PERMIT TO INSTALL

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COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
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_2e	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_2S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO_x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO_2	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
EU-TUTONE	An automatic tutone spray application process consisting of a coating booth, an observation zone, and a natural gas-fired curing oven. Includes cleaning and purge solvents used in the tutone booth, associated natural gas-fired air supply housing (ASH), and heated flash units. VOC emissions from the solvent-based purge materials used within the tutone booth are controlled by the concentrator and thermal oxidizer except when collected in the purge collection system.	TBD	FG-FACILITY, FG-CONTROLS, FG-AUTO-MACT, FG-2020NEWNG
EU-RAPREPROCESS	A repair area with multiple decks and repair booths where blemished areas on vehicles are identified and repaired. Includes associated natural gas-fired ASH units. This process is performed manually and emissions are vented to the atmosphere.	01-01-1991 / Date of PTI	FG-FACILITY, FG-AUTO-MACT, FG-2020NEWNG
EU-TOPCOAT1	Paint is applied to vehicles automatically and manually in booths. Vehicles proceed through a curing oven. This line consists of three basecoat robot zones, basecoat electrostatic bells, basecoat automatic conventional zone, heated flash zone, two clearcoat robot zones, clearcoat electro-static bells zone, and a cure oven. Emissions from the basecoat bell zone, basecoat automatic conventional zone, heated flash, and clearcoat bell zones are ducted to a filter house, concentrator, and a thermal oxidizer. Emissions from the oven are controlled by a separate thermal oxidizer.	01-01-1991 / Date of PTI	FG-FACILITY, FG-CONTROLS, FG-AUTO-MACT
EU-TOPCOAT2	Topcoat is applied to vehicles automatically and manually in booths. Vehicles pass through associated curing oven(s).	01-01-1991 / Date of PTI	FG-FACILITY, FG-CONTROLS, FG-AUTO-MACT
EU-TOPCOAT3	Topcoat is applied to vehicles automatically and manually in booths. Vehicles pass through associated curing oven(s).	08-1-1998 / Date of PTI I	FG-FACILITY, FG-CONTROLS, FG-AUTO MACT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-PURGE	Purge and non-production solvents associated with EUTOPCOAT1, EUTOPCOAT2, and EUTOPCOAT3.	01-01-1991 / Date of PTI	FG-FACILITY, FG-CONTROLS, FG-AUTO MACT
EU-2020NEWNG	Various ASH and air housing units (AHU) for the building additions associated with the 2020 tutone and rapid reprocess project.	TBD	FG-FACILITY, FG-2020NEWNG

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

EU-TUTONE
EMISSION UNIT CONDITIONS

DESCRIPTION

An automatic tutone spray application process consisting of a coating booth, an observation zone, and a natural gas-fired curing oven. Includes cleaning and purge solvents used in the tutone booth, associated natural gas-fired air supply housing (ASH), and heated flash units. VOC emissions from the solvent-based purge materials used within the tutone booth are controlled by the concentrator and thermal oxidizer except when collected in the purge collection system.

Flexible Group ID: FG-FACILITY, FG-CONTROLS, FG-AUTO-MACT, FG-2020NEWNG

POLLUTION CONTROL EQUIPMENT

The coating booth exhaust is controlled by a waterwash particulate control system. The coating booth exhaust and heated flash-off area are controlled by a dry filter particulate control system prior to venting to a concentrator and a thermal oxidizer. Oven emissions are exhausted directly to a separate thermal oxidizer. Exhaust from the observation zones is controlled by a particulate control system and exhausted to atmosphere. Solvent-based robots (basecoat and clearcoat) in EU-TUTONE will capture and recover purge solvents in a purge collection system. Tutone purge solvents not captured in the collection system will be controlled by the concentrator and thermal oxidizer. This does not include purging lines from the paint kitchen in a closed-loop system.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-TUTONE, including spray purge operations, unless the associated concentrator and thermal oxidizers are installed, maintained, and operated in a satisfactory manner. This does not include purging lines from the paint kitchen in a closed-loop system. Satisfactory operation of the associated 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 collecting desorption gas inlet temperature data above the temperature from the most recent acceptable performance test minus 15 degrees Fahrenheit and can be based upon a three-hour average. Satisfactory operation of the associated thermal oxidizers includes maintaining minimum thermal oxidizer combustion chamber temperatures at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the thermal oxidizer combustion chamber temperatures 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)**

2. The permittee shall not operate EU-TUTONE unless the associated waterwash and dry filter particulate control systems are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the waterwash and dry filter system particulate controls includes conducting the required monitoring and

recordkeeping pursuant to FG-FACILITY, SC VI.2. **(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 EU-TUTONE, 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)**

2. Within 365 days after the beginning of saleable vehicle production in EU-TUTONE 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 concentrator, thermal oxidizer, and observation stack portions of EU-TUTONE as identified in a complete test plan by testing at owner's expense, 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))**

3. Within 365 days after the beginning of saleable vehicle production in EU-TUTONE, 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 the concentrator and thermal oxidizer portions of EU-TUTONE by testing at owner's expense, in accordance with Department requirements. 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 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 336.1205, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

4. Within 365 days after the beginning of saleable vehicle production in EU-TUTONE, 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 for EU-TUTONE by testing at owner's expense, in accordance with Department requirements and the USEPA "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)**

5. Within 365 days after the beginning of saleable vehicle production in EU-TUTONE, 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, heated flash-off, observation, and oven portions of EU-TUTONE to the associated VOC control devices, by testing at owner's expense, in accordance with Department requirements and the USEPA "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. 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 336.1702, R 336.2001, R 336.2003, R 336.2004)**

6. Within 365 days after the beginning of saleable vehicle production in EU-TUTONE, 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 concentrators the destruction efficiency of the thermal oxidizer portions of EU-TUTONE 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 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, R 336.2001, R 336.2003, R 336.2004)**

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 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)**

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 EU-TUTONE. **(R 336.1201(7)(a))**

2. Within 30 days of the start of producing saleable vehicles in EU-TUTONE, the permittee shall provide the AQD District Supervisor written notification of the date that the first saleable vehicle was produced. **(R 336.1201)**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C12TTRTO	78	113	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-TT1 (BC OBS ZONE)	120	113	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-TT2 (CC OBS ZONE)	108	113	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-TTCONC	94	113	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-TTOVRTO	24	70	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 EU-TUTONE. **(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-TUTONE, except as provided in FG-FACILITY SC IX.2. **(40 CFR 60.390)**

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

EU-RAPREPROCESS
EMISSION UNIT CONDITIONS

DESCRIPTION

A repair area with multiple decks and repair booths where blemished areas on vehicles are identified and repaired. Includes associated natural gas-fired ASH units. This process is performed manually and emissions are vented to the atmosphere.

Flexible Group ID: FG-FACILITY, FG-AUTO-MACT, FG-2020NEWNG

POLLUTION CONTROL EQUIPMENT

Dry filter particulate controls on all spray booths

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-RAPREPROCESS unless the associated dry filter particulate control system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the particulate control systems includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY SC VI.2. **(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 EU-RAPREPROCESS, 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)**

2. Within 365 days after trial operation of EU-RAPREPROCESS 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 EU-RAPREPROCESS as identified in a complete test plan by testing at owner's expense, 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 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)**

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 EU-RAPREPROCESS. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-RR1	60	70	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-RR2	60	70	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

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

EU-TOPCOAT1
EMISSION UNIT CONDITIONS

DESCRIPTION

Paint is applied to vehicles automatically and manually in booths. Vehicles proceed through a curing oven. This line consists of three basecoat robot zones, basecoat electrostatic bells, basecoat automatic conventional zone, heated flash zone, two clearcoat robot zones, clearcoat electrostatic bells zone and a cure oven. Emissions from the basecoat bell zone, basecoat automatic conventional zone, heated flash, and clearcoat bell zones are ducted to a filter house, concentrator, and a thermal oxidizer. Emissions from the oven are controlled by a separate thermal oxidizer.

Note: There are two thermal oxidizers for this emission unit.

Flexible Group ID: FG-FACILITY, FG-CONTROLS, FG-AUTO-MACT

POLLUTION CONTROL EQUIPMENT

Coating booth exhaust is controlled by a waterwash particulate control system. The basecoat bell zone, basecoat automatic conventional zone, heated flash-off area, and clearcoat bell zones are controlled by a dry filter particulate control system prior to venting to a concentrator and a thermal oxidizer. Oven emissions are exhausted directly to a separate thermal oxidizer. Exhaust from the observation zones is controlled by a particulate control system and exhausted to atmosphere. Solvent-Based robots (basecoat and clearcoat) in EU-TOPCOAT1 will capture and recover purge solvents in a purge collection system. EU-TOPCOAT1 purge solvents used in the basecoat bell zone, basecoat automatic conventional zone, and clearcoat bell zones not captured in the collection system will be controlled by the associated concentrator and thermal oxidizer.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the spray booth portions of EU-TOPCOAT1 unless the associated waterwash and dry particulate control systems are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the waterwash and dry particulate control systems includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI. 2. **(R 336.1205, R 336.1331, R 336.1910)**

2. The permittee shall not operate EU-TOPCOAT1 unless the associated concentrator and thermal oxidizers are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the associated 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 collecting desorption gas inlet temperature data above the temperature from the most recent acceptable performance test minus 15 degrees Fahrenheit and can be based upon a three-hour average. Satisfactory operation of the associated thermal oxidizer for the oven portion of EU-TOPCOAT1 includes maintaining minimum thermal oxidizer combustion chamber temperatures at 1310 ºF until an acceptable performance test has been performed; after which the thermal oxidizer 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. Satisfactory operation of the associated thermal oxidizer for the controlled spray booth portions of EU-TOPCOAT1 (basecoat bell zone, basecoat automatic conventional zone, heated flash, and clearcoat bell zones) includes maintaining minimum thermal oxidizer combustion chamber temperatures at 1325 ºF until an acceptable performance test has been performed; after which the thermal oxidizer 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)**

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 EU-TOPCOAT1, 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)**

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 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)**

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. SVST-PS-039 (EU-TOPCOAT1)	120	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVST-PS-041	108	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. SVST-PS-043	108	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. SVST-PS-001	88	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
5. SVST-PS-004	55	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
6. SVST-PS-047	26	69	R336.1225, R 336.2803, R 336.2804, 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 EU-TOPCOAT1. **(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-TOPCOAT1, except as provided in FG-FACILITY SC IX.2. **(40 CFR 60.390)**

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

EU-TOPCOAT2
EMISSION UNIT CONDITIONS

DESCRIPTION

Paint is applied to vehicles automatically and manually in booths. Vehicles proceed through a curing oven. This line consists of three basecoat robot zones, basecoat electrostatic bells, basecoat automatic conventional zone, heated flash zone, two clearcoat robot zones, clearcoat electrostatic bells zone and a cure oven. Emissions from the basecoat bell zone, basecoat automatic conventional zone, heated flash, and clearcoat bell zones are ducted to a filter house, concentrator, and a thermal oxidizer. Emissions from the oven are controlled by a separate thermal oxidizer.
Note: There are two thermal incinerators for this emission unit.

Flexible Group ID: FG-FACILITY, FG-CONTROLS, FG-AUTO-MACT

POLLUTION CONTROL EQUIPMENT

Coating booth exhaust is controlled by a waterwash particulate control system. The basecoat bell zone, basecoat automatic conventional zone, heated flash-off area, and clearcoat bell zones are controlled by a dry filter particulate control system prior to venting to a concentrator and a thermal oxidizer. Oven emissions are exhausted directly to a separate thermal oxidizer. Exhaust from the observation zones is controlled by a particulate control system and exhausted to atmosphere. Solvent-Based robots (basecoat and clearcoat) in EU-TOPCOAT2 will capture and recover purge solvents in a purge collection system. EU-TOPCOAT2 purge solvents used in the basecoat bell zone, basecoat automatic conventional zone, and clearcoat bell zones not captured in the collection system will be controlled by the associated concentrator and thermal oxidizer.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the spray booth portions of EU-TOPCOAT2 unless the associated waterwash and dry particulate control systems are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the waterwash and dry particulate control systems includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI. 2. **(R 336.1205, R 336.1331, R 336.1910)**

2. The permittee shall not operate EU-TOPCOAT2 unless the associated concentrator and thermal oxidizers are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the associated 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 collecting desorption gas inlet temperature data above the temperature from the most recent acceptable performance test minus 15 degrees Fahrenheit and can be based upon a three-hour average. Satisfactory operation of the associated thermal oxidizer for the oven portion of EU-TOPCOAT2 includes maintaining minimum thermal oxidizer combustion chamber temperatures at 1310 ºF until an acceptable performance test has been performed, after which the thermal oxidizer 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. Satisfactory operation of the associated thermal oxidizer for the controlled spray booth portions of EU-TOPCOAT2 (basecoat bell zone, basecoat automatic conventional zone, heated flash, and clearcoat bell zones) includes maintaining minimum thermal oxidizer combustion chamber temperatures at 1325 ºF until an acceptable performance test has been performed; after which the thermal oxidizer 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)**

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 EU-TOPCOAT2, 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)**

VI. MONITORING/RECORDKEEPING

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

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)**

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVST-PS-040 (EU-TOPCOAT2)	120	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVST-PS-042	108	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. SVST-PS-044	108	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. SVST-PS-002	88	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
5. SVST-PS-004	55	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
6. SVST-PS-048	26	69[2]	R336.1225, R 336.2803, R 336.2804, 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 EU-TOPCOAT2. **(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-TOPCOAT2, except as provided in FG-FACILITY SC IX.2. **(40 CFR 60.390)**

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

EU-TOPCOAT3
EMISSION UNIT CONDITIONS

DESCRIPTION

Paint is applied to vehicles automatically and manually in booths. Vehicles proceed through a curing oven. This line consists of three basecoat robot zones, basecoat electrostatic bells, basecoat automatic conventional zone, heated flash zone, two clearcoat robot zones, clearcoat electrostatic bells zone and a cure oven. Emissions from the basecoat bell zone, basecoat automatic conventional zone, heated flash, and clearcoat bell zones are ducted to a filter house, concentrator, and a thermal incinerator. Emissions from the oven are controlled by a separate thermal incinerator.

Note: There are two thermal incinerators for this emission unit.

Flexible Group ID: FG-FACILITY, FG-CONTROLS, FG-AUTO-MACT

POLLUTION CONTROL EQUIPMENT

Coating booth exhaust is controlled by a waterwash particulate control system. The basecoat bell zone, basecoat automatic conventional zone, heated flash-off area, and clearcoat bell zones are controlled by a dry filter particulate control system prior to venting to a concentrator and a thermal oxidizer. Oven emissions are exhausted directly to a separate thermal oxidizer. Exhaust from the observation zones is controlled by a particulate control system and exhausted to atmosphere. Solvent-based robots (basecoat and clearcoat) in EU-TOPCOAT3 will capture and recover purge solvents in a purge collection system. EU-TOPCOAT3 purge solvents from the basecoat bell zone, basecoat automatic conventional zone, and clearcoat bell zones not captured in the collection system will be controlled by the associated concentrator and thermal oxidizer.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the spray booth portions of EU-TOPCOAT3 unless the associated waterwash and dry particulate control systems are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the waterwash and dry particulate control systems includes conducting the required monitoring and recordkeeping pursuant to FG-FACILITY, SC VI. 2. **(R 336.1205, R 336.1331, R 336.1910)**

2. The permittee shall not operate EU-TOPCOAT3 unless the associated concentrator and thermal oxidizers are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the associated 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 collecting desorption gas inlet temperature data above the temperature from the most recent acceptable performance test minus 15 degrees Fahrenheit and can be based upon a three-hour average. Satisfactory operation of the associated thermal oxidizer for the oven portion of EU-TOPCOAT3 includes maintaining minimum thermal oxidizer combustion chamber temperatures at 1310 ºF until an acceptable performance test has been performed; after which the thermal oxidizer 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. Satisfactory operation of the associated thermal oxidizer for the controlled spray booth portions of EU-TOPCOAT3 (basecoat bell zone, basecoat automatic conventional zone, heated flash, and clearcoat bell zones) includes maintaining minimum thermal oxidizer combustion chamber temperatures at 1325 ºF until an acceptable performance test has been performed; after which the thermal oxidizer 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)**

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 EU-TOPCOAT2, 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)**

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 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)**

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. SVST-PS-089	120	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SVST-PS-090	120	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. SVST-PS-091	120	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. SVST-PS-036	85	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
5. SVST-PS-037	41	113	R336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
6. SVST-PS-095	40	69	R336.1225, R 336.2803, R 336.2804, 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 EU-TOPCOAT3. **(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-TOPCOAT3, except as provided in FG-FACILITY SC IX.2. **(40 CFR 60.390)**

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

EU-PURGE
EMISSION UNIT CONDITIONS

DESCRIPTION

Purge and non-production solvents associated with EU-TOPCOAT1, EU-TOPCOAT2, and EU-TOPCOAT3.

Flexible Group ID: FG-FACILITY, FG-CONTROLS, FG-AUTO-MACT

POLLUTION CONTROL EQUIPMENT

The portion of purge sprayed inside the solvent-based robots (basecoat and clearcoat) in EU-PURGE will be captured and recovered in a purge collection system. The portion of purge solvents sprayed in the basecoat bell zone, basecoat automatic conventional zone, and clearcoat bell zone portions of EU-TOPCOAT1, EU-TOPCOAT2, and EU-TOPCOAT3 (controlled portions of EU-PURGE) not captured in the purge collection system will be controlled by the associated concentrator and thermal oxidizer. This portion of purge solvents does not include purging lines from the paint kitchen in a closed-loop system.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not conduct any spray purge operations in the controlled portions of EU-PURGE unless the associated concentrator and thermal oxidizers are installed, maintained, and operated in a satisfactory manner. This does not include purging lines from the paint kitchen in a closed-loop system. Satisfactory operation of the associated concentrator for the controlled portions of EU-PURGE 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 collecting desorption gas inlet temperature data above the temperature from the most recent acceptable performance test minus 15 degrees Fahrenheit and can be based upon a three-hour average. Satisfactory operation of the associated thermal oxidizer for the controlled portions of EU-PURGE includes maintaining minimum thermal oxidizer combustion chamber temperatures at 1325 ºF until an acceptable performance test has been performed; after which the thermal oxidizer 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)**

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 solvent 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 material shall be verified using federal Reference Test Method 24. **(R 336.1220(a), R 336.2040, R 336.2041)**

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 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)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

NA

IX. OTHER REQUIREMENT(S)

NA

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

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-FACILITY	This flexible group covers all equipment used for automotive assembly and painting operations for the Jefferson North Assembly Plant.	All emission units and flexible groups associated with automotive assembly and painting operations. This includes clean up and purge activities, storage tanks, boilers, and paint sludge handling and disposal operations. Additionally, this includes but is not limited to the following emission units: EU-GRINDING, EU-SEALERS, EU-ECOAT, EU-GUIDECOAT, EU-TOPCOAT1, EU-TOPCOAT2, EU-TOPCOAT3, EU-TUTONE, EU-RAPREPROCESS, EU-FINAL SEALER, EU-GAS FILL, EU-WINDSHIELDFILL, EU-LOWBAKE, EU-WIPE, EU-PURGE, EU-TF-O-004, EU-TF-O-005, EU-TF-O-006, EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-2020NEWNG
FG-CONTROLS	VOC concentrators and regenerative thermal oxidizers used for control of VOC emissions from the paint spray booths and curing ovens (excluding guidecoat cure oven).	All emission units and flexible groups associated with automotive assembly and painting operations with VOC controls including: EU-ECOAT, EU-TOPCOAT1, EU-TOPCOAT2, EU-TOPCOAT3, EU-PURGE, and EU-TUTONE
FG-AUTO-MACT	Each new, reconstructed, or existing affected source as defined in 40 CFR 63.3082, that is located at a facility which applies topcoat to new automobile or new light duty truck bodies or body parts, 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) is subject to the requirements of 40 CFR 63 Subpart IIII. This includes equipment covered by other permits, grandfathered equipment, and exempt equipment.	EU-SEALERS, EU-ECOAT, EU-GUIDECOAT, EU-TOPCOAT1, EU-TOPCOAT2, EU-TOPCOAT3, EU-TUTONE, EU-RAPREPROCESS, EU-FINALSEALER, EU-WINDSHIELDFILL, EU-LOWBAKE, EU-WIPE, EU-PURGE

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-2020NEWNG	New natural gas equipment installed as part of the project for installation of EU-TUTONE and EU-RAPREPROCESS. This FG includes EU-TUTONE air supply houses, heated flash, curing oven, concentrator, and thermal oxidizers; EU-RAPREPROCESS air supply houses; and other air supply houses and air handling units for the new building additions. The total heat input capacity for this equipment is 191.6 MMBTU/hr.	EU-TUTONE, EU-RAPREPROCESS, EU-2020NEWNG

FG-FACILITY
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

This flexible group covers all equipment used for automotive assembly and painting operations for the Jefferson North Assembly Plant.

Emission Unit: All emission units and flexible groups associated with automotive assembly and painting operations. This includes clean up and purge activities, storage tanks, boilers, and paint sludge handling and disposal operations. Additionally, this includes but is not limited to the following emission units: EU-GRINDING, EU-SEALERS, EU-ECOAT, EU-GUIDECOAT, EU-TOPCOAT1, EU-TOPCOAT2, EU-TOPCOAT3, EU-TUTONE, EU-RAPREPROCESS1, EU-RAPREPROCESS2, EU-FINAL SEALER, EU-GAS FILL, EU-WINDSHIELDFILL, EU-LOWBAKE, EU-WIPE, EU-PURGE, EU-TF-O-004, EU-TF-O-005, EU-TF-O-006, EU-BOILER1, EU-BOILER2, EU-BOILER3, EU-BOILER4, EU-2020NEWNG

POLLUTION CONTROL EQUIPMENT

Three VOC concentrators to control clearcoat booths, basecoat booths, and basecoat flash. Eight thermal oxidizers to control e-coat oven, clearcoat booths, basecoat booths, basecoat flash, topcoat ovens. A waterwash system used to control particulate from three topcoat lines. A VOC concentrator and thermal oxidizer to control the spray booth and heated flash-off, portions of the tutone process. A thermal oxidizer to control the oven portion of the tutone process. All vehicles are equipped with an Onboard Refueling Vapor Recovery system to control the gasoline filling operations. Dry filtration is used to control particulate emissions from the color prep booths, the welding, grinding, sanding, low bake and rapid reprocess operations.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	995.3 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.1	R 336.1225, R 336.1702(a), 40 CFR 52.21
2. VOC	4.8 lbs per job	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.1	R 336.1225, R 336.1702(a), 40 CFR 52.21
3. VOC	4.6 lbs per job[a]	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.1	R 336.1225, R 336.1702(a), 40 CFR 52.21
4. VOC	4.4 lbs per job[b]	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.1	R 336.1225, R 336.1702(a), 40 CFR 52.21
5. PM	42.4 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC V.1, SC VI.1	R 336.1205, R 336.1331
6. PM10	42.4 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC V.1, SC VI.1	R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
7. PM2.5	42.4 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC V.1, SC VI.1	R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
8. NOx	133.4 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC V.2, SC VI.1	R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
9. CO	97.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC V.3, SC VI.1	R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
10. SO2	3.4 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.1	R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

[a] This emission limit becomes applicable in the 7th month after the trial operation date in the notification required per SC VII.4. The 4.8 lbs VOC/job limit in SC I.2 will no longer be applicable.

[b] This emission limit becomes applicable in the 13th month after the trial operation date in the notification required per SC VII.4. The 4.6 lbs VOC/job limit in SC I.3 will no longer be applicable.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Natural Gas	3,000.0 MM cubic feet per year	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.1	R 336.1205(1)(a)
2. No. 2 fuel oil	160,340 gallons	12-month rolling time period	FG-FACILITY	SC VI.1	R336.1205(1)(a)
3. Sulfur Content of the No. 2 fuel oil	0.3% by weight	Instantaneous	FG-FACILITY	SC VI.1	R 336.1401

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each spray coating or scuff booth operation which directly vents to the outdoor air with water wash particulate controls unless another particulate control technology is specified. **(R 336.1301, R 336.1331)**

V. TESTING/SAMPLING

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

1. Within 365 days after saleable vehicle production, 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 representative particulate emission units (or portions of emission units) as identified in a complete test plan 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). 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))**

2. At least once every five years, unless the permittee documents annually that the most recent acceptable performance test remains valid and representative, the permittee shall verify NOx emission rates from natural gas combustion in a single representative boiler by testing at owner's expense, in accordance with Department requirements. This testing shall consist of three sample runs. For the other three boilers, the permittee shall perform a single sample run to confirm that the NOx emissions are similar to those from the boiler on which the three sample runs were taken. If the single sample run does not show the NOx emissions to be similar, the permittee shall perform three sample runs on the boiler in question. 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 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 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

3. At least once every five years, unless the permittee documents annually that the most recent acceptable performance test remains valid and representative, the permittee shall verify CO emission rates from natural gas combustion in a single representative boiler by testing at owner's expense, in accordance with Department requirements. This testing shall consist of three sample runs. For the other three boilers, the permittee shall perform a single sample run to confirm that the CO emissions are similar to those from the boiler on which the three sample runs were taken. If the single sample run does not show the CO emissions to be similar, the permittee shall perform three sample runs on the boiler in question. 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 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 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

4. At least once every five years, unless the permittee documents annually that the most recent acceptable performance test remains valid and representative, the permittee shall verify the transfer efficiency of one representative Basecoat line, and one representative Clearcoat line, capture efficiency across one representative Topcoat line for both the booth and curing oven portions, and the destruction efficiency of all thermal oxidizers, and removal efficiency of all concentrators, by in-plant testing at owner's expense, in accordance with Department requirements, 40 CFR 51 Appendix M, and the USEPA "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 will be required. 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 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**

5. The permittee shall conduct an analysis for EU-ECoat as found in Appendix 5. **(R 336.1225, R 336.1702)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep the following records/calculations in a 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. 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)
   a) For each material used in FG-FACILITY:
      i. Material identification;
      ii. Material VOC content; and,
      iii. Material usage.
   b) Number of jobs each calendar month, where a job is defined as a painted vehicle leaving the assembly line.
   c) Calculations showing the FG-FACILITY monthly and annual mass VOC emission rates, in tons per month and tons per 12-month rolling time period, as determined at the end of each calendar month. Calculations must show the capture and control efficiency of each control device used. Calculations must also include a sample calculation based on the production of a single job and that specifies all measured or assumed process parameters (e.g., transfer, capture and control efficiencies, booth splits, etc.) and VOC emissions due to natural gas combustion, purge and cleanup operations, storage tanks, and paint sludge handling and disposal operations. Prior to the initial testing, for each controlled section, the design combined capture and control efficiency may be used. Thereafter, values no greater than the most recently tested values may be used.
   d) Calculations showing the VOC emission rate (lb/job) on a 12-month rolling basis, as determined at the end of each calendar month for the equipment covered by FG-FACILITY.
   e) Calculations showing the PM, PM10, and PM2.5 mass emission rate in tons on a monthly and 12-month rolling time period, as determined at the end of each calendar month for the equipment in FG-FACILITY. Prior to the testing required in SC V.1 being completed, these calculations shall be performed according to a method acceptable to the AQD District Supervisor. After the testing required in SC V.1 is completed, the PM, PM-10 and PM2.5 emission factors measured during the test shall be used to perform these calculations.
   f) Calculations showing the NOx mass emission rate in tons on a monthly and 12-month rolling time period, as determined at the end of each calendar month for the equipment in FG-FACILITY. Prior to the testing required in SC V.2 being completed, AP-42 emission factors shall be used to perform these calculations. After the testing required in SC V.2 is completed, the NOx emission factors measured during the test shall be used to perform these calculations.
   g) Calculations showing the CO mass emission rate in tons on a monthly and 12-month rolling time period, as determined at the end of each calendar month for the equipment in FG-FACILITY. Prior to the testing required in SC V.3 being completed, AP-42 emission factors shall be used to perform these calculations. After the testing required in SC V.3 is completed, the CO emission factors measured during the test shall be used to perform these calculations.
   h) Calculations showing the SO2 mass emission rate in tons on a monthly and 12-month rolling time period, as determined at the end of each calendar month for the equipment in FG-FACILITY.
   i) Records of the total natural gas used during each calendar month and 12-month rolling time period, in cubic feet.
   j) Records of the total No. 2 fuel oil combusted in EU-BOILER1, EU-BOILER2, EU-BOILER3, and EU-BOILER4 during each calendar month and 12-month rolling time period, in gallons. Also, records of the sulfur content, in percent by weight, of all No. 2 fuel oil used.
   k) Hours of operation for each calendar month and 12-month rolling time period.

   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 336.1225, R 336.1702(a))**

2. The permittee shall monitor the condition of each particulate control system through weekly visual inspections (except during weeks with no production). 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 for a period of at least five years and made available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

3. 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 with any of the emission limits in FG-FACILITY, SC I.1, 2, 3, 4, 5. 6, and 7 depends. **(R 336.1225, R 336.1301, R 336.1331, R 336.1702, R 336.1910, 40 CFR 52.21(c) & (d))**

4. The permittee shall maintain a record of the projects authorized by SC IX.3 and IX.4. This includes, at a minimum, maintaining documentation of testing and monitoring for each project demonstrating compliance with the applicable emission limits in SC I.1 through SC I.10. All records shall be kept on file in a format acceptable to the District Supervisor and made available to the Department upon request. **(R 336.1225, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.1908 (formerly R 336.1220), 40 CFR 52.21(c) & (d))**

5. The permittee shall calculate and keep records of the annual emissions of VOCs and NOx from FG FACILITY described in Appendix 9, in tons per calendar year. Calculations and recordkeeping shall begin following the resumption of regular operations after the change and shall continue for five (5) years. Resumption of regular operations is the trial operation date in the notification required per SC VII.5 **(R 336.2902(6)(c))**

VII. REPORTING

1. For each emission unit (EU) and flexible group (FG) included in this permit, the permittee shall submit to the AQD District Supervisor, in an acceptable format, within 30 days following the end of the quarter in which the data was collected, the actual VOC, PM, PM10, PM2.5, NOx, CO, and SO2 emission rates for each limit included in the permit. **(R 336.1205, R 336.1225, R 336.1702, R 336.2902 (formerly R 336.1220))**

2. The permittee shall notify the AQD District Supervisor, in writing, of projects authorized by SC IX.3 and 4 at least 30 days prior to initialization of the activity. The notification shall include, at a minimum, a description of the type of project and any changes in testing, monitoring, recordkeeping or other compliance evaluation activities. **(R 336.1201)**

3. The permittee shall submit records of the annual emissions of VOCs and NOx from FG-FACILITY described in Appendix 9, in tons per calendar year, to the AQD District Supervisor and Permit Section Manager within 60 days following the end of each reporting year if both the following occur:
   a) The calendar year actual emission of VOCs or NOx exceed the baseline actual emissions (BAE) for that pollutant by a significant amount, and
   b) The calendar year actual emissions differ from the pre-construction projection. (The pre-construction projection is the sum of the projected actual emissions from each existing emission unit and the potential emissions from each new emission unit included in the Hybrid Applicability Test used for FG-FACILITY.)

   The report shall contain the name, address, and telephone number of the facility; the annual emissions as calculated pursuant to SC VI.5, and any other information the owner or operator wishes to include (i.e., an explanation why emissions differ from the pre-construction projection). **(R 336.2902(6)(e))**

4. The permittee shall notify the AQD District Supervisor, in writing, within 30 days of commencement of trial operation of EU-TOPCOAT1, EU-TOPCOAT2, or EU-TOPCOAT3 after the coating applicators have been replaced. **(R 336.1702(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. This permit covers automotive assembly and painting operations. Changes to these operations or replacement with a different process type are subject to the requirements of R 336.1201, except as disallowed by R 336.1278 or as allowed by R 336.1279 through R 336.1291 or SC IX.3 or 4. **(R 336.1201)**

2. The Department has determined that compliance with the limits listed in SC I.1 through 2 provides a level of control that is at least equivalent to and not less stringent than the standards in 40 CFR 60.392, *et seq.* Accordingly, compliance with the limitations in this permit meets all applicable requirements of 40 CFR Part 60, Subpart MM. **(40 CFR 60, Subpart MM)**

3. This permit authorizes any activities including projects involving physical changes or changes in the method of operation to existing emission units that do not require an increase in the emissions limits or performance levels specified in SC I.1 through SC I.10. As a state only enforceable requirement[1], the changes to the emission unit(s) shall not result in a meaningful change in the nature or quantity of toxic air contaminants emitted from the stationary source. The permittee shall keep on file a demonstration, consistent with AQD Policy and Procedure number AQD-025, or according to the method outlined in SC IX.4. Such activities do not require the facility to obtain any federal or state air permits. **(R 336.1201)**

4. This permit authorizes projects involving the installation of new emission units that do not require an increase in the emissions limits or performance levels specified in SC I.1 through SC I.10 under the following conditions: **(R 336.1201)**
   a) As a state-only enforceable requirement, the new emission unit will not result in an exceedance of any air toxics standards found in Rule 336.1226 or Rule 336.1227. The permittee shall keep on file, a copy of all demonstrations that the air toxics impact from the new emission unit(s) will comply with the levels specified in Rule 336.1226 or Rule 336.1227. The permittee may devise its own method to perform this demonstration subject to approval by the department.[1]
   b) The new emissions unit will not be a newly constructed or reconstructed major source of hazardous air pollutants as defined in and subject to 40 C.F.R. §63.2 and §63.5(b)(3), National Emission Standard for Hazardous Air Pollutants; and,
   c) The installation of the new emissions unit will not cause the violation of any applicable air requirement.
   d) A demonstration that the new installation meets these criteria shall be kept on site for the life of the new emission unit and made available to the department upon request. The permittee must notify the department of the installation of the new emission unit. This notification must contain the information specified in R 336.1215(3)(c)(i) through (v). Construction of the new emission unit may commence upon submittal of the notice.

5. The emission limits and performance levels specified in SC I.1 through SC I.10 may be reviewed and/or adjusted when newly applicable federal requirements or any other requirement that is enforceable as a practical matter and that the Department, under its State Implementation Plan, may impose on the facility become applicable during the term of the permit that would lower allowable emissions. Adjustments to SC I.1 through SC I.10 will be made through a permit revision as of the effective date of the new applicable requirements and will reflect the impact the new applicable requirements will have on the affected emission units. Initial compliance with the adjusted emission limits and performance levels will be demonstrated over the initial compliance period granted by the newly applicable federal requirement. **(R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

6. The permittee may, at any time, request that the Department terminate the flexible emission limit provisions of this permit and issue a traditional permit. In the event of such termination, the requirements of this permit shall remain in effect until a new permit is issued. At that time, the permit conditions for any existing emission unit that has not been modified and to which new requirements have not become applicable will revert to those found in the previous permits. For any new or modified emission unit, or any emission unit for which new requirements have become applicable the permit conditions will reflect requirements contemporaneous with the date of installation, modification or new requirement applicability. **(R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

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

FG-CONTROLS
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

VOC concentrators used for control of VOC emissions from the controlled paint spray booths and thermal oxidizers used for control of VOC emissions from the paint spray booths and curing ovens (except guidecoat cure ovens).

Emission Unit: All emission units and flexible groups associated with automotive assembly and painting operations with VOC controls including: EU-ECOAT, EU-TOPCOAT1, EU-TOPCOAT2, and EU-TOPCOAT3, EU-PURGE, and EU-TUTONE.

POLLUTION CONTROL EQUIPMENT

VOC concentrators used for control of VOC emissions from the controlled paint spray booths and thermal oxidizers used for control of VOC emissions from portions of the painting operations and curing ovens (except guidecoat cure ovens).

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 90 days of trial operation of EU-TUTONE, the permittee shall develop, maintain and implement an Operation and Maintenance Plan (O & M Plan) for FG-CONTROLS. The O & M Plan shall contain the minimum requirements as outlined in Appendix 3. The O & M Plan shall be updated as necessary to reflect changes in equipment and monitoring, to implement corrective actions and to address malfunctions. Changes in the O & M Plan as outlined in Appendix 3 shall be submitted to the AQD District Supervisor for review and approval. All records and activities associated with the O & M Plan shall be made available to the Department upon request. **(R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.2908 (formerly R 336.1220(a)))**

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 FG-CONTROLS to monitor and record the temperature on a continuous basis during operation. Temperature data recording shall consist of measurements made at equally spaced intervals at least once every 15 minutes. All records shall be kept on file and made available to the Department upon request. **(R 336.1910, R 336.2908 (formerly R 336.1220))**

2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner, temperature monitoring devices for the VOC concentrators in FG-CONTROLS to monitor and record the desorption gas inlet temperature on a continuous basis during operation. Desorption gas inlet 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 (formerly R 336.1220)**

3. The permittee shall maintain records of maintenance and repair activities for FG-CONTROLS. 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. 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)**

5. 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 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.
   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:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FG-AUTO-MACT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: All emission units and flexible groups associated with automotive assembly and painting operations including: EU-SEALERS, EU-ECOAT, EU-GUIDECOAT, EU-TOPCOAT1, EU-TOPCOAT2, EU-TOPCOAT3, EU-TUTONE, EU-RAPREPROCESS, EU-FINALSEALER, EU-WINDSHIELDFILL, EU-LOWBAKE, EU-WIPE and EU-PURGE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Organic HAP	0.60 lb per GACS	Calendar month	**Existing–** FG-AUTO-MACT with EU-ECOAT	SC III.3, SC V.1, SC VI.3	40 CFR 63.3091(a)
2. Organic HAP	1.10 lbs per GACS*	Calendar month	**Existing–** FG-AUTO-MACT	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	**Existing–** 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	**Existing–** Deadener Materials	SC III.2, SC V.1, SC VI.3	40 CFR 63.3090(d) or 63.3091(d)

- **FG-AUTO-MACT** 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.
- **FG-AUTO-MACT WITH EU-ECOAT** also includes Electrocoat operations in addition to all of the operations of FG-AUTO-MACT.
- **SEALERS & ADHESIVES** include only adhesives and sealers that are not part of glass bonding systems.

* Permittee may choose to comply with this limit if the requirements of Condition No. I.5 is met.

5. The permittee may choose to comply with either SC I.1 or 2. SC I.2 may be chosen only if EU-ECOAT meets either of the following requirements. **(40 CFR 63.3092)**
   a) Each individual material added to EU-ECOAT 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.
   b) The emissions from all EU-ECOAT 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.
   a) All organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be stored in closed containers.
   b) Spills of organic-HAP containing coatings, thinners, cleaning materials, and waste materials must be minimized.
   c) Organic-HAP-containing coatings, thinners, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
   d) Mixing vessels, other than day tanks equipped with continuous agitation systems, which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
   e) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.
   f) Organic HAP emissions from cleaning and from purging of equipment associated with all coating operations subject to emission limits in Special Conditions I.1 through I.4 above must be minimized by addressing:
      i. Vehicle body wipe pursuant to 40 CFR 63.3094(c)(1)(i).
      ii. Coating line purging pursuant to 40 CFR 63.3094(c)(1)(ii).
      iii. Coating system flushing pursuant to 40 CFR 63.3094(c)(1)(iii).
      iv. Cleaning of spray booth grates pursuant to 40 CFR 63.3094(c)(1)(iv).
      v. Cleaning of spray booth walls pursuant to 40 CFR 63.3094(c)(1)(v).
      vi. Cleaning of spray booth equipment pursuant to 40 CFR 63.3094(c)(1)(vi).
      vii. Cleaning of external spray booth areas pursuant to 40 CFR 63.3094(c)(1)(vii).
      viii. Additional housekeeping measures pursuant to 40 CFR 63.3094(c)(1)(viii).

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

2. The work practice plan shall not become part of the facility's Renewable Operating Permit (ROP). Revisions to the work practice plan likewise do not represent revisions to the facility's ROP. Copies of the current work practice plan and any earlier plan developed within the past five 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 FG-AUTO-MACT or FG-AUTO-MACT with EU-ECOAT, the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids. **(40 CFR 63.3130(c))**
   d) For each material used in EU-SEALERS, the mass used in each month and the mass organic HAP content. **(40 CFR 63.3130(c))**
   e) Calculations of the organic HAP emission rate for FG-AUTO-MACT or FG-AUTO-MACT with EU-ECOAT in pounds per gallon of applied coating solids. If permittee chooses to comply with the option identified in Special Condition I.5.a., a record of the weight fraction of each organic HAP in each material added to the Electrocoat system. These calculations and records must include all raw data, algorithms, and intermediate calculations. If the ''Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations,'' EPA–450/3–88–018 (Docket ID No. OAR–2002–0093 and Docket ID No. A–2001–22), is used, all data input to this protocol must be recorded. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. **(40 CFR 63.3130(c), 40 CFR 63.3163, 40 CFR 63.3173)**
   f) Calculation of the average monthly mass organic HAP content in pounds per pound of coating, separately for EU-SEALERS. **(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 FG-AUTO-MACT. The permittee may choose an alternative compliance method not listed in FG-AUTO-MACT by providing the appropriate notifications required under 40 CFR, Part 63.9(j), maintaining a log required by 40 CFR Part 70.6(9), and by complying with all applicable provisions required by Subpart IIII for the compliance option chosen. **(40 CFR 70.6(a)(9), 40 CFR Part 63.9(j), 40 CFR Part 63 Subparts A and IIII)**

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

FG-2020NEWNG
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

New natural gas equipment installed as part of the project for installation of EU-TUTONE and EU-RAPREPROCESS. This FG includes EU-TUTONE air supply houses, heated flash, curing oven, concentrator, and thermal oxidizers; EU-RAPREPROCESS air supply houses; and other air supply houses and air handling units for the new building additions. The total heat input capacity for this equipment is 191.6 MMBTU/hr.

Emission Unit: EU-TUTONE, EU-RAPREPROCESS, EU-2020NEWNG

POLLUTION CONTROL EQUIPMENT

Low NOx burners on all 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 FG-2020NEWNG **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FG-2020NEWNG 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))**

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 60 days of start-up, the permittee shall provide information acceptable to the AQD District Supervisor demonstrating the air supply houses, heated flash, and air housing unit portions of FG-2020NEWNG are equipped with Low NOx burners. **(R 336.1205(1)(a) & (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:

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-C12TTRTO	78	113	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-TT1	120	113	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-TT2	108	113	R 336.1225, 40 CFR 52.21(c) & (d)
4. SV-TTCONC	94	113	R 336.1225, 40 CFR 52.21(c) & (d)
5. SV-TTOVRTO	24	70	R 336.1225, 40 CFR 52.21(c) & (d)
6. SV-RR1	60	70	R 336.1225, 40 CFR 52.21(c) & (d)
7. SV-RR2	60	70	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:
[1] This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

APPENDIX 3. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FG-FACILITY and FG-CONTROLS.

Elements of an O & M Plan

General – 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 each respective add-on control device used to demonstrate compliance with applicable VOC emissions limits.

Thermal Oxidizers

1. Validation of thermocouple accuracy or recalibration of each thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.

2. Perform a heat exchanger visual internal inspection a minimum of once every 18 months.*

Regenerative Thermal Oxidizers

1. Validation of thermocouple accuracy or recalibration of each thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.

2. Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months.*

3. Perform an inspection of the valve seals condition and verify valve timing/synchronization a minimum of once every 18 months.*

VOC Concentrators

1. Validation of thermocouple accuracy or recalibration of each thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.

2. Perform internal observation of adsorbent materials for contamination and erosion a minimum of once every 18 months.*

3. Observe and record the pressure drop across the concentrator a minimum of once every calendar quarter.

* The requirement to address this issue is satisfied if a performance test (i.e., stack test) has been performed on the control device within the prior 18 month period.

APPENDIX 5. Testing Procedures

By August 1, 2019, the permittee shall provide a proposal for updating the established percentage "split" of EU-ECoat's VOC emissions from the dip tank versus the curing oven which is acceptable to the AQD District Supervisor. The proposal will include a schedule for completing the analysis and employing its results by August 1, 2021. The proposal may consist of stack testing, sampling, laboratory testing, engineering analysis, evaluations performed for other assembly plant facilities or some combination of these or additional methods that are acceptable to the AQD District Supervisor.

APPENDIX 9. Recordkeeping Provisions

Recordkeeping Provisions for Source Using Hybrid Applicability Test

All information in this Appendix shall be maintained pursuant to R 336.2902(6) for five years following the resumption of regular operations after the change. Resumption of regular operations is the trial operation date in the notification required per FGFACILITY, SC VII.4.

A. Description: FCA is proposing new equipment and modifications to existing equipment at the JNAP facility that are being incorporated into the flexible limits in FG-FACILITY. The hybrid applicability test was performed for FG-FACILITY.

B. Applicability Test Description: Hybrid Test

C. Emissions

Table C

		Emissions (tpy)			
Emission Unit/Flexible Group ID	**Pollutant**	**Baseline Actual**	**Projected Actual**	**Excluded**	**Reason for Exclusion**
FG-FACILITY	VOCs	798	781.03	--	No excludables were used in the analysis
FG-FACILITY	NOx	77.53	107.54	24.0	Capable of accommodating operating rate. (The maximum automobile production rate during the baseline period of 01/01/2013 to 12/31/2014 was determined and annualized for a 12-month period)