 5-year tune-up according to 40 CFR 63.7540(a)(12), stated in SC IX.8.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. 40 CFR Part 63, Subpart DDDDD applies to new or reconstructed affected sources as described in paragraph (a)(2) of 40 CFR 63.7490, as listed below. **(40 CFR 63.7490(a))**
- a) The affected source of 40 CFR Part 63, Subpart DDDDD is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in 40 CFR 63.7575, located at a major source. **(40 CFR 63.7490(a)(2))**
2. A boiler or process heater is:
- a) New if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
- b) Reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. **(40 CFR 63.7490(c))**
3. If the permittee has a new or reconstructed boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD by April 1, 2013, or upon startup of each boiler or process heater, whichever is later. **(40 CFR 63.7495(a))**
4. If the permittee has an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraph (c)(2) of 40 CFR 63.7495, as listed below, applies to the permittee. **(40 CFR 63.7495(c))**
- a. Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup. **(40 CFR 63.7495(c)(1))**
5. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7505(a))**
6. 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))**
7. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1) 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.8.a, and the schedule described in

40 CFR 63.7540(a)(13), stated in SC IX.8.d, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**

8. 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<sub>x</sub> 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 five 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 five 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))**
- 9. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. **(40 CFR 63.7565)**

**Footnotes:**

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

**FGNGWEST  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

All natural gas-fired equipment associated with the installation of west paint shop portion of the Warren Truck Assembly Plant, except the emergency generators, including eight hot water generators, air supply houses, space heaters, heated flash, cure ovens, the carbon concentrator, and the RTO. In addition, this FG includes new air supply houses and space heating in the assembly area.

**Emission Unit:** EUPRETREATWEST, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUNEWNGASSEMBLY, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8

**POLLUTION CONTROL EQUIPMENT**

Low NOx burners on all equipment; RTO for VOC control of spray booths and curing ovens in EUECOAT, EUPRIMER, and EUTOPCOAT; dry filter particulate controls on direct-fired natural gas equipment.

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall burn only pipeline quality natural gas in FGNGWEST (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2908, 40 CFR 52.21(c) & (d))

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate FGNGWEST unless Low NOx burners are installed, maintained, and operated in a satisfactory manner. (R 336.1205, 40 CFR 52.21(c) & (d))
2. The permittee shall not operate any air handling units, any air supply houses, and any curing ovens in EUECOATWEST, EUPRIMERWEST, and EUTOPCOATWEST in FGNGWEST unless the respective dry filter particulate control systems are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dry filter control system includes conducting the required monitoring and recordkeeping pursuant to SC VI.4. (R 336.1205(1)(a) & (b), R 336.1331, 40 CFR 52.21(c) & (d))
3. All air supply houses, air handling units, and E-coat, primer, and topcoat curing oven(s) in FGNGWEST shall be direct-fired units. (R 336.1205, 40 CFR 52.21(c) & (d))

**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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.2908)



2. Based upon the records of the amount of natural gas burned and the U.S. EPA AP-42 emission factor for VOCs from the combustion of natural gas, the permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total VOC emissions for FGNGWEST. Upon agreement with the AQD District Supervisor, alternative emission factors or calculation methods may be used. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.2908)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter, 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, 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 new Hot Water Generators (HWG), the new air supply houses, and the new space heaters are equipped with Low NOx burners. **(R 336.1205(1)(a) & (b))**

**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. SVPRMOBSWEST	44	113	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBCOBSWEST (BC Observation Zone)	36	113	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVCCOBSWEST (CC Observation Zone)	40	113	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVBTHCONCWEST	68	113	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVRTOWEST	58	113	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVHWG1	16	86	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVHWG2	16	86	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVHWG3	16	86	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVHWG4*	16	45	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVHWG5*	16	45	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVHWG6*	16	45	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVHWG7	16	55	R 336.1225, 40 CFR 52.21(c) & (d)
13. SVHWG8	16	55	R 336.1225, 40 CFR 52.21(c) & (d)

\*This stack exhausts horizontally

**IX. OTHER REQUIREMENT(S)**

1. Within 30 days of installation, the permittee shall label all natural gas equipment with its respective EU and/or FG name in a manner acceptable to the AQD District Supervisor. **(R 336.1205)**

**Footnotes:**

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

**FGNEWNGEAST  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

All natural new gas-fired equipment associated with the refurbishment of east paint shop portion of the Warren Truck Assembly Plant, except the new trim boiler, including hot water generators, air supply houses, cure ovens, the carbon concentrator, and the RTO.

**Emission Unit:** EUECOATEAST, EU-COLOR-ONE, EUDSBCHWG, EUDSSBHWG, EUDSCCHWG, EUNEWNGPSEAST

**POLLUTION CONTROL EQUIPMENT**

Low NOx burners on all equipment. The east concentrator and east RTO for VOC control of spray booths and curing ovens in EUECOATEAST and EU-COLOR-ONE. Dry filter particulate controls on direct-fired natural gas equipment.

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall burn only pipeline quality natural gas in FGNEWNGEAST. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.2908, 40 CFR 52.21(c) & (d))

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate FGNEWNGEAST unless Low NOx burners are installed, maintained, and operated in a satisfactory manner. (R 336.1205, R 336.1225, 40 CFR 52.21(c) & (d))
2. The permittee shall not operate the air handling housing in the Basecoat and Clearcoat portions of EU-COLOR-ONE (equal to 34.5 MMBTU/hr) and EUNEWNGPSEAST unless the respective dry filter particulate control systems are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dry filter control system includes conducting the required monitoring and recordkeeping pursuant to SC VI.4. (R 336.1205(1)(a) & (b), R 336.1331, 40 CFR 52.21(c) & (d))
3. All air supply houses, air handling units, and E-coat, primer, topcoat, and sealer curing oven(s) in FGNEWNGEAST shall be direct-fired units. (R 336.1205, R 336.1225, 40 CFR 52.21(c) & (d))

**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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.2908)

2. Based upon the records of the amount of natural gas burned and the U.S. EPA AP-42 emission factor for VOCs from the combustion of natural gas, the permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total VOC emissions for FGNEWNGEAST. Upon agreement with the AQD District Supervisor alternative emission factors or calculation methods may be used. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.2908)**
3. The permittee shall monitor the condition of each particulate control system through weekly visual inspections. The permittee shall keep records of visual inspections of each exhaust filter, 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, 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 new Hot Water Generators (HWG), the new air supply houses, and the new space heaters are equipped with Low NOx burners. **(R 336.1205(1)(a) & (b))**

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter/ Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVBC1OBEAST1	41	106	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBC1OBEAST2	41	106	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVBC1OBEAST3	41	106	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVCC1OBEAST1	34	106	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVCC1OBEAST2	33	106	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVBTHCONCEAST	60	106	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVRTOEAST	60	114	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVDS1HWG	21.6	84.7	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. Within 30 days of installation, the permittee shall label all natural gas equipment with its respective EU and/or FG name in a manner acceptable to the AQD District Supervisor. **(R 336.1205)**

**Footnotes:**

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

<b>FGTANKS FLEXIBLE GROUP CONDITIONS</b>
--

**DESCRIPTION**

Any existing (placed into operation before 7/1/79), new (placed into operation on or after 7/1/79) or modified storage tank, including those that are exempt from the requirements of R 336.1201 pursuant to R 336.1284.

**Emission Unit:** EU-UNLEADEDGAS1, EUMETANK, EUDIESELTANK1, EUANTIFREEZETANK, EUBRAKEFLUIDTANK, EUAUTOTRANS, EUDIESELEXTANK, EUGASTANK2, EUDIESELTANK2, EUPURSOLVTANK, EUDIESELTANK3

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not load or allow the loading of gasoline from a delivery vessel into any new stationary vessel of more than 2,000 gallons (7.57 cubic meters or 7,571 liters) capacity unless such stationary vessel is equipped with a permanent submerged fill pipe. **(R 336.1703(1))**

**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 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 336.1225, R 336.1702)**

2. The permittee shall keep a record of the following for each storage vessel:
  - a) The identification (name, tank #, etc).
  - b) Location within the plant.
  - c) The capacity of the vessel.
  - d) The date of installation/modification.
  - e) The type of material contained in the vessel.
  - f) The true vapor pressure of the material contained in the vessel at actual storage conditions.
  - g) The applicable requirements.

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 336.1703, 40 CFR 60 Subparts K, Ka, Kb)**

## **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. Any new gasoline tank (placed into operation on or after 07/01/79) shall comply with the applicable requirements of Rule 703. **(R 336.1703)**
2. Any gasoline tank or volatile organic liquid (VOL) storage tank shall comply with New Source Performance Standards, 40 CFR Part 60 Subparts A, K, Ka, Kb based upon installation or modification date and applicability and designation of affected facility provisions in 40 CFR 60.110, 60.110a, 60.110b. Construction, reconstruction, or modification dates are as follows: **(40 CFR Part 60 Subparts A, K, Ka, Kb)**
  - a) Subpart K: after June 11, 1973 and prior to May 19, 1978;
  - b) Subpart Ka: after May 18, 1978 and prior to July 23, 1984;
  - c) Subpart Kb: after July 23, 1984.

### **Footnotes:**

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

## **FG-OLDMACT FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

FG-OLDMACT: The affected source is each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is located at, or is part of a major source of hazardous air pollutant (HAP) emissions. The affected source is comprised of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to this subpart. Equipment that is part of an affected source under another NESHAP is excluded from the affected source. **(40 CFR 63.2338(c))**

These conditions specifically cover existing (construction predates April 2, 2002) liquid storage tanks which hold more than 5,000 gallons but less than 50,000 gallons, and/or new liquid storage tanks which hold more than 5,000 gallons but less than 10,000 gallons of methanol/windshield washer fill solvents that are dispensed to newly assembled vehicles.

**Emission Unit:** EUMETANK

### **POLLUTION CONTROL EQUIPMENT**

NA

#### **I. EMISSION LIMIT(S)**

NA

#### **II. MATERIAL LIMIT(S)**

NA

#### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. For each existing storage tank with a capacity greater than 5,000 gallons but less than 50,000 gallons, the permittee shall comply with the requirements of 63.2343(b). **(40 CFR 63.2343(b))**
2. For each new storage tank with a capacity greater than 5,000 gallons but less than 10,000 gallons, the permittee shall comply with the requirements of 63.2343(b). **(40 CFR 63.2343(b))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep documentation, including a record of the annual average true vapor pressure of the total Table 1 Organic liquid, that verifies the storage tank is not required to be controlled under this subpart. The documentation shall be kept up-to-date and must be in a format acceptable to AQD. **(63.2343(b)(3))**

## **VII. REPORTING**

1. The permittee shall submit the following information in either the Notification of Compliance Status, according to the schedule in Table 12 to this subpart, or in your first Compliance report according to the schedule in 63.2386(b), whichever occurs first. **(63.2343(b)(1))**
  - a) Company name and address.
  - b) A statement by a responsible official, including the official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
  - c) Date of report and beginning and ending dates of the reporting period.
  - d) A list of all storage tanks greater than 5,000 gallons that are part of the affected source but not subject to any of the emission limitations, operating limits, or work practice standards of this subpart.
2. The permittee shall submit subsequent compliance reports according to the schedule in 63.2386(b) or in conjunction with the reporting requirements in this permit whenever any of the following events occur as applicable: **(63.2343(b)(2))**
  - a) Any storage tank became subject to control under this subpart EEEE.
  - b) Any storage tank greater than 5,000 gallons became part of the affected source, but is not subject to any emission limitations, operating limits, or work practice standards of this subpart.

## **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 EEEE as they apply to FG-OLDMACT. The permittee may choose an alternative compliance method not listed in FG-OLDMACT by providing the appropriate notifications required under 40 CFR 63.9(j), maintaining a log required by 40 CFR 70.6(a)(9), and by complying with all applicable provisions required by Subpart EEEE for the compliance option chosen. **(40 CFR Part 70.6(a)(9), 40 CFR Part 63.9(j), 40 CFR Part 63, Subparts A and EEEEE)**

### **Footnotes:**

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



**FGNGEMENG  
 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:** EUNGGEN1

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	2.0 g/HP-hr Or 160 ppmvd at 15% O <sub>2</sub>	Hourly	Each EU in FGNGEMENG	SC V.1, SC V.2, SC VI.2, SC VI.3	R 336.1205(1)(a) & (b), 40 CFR 52.21(c) & (d), 40 CFR 60.4233(e)
2. CO	4.0 g/HP-hr OR 540 ppmvd at 15% O <sub>2</sub>	Hourly	Each EU in FGNGEMENG	SC V.1, SC V.2, SC VI.2, SC VI.3	R 336.1205(1)(a) & (b), 40 CFR 52.21(c) & (d), 40 CFR 60.4233(e)
3. VOC	0.50 g/HP-hr <sup>C,D</sup>	Hourly	Each EU in FGNGEMENG	SC V.1, SC V.2, SC VI.4	R 336.1205(1)(a) & (b), R 336.2908, 40 CFR 60.4233(e)

<sup>C</sup> For compliance purposes, this limit includes formaldehyde for Nonattainment New Source Review, but does not include formaldehyde for the NSPS.  
<sup>D</sup> This emission limit has subsumed the emission limit required in 40 CFR 60 Subpart JJJJ, Table 1.

**II. MATERIAL LIMIT(S)**

- The permittee shall burn only pipeline quality natural gas in FGNGEMENG. **(R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), R 336.2908, 40 CFR 60.4233)**

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- The permittee shall not operate any EU in FGNGEMENG for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the 100 hours as described in SC III.2. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**
- The permittee may operate any EU in FGNGEMENG 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. 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)(2))**

3. Each EU in FGNGEMENG 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 described in SC III.2. Except as provided in 40 CFR 60.4243(d)(3)(i), 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)(3))**
4. The permittee shall operate and maintain each EU in FGNGEMENG such that it meets the emission limits in SC I.1, I.2, and I.3 over the entire life of the engine. **(40 CFR 60.4234, 40 CFR 60.4243(b))**
5. If any EU in FGNGEMENG is operated as 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 respective engine:
  - a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.
  - b) Meet the requirements as specified in 40 CFR 1068 Subparts A through D, as applicable, including labeling and maintaining certified engines according to the manufacturer's recommendations.
  - c) Only change those engine settings that are permitted by the manufacturer.

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 SC III.6. **(40 CFR 60.4243(b)(1))**

6. If any EU in FGNGEMENG 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 respective EU and shall, to the extent practicable, maintain, and operate each respective EU in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4243(b)(2))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall equip and maintain each EU in FGNGEMENG with a non-resettable hours meter to track the operating hours. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2908, 40 CFR 52.21(c) & (d), 40 CFR 60.4237(a))**
2. The nameplate capacity of each EU in FGNGEMENG shall not exceed 574 kW (770 HP), as certified by the equipment manufacturer. **(R 336.1205(1)(a) & (b), R 336.2908, 40 CFR 52.21(c) & (d), 40 CFR 60.4230)**
3. The emergency engines in FGNGEMENG shall be 4-stroke rich-burn engines.<sup>1</sup> **(R 336.1225)**

#### **V. TESTING/SAMPLING**

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

1. If any EU in FGNGEMENG 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 limits in SC I.1, I.2, and I.3 within 60 days after achieving the maximum production rate at which the respective EU will be operated, but not later than 180 days after initial startup of the respective EU, or within one year after the respective EU is no longer operated as a certified engine.
  - b) The performance tests shall consist of three separate test runs of at least 1 hour, for each performance test required in 40 CFR 60.4244 and Table 2 to Subpart JJJJ of Part 60.
  - c) Subsequent performance testing shall be completed every 8,760 hours of engine operation or every three years, whichever comes first, to demonstrate compliance with the applicable emission limits.

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. Verification of emission rates includes the submittal of 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 336.1205(1)(a), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (c) & (d), 40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60 Subpart JJJJ)**

2. Within 365 days after 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 VOC mass emissions from representative EUs in FGNGEMENG by testing at owner's expense, in accordance with Department requirements. Alternatively, one EU may be tested if the permittee provides a demonstration to the AQD that the tested unit(s) is identical to and/or the emission rates from the tested unit(s) are representative of the other unit(s). Testing shall be performed using approved EPA Method(s) listed in

Pollutant	Test Method Reference
VOC	40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A

Alternate method(s), or a modification to the approved EPA Method(s), may be specified in an AQD-approved Test Protocol. No less than 30 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. Verification of emission rates includes the submittal of 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 336.1205(1)(a) & (b), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2908)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep, in a satisfactory manner, the following records for each EU in FGNGEMENG:
  - a) If certified: The permittee shall keep records of the documentation from the manufacturer that the respective EU 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 336.2908, 40 CFR 52.21(c) & (d), 40 CFR 60.4233(e), 40 CFR 60.4243, 40 CFR 60.4245(a))**

2. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each EU in FGNGEMENG:
  - a) If certified: The permittee shall keep the manufacturer's emission-related written instructions and records demonstrating that the respective EU has been maintained according to them, as specified in SC III.5.
  - b) If non-certified: The permittee shall keep records of a maintenance plan, as required by SC III.6 and records of conducted maintenance.

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)**

3. The permittee shall monitor and record the total hours of operation for each EU in FGNGEMENG. The permittee shall document how many hours are spent for emergency operation of each EU in FGNGEMENG including what classified the operation as emergency. **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.2908, 40 CFR 52.21(c) & (d), 40 CFR 60.4243, 40 CFR 60.4245(b))**
4. The permittee shall keep records of notifications submitted for the completion of construction and start-up of each EU in FGNGEMENG. **(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 each EU in FGNGEMENG. **(R 336.1216(1)(a)(v), R 336.1201(7)(a))**
2. The permittee shall submit a notification specifying whether each EU in FGNGEMENG 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 EU in FGNGEMENG and within 30 days of switching the manner of operation. **(40 CFR Part 60 Subpart JJJJ)**
3. If any EU in FGNGEMENG 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). The notification must include the following information:
  - a) The date construction of the respective EU commenced.
  - b) Name and address of the owner or operator.
  - c) The address of the affected source.
  - d) The respective EU information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement.
  - e) The respective EU emission control equipment.
  - f) Fuel used in the respective EU.

The notification must be postmarked no later than 30 days after construction commenced for the respective EU. **(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 EU in FGNGEMENG. 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.
  - 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 EU in FGNGEMENG 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. SVNGGEN1	7.5	10	R 336.1225, 40 CFR 52.21(c) & (d)

**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 FGNGEMENG. **(40 CFR Part 60 Subparts A & JJJJ)**
2. The permittee shall comply with the provisions of the federal National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63 Subpart A and Subpart ZZZZ, as they apply to FGNGEMENG. **(40 CFR Part 63 Subparts A & ZZZZ)**

**Footnotes:**

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

**FGPSWEST/NEWEAST  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

All process equipment associated with the installation of the west paint shop and modernization of the east paint shop, body shop, and final assembly.

**Emission Unit ID:** EUPRETREATWEST, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUBODYWIPEWEST, EUSPOTREPAIRWEST, EUECOATEAST, EUPWDRPRMEAST, EUPURGECLEANEAST, EUSEALERS, EUSPOTREPAIREAST, EUFINALREPAIR, EUFLUIDFILL, EU-COLOR-ONE, EU-REPROCESS, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8, EUDSBCHWG, EUDSSBHWG, EUDSSCHWG, EUNEWNGASSEMBLY, EUNEWNGPSEAST, EUNGGEN1, EU-TRIMBOILER

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**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))**

NA

**VI. MONITORING/RECORDKEEPING**

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

NA

**VII. REPORTING**

1. Within seven days of starting production of saleable vehicles in the west paint shop portion of FGPSWEST/NEWEAST, 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 FGPSWEST/NEWEAST. **(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:

NA

### **IX. OTHER REQUIREMENT(S)**

1. The permittee shall notify the Department if a change in land use occurs for property classified as industrial or as a public roadway, where this classification was relied upon to demonstrate compliance with Rule 225(1). The permittee shall submit the notification to the AQD District Supervisor, within 30 days of the actual land use change. Within 60 days of the land use change, the permittee shall submit to the AQD District Supervisor a plan for complying with the requirements of Rule 225(1). The plan shall require compliance with Rule 225(1) no later than one year after the due date of the plan submittal. **(R 336.1225(4))**
2. The following emission limits in EU ECOATEAST, EU-COLOR-ONE, and EUPURGE CLEAN EAST shall become applicable upon startup of any emission unit associated with the Warren Truck West Paint Shop (including but not limited to: EUPRETREATWEST, EU COATWEST, sealers applied in the West Paint Shop portion of EU SEALERS, EUPRIMERWEST, EUTOPCOATWEST, EUPURGE CLEAN WEST, EUBODYWIPEWEST, EUSPOTREPAIRWEST, EUSPOTPRIMEWEST1, EUSPOTPRIMEWEST2, EUNEWNGASSEMBLY, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUHWG7, EUHWG8). **(R 336.2908)**
  - a) SC I.7 for EU ECOATEAST.
  - b) SC I.12 for EU-COLOR-ONE.
  - c) SC I.5 for EUPURGE CLEAN EAST.

#### **Footnotes:**

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

**FGFACILITY CONDITIONS**

**DESCRIPTION:** The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

**POLLUTION CONTROL EQUIPMENT**

The west concentrator and west RTO used for control of VOC emissions from EUPRIMERWEST spray booth and flash-off areas, EUTOPCOATWEST spray booth and flash-off areas, and solvent borne purge materials from west primer and west clearcoat booths not captured in the purge collection system. The west RTO only used for control of VOC emissions from the EUECOATWEST tank and curing oven, EUPRIMERWEST curing oven, and EUTOPCOATWEST curing oven. The east concentrator and east RTO used for control of VOC emissions from EU-COLOR-ONE spray booth and flash-off areas. The east RTO only used for control of VOC emissions from EUECOATWEST tank and curing oven. A thermal oxidizer used for control of VOC emissions from the EU-COLOR-ONE cure oven. A thermal oxidizer used for control of VOC emissions from the cure oven of EU-REPROCESS. Waterwash particulate control systems on all paint spray booths and observation zones. Dry filter particulate control systems on all sanding and repair booths and all flash-off areas. Dry filter particulate control systems on all air supply housing (ASH), air handling units (AHU), space heating units, and all curing ovens in the E-coat, primer, and topcoat operations.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. NOx	150.65 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC V.2, SC VI.2	R 336.1205(1)(a) & (b), R 336.2802(4)(d), R 336.2902(2)(d)
2. CO	161.7 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(1)(a) & (b), R 336.2802(4)(d)
3. PM	29.96 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC V.1, SC VI.3	R 336.1205(1)(a) & (b), R 336.2802(4)(d)
4. PM10	20.55 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC V.1, SC VI.3	R 336.1205(1)(a) & (b), R 336.2802(4)(d)
5. PM2.5	18.05 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC V.1, SC VI.3	R 336.1205(1)(a) & (b), R 336.2802(4)(d)

**II. MATERIAL LIMIT(S)**

1. The total combined natural gas usage for FGFACILITY shall not exceed 3,850.0 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) & (b), R 336.2802(4)(d), R 336.2902(2)(d))**

**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 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 PM, PM10, and PM2.5 emission rates of representative units, which includes but is not limited to, the observation zones, the concentrators, and the thermal oxidizer portions of EU-COLOR-ONE and EU-REPROCESS, 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 the following Reference Test Method Table. 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**

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

2. Within 365 days after 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 NOx emission rates from representative natural gas combustion units, the concentrator, and RTO portions of FG FACILITY, as agreed to by the AQD District Supervisor, by testing at owner's expense, in accordance with Department requirements. One EU (or portion of an EU) may be tested if the permittee provides a demonstration to the AQD that the tested unit(s) is identical to and/or the emission rates from the tested unit(s) are representative of the other unit(s). Alternatively, the permittee may submit vendor guarantees for NOx emission rates from representative emission units in a manner acceptable to the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 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 336.1205, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

#### **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 last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1))**

2. Based upon the records of the amount of natural gas burned and the tested emission factors for NOx and CO 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 and CO emission rates for FGFACILITY, as required by SC I.1 and SC I.2. Upon agreement with the AQD District Supervisor, alternative emission factors or calculation methods 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) & (b), R 336.2802(4)(d), R 336.2902(2)(d))**
3. Based upon the records of the amount of natural gas burned and the tested emission factors for PM, PM10, and PM2.5 from the combustion of natural gas and representative units, the permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total PM, PM10, and PM2.5 emission rates for FGFACILITY, as required by SC I.3 and SC I.4. Upon agreement with the AQD District Supervisor, alternative emission factors or calculation methods 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) & (b), R 336.2802(4)(d))**
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 FGFACILITY. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2802(4)(d), R 336.2902(2)(d), 40 CFR 52.21(c) & (d))**

## **VII. REPORTING**

NA

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

NA

### **Footnotes:**

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

## APPENDIX 7.

### Appendix 7. Emission Calculations

The permittee shall use the following calculations methods as guidance in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU-Blackout Booth, EU-MechWasher, EUECOATWEST, EUPRIMERWEST, EUTOPCOATWEST, EUPURGECLEANWEST, EUBODYWIPEWEST, EUSPOTREPAIRWEST, EOECOATEAST, EUSEALERS, EUPWDRPRMEAST, EUPURGECLEANEAST, EUSPOTREPAIREAST, EUFINALREPAIR, EUGLASSBOND, EUFLUIDFILL, FGTOPCOATEAST, and FGSPOTPRIMEWEST. These calculations are to be used to estimate the emission rate that are utilized in the compliance demonstrations; however, not all calculated values have an underlying applicable requirement (e.g., monthly VOC emissions are utilized to calculate hourly VOC emissions though there is no limit on monthly VOC emissions). Material usage and VOC content are with water unless otherwise noted. Alternate calculation methods may be utilized where acceptable to the AQD. The AQD does not require a specific format to be used for submittal and currently used formats are considered acceptable unless notified in writing by the AQD.

#### VOC Emissions – Monthly Calculation (lbs./month) for Emission Units without Controls:

Pounds VOC/month = total material usage (gallons/month) \* VOC content (lbs./gal)

#### VOC Emissions – Monthly Calculation (lbs./month) for Emission Units with Controls:

Pounds VOC/month = total material usage (gal/month) \* VOC content (lbs./gal) \* [(1- capture eff.) + capture eff. \* (1- control eff.)]

#### VOC hourly Emission Calculation Averaged over a Month period (lbs./hr):

Pounds VOC/Hour = (Pounds VOC/month) / (monthly hours of operation)

#### VOC Annual Emission Calculation based on a 12-Month rolling period (Tons/yr.):

Tons VOC/Year =  $\sum_{N=12}$  (Pounds VOC/month)<sub>n</sub> / (2000 pounds/ton)

#### VOC Emission Rate Pounds of VOC per Gallon of Coating Minus Water (lbs./gal (minus water)):

The calculation procedure described in special conditions for each emission unit and R 336.2041.

#### VOC Emission Rate Pounds per gallon Applied Solids Calculation (lbs./gal applied solids):

The calculation procedure described in EPA Protocol 453/R-08-002.