

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

June 17, 2020

PERMIT TO INSTALL
209-19

ISSUED TO
General Motors, LLC Detroit-Hamtramck Assembly

LOCATED AT
2500 East Grand Boulevard
Detroit, Michigan 48211-2002

IN THE COUNTY OF
Wayne

STATE REGISTRATION NUMBER
M4199

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

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: March 19, 2020	
DATE PERMIT TO INSTALL APPROVED: June 17, 2020	SIGNATURE: <i>Mary Ann Dellhanty</i>
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS	2
POLLUTANT / MEASUREMENT ABBREVIATIONS.....	3
GENERAL CONDITIONS	4
EMISSION UNIT SPECIAL CONDITIONS.....	6
EMISSION UNIT SUMMARY TABLE	6
EUPRETREAT	11
EUELPO	13
EUPRIMER.....	15
EUMISCSOLVENTS.....	17
EUSEALERS	19
EUFLUIDFILL	21
EUFNLRPR2020.....	23
EUGLASSBOND.....	25
EUEMENG.....	27
FLEXIBLE GROUP SPECIAL CONDITIONS.....	31
FLEXIBLE GROUP SUMMARY TABLE	31
FGAUTOASSEMBLY	33
FGCONTROLS	40
FGAUTOMACT.....	43
FGBOILERMACT.....	47
FGNGEQUIP	53
FGTOPCOAT.....	55
FGNETTING2020	58
APPENDIX A.....	60

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 ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	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 conditions 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
EUPRETREAT	Pretreatment of vehicle surface to prepare it for coating, consisting of a series of dip tanks and rinse stages, followed by a deionized water rinse.	TBD	FGAUTOASSEMBLY , FGACTOMACT
EUELPO	An electrodeposition coating process (ELPO) consisting of a coating dip tank, followed by a series of rinse tanks, and two curing ovens, each with a cooling zone. Repairs will take place in an ELPO sand booth to correct minor imperfections. Emissions from the coating tank and the curing oven are controlled by a bank of RTOs.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUPRIMER	A prep area, an automatic primer booth for application of solventborne main primer and solventborne two-tone primer, a primer observation zone, an ambient flash-off area, two (2) natural gas-fired primer curing ovens, each with a cooling tunnel, and a booth for manual wet sanding repair to correct surface blemishes.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUTOPCOAT1	An automatic topcoat spray application process consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, an observation zone, and a natural gas-fired curing oven.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUTOPCOAT2	An automatic topcoat spray application process consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, an observation zone, and a natural gas-fired curing oven.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUTOPCOAT3	An automatic topcoat spray application process consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, an observation zone, and a natural gas-fired curing oven.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUTOPCOAT4	An automatic topcoat spray application process consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, an observation zone, and a natural gas-fired curing oven.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUTOPCOAT5	An automatic topcoat spray application process consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, an observation zone, and a natural gas-fired curing oven.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUTOPCOAT6	An automatic topcoat spray application process consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, an observation zone, and a natural gas-fired curing oven.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUMISCSOLVENTS	Various cleaning solvents, miscellaneous solvents, and purge solvents used throughout the Detroit-Hamtramck Assembly Plant.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUSEALERS	Various manual and robotic sealer, adhesive, and sound deadener material application stations/booths. Sealers, fillers, and liquid applied sound deadener materials applied in the paint shop after the ELPO and prior to primer application will be air-dried prior to further curing in the primer curing ovens. VOC emissions released in the primer curing ovens will be controlled by the appropriate RTO(s). Sealers and adhesives applied in the body shop and general assembly area are air-dried and emissions are emitted to the general in-plant environment.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUFLUIDFILL	Each new vehicle will be filled with various fluids such as antifreeze, brake fluid, and windshield washer fluid.	TBD	FGAUTOASSEMBLY
EUFNLRPR2020	Final repair operations including a coating area.	TBD	FGAUTOASSEMBLY , FGACTOMACT, FGCONTROL
EUGLASSBOND	Installation of glass to the coated automobile in the final assembly area. Glass bonding emissions are emitted to the general in-plant environment.	TBD	FGAUTOASSEMBLY , FGACTOMACT
EUHWG1	Hot water generator with a maximum heat input rating of 8 MMBtu/hr.	TBD	FGAUTOASSEMBLY , FGBOILERMACT, FGNGEQUIP
EUHWG2	Hot water generator with a maximum heat input rating of 8 MMBtu/hr.	TBD	FGAUTOASSEMBLY , FGBOILERMACT, FGNGEQUIP
EUHWG3	Hot water generator with a maximum heat input rating of 8 MMBtu/hr.	TBD	FGAUTOASSEMBLY , FGBOILERMACT, FGNGEQUIP
EUHWG4	Hot water generator with a maximum heat input rating of 8 MMBtu/hr.	TBD	FGAUTOASSEMBLY , FGBOILERMACT, FGNGEQUIP

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUHWG5	Hot water generator with a maximum heat input rating of 8 MMBtu/hr.	TBD	FGAUTOASSEMBLY , FGBOILERMACT, FGNGEQUIP
EUHWG6	Hot water generator with a maximum heat input rating of 8 MMBtu/hr.	TBD	FGAUTOASSEMBLY , FGBOILERMACT, FGNGEQUIP
EUNGHEAT	All new natural gas-fired spaceheaters, air handling units (AHU), air supply houses (ASH), dockheaters and other miscellaneous heaters. This equipment was added as part of the reconstructed automotive manufacturing project.	TBD	FGAUTOASSEMBLY , FGNGEQUIP
EUEMENG	A 346 kilowatts (kW) diesel-fueled emergency engine with a model year of 2011 or later, and a displacement of <30 liters/cylinder.	TBD	
EUPRETREATMENT	Previous operation for Surface Preparation for the painting applications to follow. Vehicle bodies are cleaned with detergent and rinsed. Microcrystals are applied to vehicle bodies for corrosion resistance and enhanced paint adhesion. There are not any add-on controls associated with this emission unit. Used for the 2020 netting analysis.	05-19-1981 / 01-17-1989	FGNETTING2020
EUELPOSYSTEM	Previous operation for an electrocoat dip tank followed by an electrocoat curing oven. There are not any add on controls associated with this emission unit. Used for the 2020 netting analysis.	05-19-1981 / 11-15-1982 / 01-17-1989	FGNETTING2020
EUPRIMERSURFACE R	Previous operation for a guidecoat (primer surfacer) spray booth followed by a curing oven. The solventborne primersurfacer is applied manually or automatically with air atomized or electrostatic spray guns. The guidecoat booth is equipped with a downdraft water wash system to control particulate emissions from paint overspray. VOC emissions from the curing oven are controlled by a thermal oxidizer. Used for the 2020 netting analysis.	05-19-1981 / 11-15-1982 / 01-17-1989 / 05-19-1993	FGNETTING2020

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUTOPCOATSYSTEM	Previous operation for a topcoat spray booth followed by a curing oven. There is a heated flash-off area located between the basecoat portion of the booth and the clearcoat portion of the booth. The waterborne basecoat is applied manually or automatically with air atomized or electrostatic spray guns, the solventborne basecoat replacement (BCR) is applied manually or automatically with air atomized or electrostatic spray guns. The BCR is a topcoat material but is applied in the primer surfacer booth. The solventborne clearcoat is applied manually or automatically with air atomized or electrostatic spray guns. The topcoat booth is equipped with a downdraft water wash system to control particulate emissions from paint overspray. VOC emissions from the curing ovens are controlled by a thermal oxidizer. Used for the 2020 netting analysis.	05-19-1981 / 11-15-1982 / 01-17-1989 / 07-18-1991 / 06-24-1993	FGNETTING2020
EUFINALREPAIR	Previous operation for a combination final repair down draft booth with a particulate control system and dry filter stalls located throughout the assembly plant. The booth and stalls are equipped with automatic and manual applicators. Used for the 2020 netting analysis.	05-19-1981 / 11-15-1982 / 01-17-1989	FGNETTING2020
EUSEALERADH	Previous operation for various sealers, adhesives, and fillers are applied in the body shop, the paint shop, and the general assembly areas. Used for the 2020 netting analysis.	05-19-1981 / 11-15-1982 / 01-17-1989 / 12-11-1989	FGNETTING2020
EUBOOTHCLEAN	Previous operation for the application of solvents to clean spray booths. There are no add-on controls for this emission unit. Used for the 2020 netting analysis.	05-19-1981 / 11-15-1982 / 01-17-1989 / 12-11-1989	FGNETTING2020
EUPURGE	Previous operation for the purging of applicators within the paint spray booth. Used for the 2020 netting analysis.	05-19-1981 / 11-15-1981 / 01-17-1989 / 12-11-1989	FGNETTING2020
EUMISCSOLV	Previous operation for activities consisting of miscellaneous cleaning activities, bodywipe, general assembly clean-up, production equipment clean-up and maintenance equipment cleanup. Used for the 2020 netting analysis.	05-19-1981 / 11-15-1982 / 01-17-1989 / 12-11-1989	FGNETTING2020

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
Gasoline fuel filling operations and all gasoline storage tanks containing fuel for vehicle fuel filling operations	All gasoline storage tanks containing fuel for vehicle fuel filling operations. Vehicles being filled with gasoline shall be equipped with onboard refueling vapor recovery (ORVR), Stage II oxidizer, or other equivalent vapor control system.	05-19-1981 / 11-15-1982 / 01-17-1989 / 12-11-1989	FGNETTING2020

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.

EUPRETREAT EMISSION UNIT CONDITIONS
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DESCRIPTION

Pretreatment of vehicle surface to prepare it for coating, consisting of a series of dip tanks and rinse stages, followed by a deionized water rinse.

Flexible Group ID: FGAUTOASSEMBLY, FGAUTOMACT

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The VOC content, water content and density of the materials, as added to the EUPRETREAT system, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the District Supervisor, the VOC content, water content and density of the materials, as added to EUPRETREAT shall be verified by testing 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. SVR1 (Entry Seal Exhaust)	14	75	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVR2 (Exhaust Stage 1B)	20	75	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVR3 (Exhaust Stage 4)	22	75	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).

EUELPO EMISSION UNIT CONDITIONS

DESCRIPTION

An electrodeposition coating process (ELPO) consisting of a coating dip tank, followed by a series of rinse tanks, and two curing ovens, each with a cooling zone. Repairs will take place in an ELPO sand booth to correct minor imperfections. Emissions from the coating tank and the curing oven are controlled by a bank of RTOs.

Flexible Group ID: FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROLS

POLLUTION CONTROL EQUIPMENT

A bank of two RTOs (RTO 210 and RTO 220) for control of VOC emissions from the coating tank and curing oven.

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 electrodeposition tank and curing oven portions of EUELPO unless the appropriate RTO portions of FGCONTROL as specified in Appendix A are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes: **(R 336.1225, R 336.1702, R 336.1910)**
 - a) A minimum retention time of 0.5 seconds.
 - b) Maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed.
 - c) After the acceptable performance test has been performed, maintaining the RTO combustion chamber temperature, based upon a three-hour average, at the temperature during the most recent control device performance test which demonstrated compliance with either:
 - i. During the initial low production period as specified in FGAUTOASSEMBLY SC III.1, a VOC outlet concentration of less than or equal to 7 ppm as propane, or
 - ii. After the initial low production period ends as specified in FGAUTOASSEMBLY SC III.1, a minimum 95 percent destruction efficiency.

V. TESTING/SAMPLING

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

1. The VOC content, water content and density of the resin, pigment, and additives, as added to the EUELPO tank, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the District Supervisor, the VOC content, water content and density of the resin, pigment and additives as added to the EUELPO tank shall be verified by testing 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 used in EUELPO. 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. SVR7 (Oven Cooler #1)	58	75	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVR8 (Oven Cooler #2)	58	75	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVR56 (Combined stack of two-bank RTOs serving ELPO tank, all ovens, and all heated flash)	90	126	R 336.1225, 40 CFR 52.21(c) & (d)

4. The sand booth portion of EUELPO shall not be directly discharged to the ambient air at any time. **(R 336.1225, 40 CFR 52.21(c) & (d))**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all 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 EUELPO, except as provided in FGAUTOASSEMBLY SC IX.2. **(40 CFR 60.390)**

Footnotes:

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

EUPRIMER EMISSION UNIT CONDITIONS

DESCRIPTION

A prep area, an automatic primer booth for application of solventborne main primer and solventborne two-tone primer, a primer observation zone, an ambient flash-off area, two (2) natural gas-fired primer curing ovens, each with a cooling tunnel, and a booth for manual wet sanding repair to correct surface blemishes.

Flexible Group ID: FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROLS

POLLUTION CONTROL EQUIPMENT

Primer coating booth overspray is controlled by a waterwash particulate control system. The exhaust from the primer coating booth and observation zone is controlled by a bank of three RTOs (RTO 110, RTO 120, and RTO 130) for control of VOCs. Primer curing oven emissions are exhausted to a bank of two RTOs (RTO 210 and RTO 220) for control of VOC emissions. The cooling tunnels are exhausted to the atmosphere.

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 coating booth, ambient flash, observation zone, or curing oven portions of EUPRIMER unless the appropriate RTO portions of FGCONTROLS as specified in Appendix A are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes: **(R 336.1225, R 336.1702, R 336.1910)**
 - a) A minimum retention time of 0.5 seconds.
 - b) Maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed.
 - c) After the acceptable performance test has been performed, maintaining the RTO combustion chamber temperature, based upon a three-hour average, at the temperature during the most recent control device performance test which demonstrated compliance with either:
 - i. During the initial low production period as specified in FGAUTOASSEMBLY SC III.1, a VOC outlet concentration of less than or equal to 7 ppm as propane, or
 - ii. After the initial low production period ends as specified in FGAUTOASSEMBLY SC III.1, a minimum 95 percent destruction efficiency.
2. The permittee shall not operate the primer spray booth of EUPRIMER unless the waterwash system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the waterwash particulate system includes conducting the required monitoring and recordkeeping pursuant to FGAUTOASSEMBLY, SC VI.2. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

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

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. SVR13 (Oven Cooler #1)	62	75	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVR15 (Oven Cooler #2)	62	75	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVR55 (Combined stack of three-bank RTOs serving all booths and all observation zones)	108	126	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVR56 (Combined stack of two-bank RTOs serving ELPO tank, all ovens, and all heated flash)	90	126	R 336.1225, 40 CFR 52.21(c) & (d)

5. The exhaust gases from the sand booth portion of EUPRIMER shall not be discharged to the ambient air at any time. (R 336.1225, 40 CFR 52.21(c) & (d))

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all 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 EUPRIMER, except as provided in FGAUTOASSEMBLY SC IX.2. (40 CFR 60.390)

Footnotes:

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

**EUMISCSOLVENTS
EMISSION UNIT CONDITIONS**

DESCRIPTION

Various cleaning solvents, miscellaneous solvents, and purge solvents used throughout the Detroit-Hamtramck Assembly Plant.

Flexible Group ID: FGAUTOASSEMBLY, FGCONTROLS, FGAUTOMACT

POLLUTION CONTROL EQUIPMENT

The portion of solventborne purge used inside the primer and clearcoat spray booths during the vehicle painting operation will be captured and recovered in a purge solvent collection system. The portion of solventborne purge used inside the booths during the vehicle painting operation that is not captured in the purge solvent collection system is controlled by a bank of three RTOs (RTO 110, RTO 120, and RTO 130). The waterborne purge used in the basecoat spraybooth during the vehicle painting operation is controlled by a bank of three RTOs (RTO 110, RTO 120, and RTO 130).

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 purging operations in the coating booth portions of EUPRIMER and FGTOPCOAT during vehicle painting operation unless the appropriate RTO portions of FGCONTROLS as specified in Appendix A are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes: **(R 336.1225, R 336.1702, R 336.1910)**
 - a) A minimum retention time of 0.5 seconds.
 - b) Maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed.
 - c) After the acceptable performance test has been performed, maintaining the RTO combustion chamber temperature, based upon a three-hour average, at the temperature during the most recent control device performance test which demonstrated compliance with either:
 - i. During the initial low production period as specified in FGAUTOASSEMBLY SC III.1, a VOC outlet concentration of less than or equal to 7 ppm as propane, or
 - ii. After the initial low production period ends as specified in FGAUTOASSEMBLY SC III.1, a minimum 95 percent destruction efficiency.

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of 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. SVPURGERECL (Purge Solvent Reclaim Tank)*	3	12	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVR55 (Combined stack of three-bank RTOs serving all booths and all observation zones)	108	126	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVR59 (Dip Skid Cleaner)	30	75	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVR60 (Paint Skid Cleaner)	30	75	R 336.1225, 40 CFR 52.21(c) & (d)
*This stack vents horizontally			

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

EUSEALERS EMISSION UNIT CONDITIONS

DESCRIPTION

Various manual and robotic sealer, adhesive, and sound deadener material application stations/booths. Sealers, fillers, and liquid applied sound deadener materials applied in the paint shop after the ELPO and prior to primer application will be air-dried prior to further curing in the primer curing ovens. VOC emissions released in the primer curing ovens will be controlled by the appropriate RTO(s). Sealers and adhesives applied in the body shop and general assembly area are air-dried and emissions are emitted to the general in-plant environment.

Flexible Group ID: FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROL

POLLUTION CONTROL EQUIPMENT

A bank of two RTOs (RTO 210 and RTO 220) to control VOC emissions from the sealers cured in the primer curing ovens.

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 primer curing oven portion of EUSEALERS unless the appropriate RTO portions of FGCONTROLS as specified in Appendix A are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes: **(R 336.1225, R 336.1702, R 336.1910)**
 - a) A minimum retention time of 0.5 seconds.
 - b) Maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed.
 - c) After the acceptable performance test has been performed, maintaining the RTO combustion chamber temperature, based upon a three-hour average, at the temperature during the most recent control device performance test which demonstrated compliance with either:
 - i. During the initial low production period as specified in FGAUTOASSEMBLY SC III.1, a VOC outlet concentration of less than or equal to 7 ppm as propane, or
 - ii. After the initial low production period ends as specified in FGAUTOASSEMBLY SC III.1, a minimum 95 percent destruction efficiency.

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 material as applied in EUSEALERS, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the District Supervisor, the VOC content, water content and density of any sealer, adhesive, or deadener material shall be verified by testing using federal Reference Test Method 24. **(R 336.1702, 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. SVR55 (Combined stack of three-bank RTOs serving all booths and all observation zones)	108	126	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).

EUFLUIDFILL EMISSION UNIT CONDITIONS

DESCRIPTION

Each new vehicle will be filled with various fluids such as antifreeze, brake fluid, and windshield washer fluid.

Flexible Group ID: FGAUTOASSEMBLY

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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. SVFLUIDFILLN	40	57	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVFLUIDFILLS	40	57	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).

EUFNLRPR2020 EMISSION UNIT CONDITIONS
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DESCRIPTION

Final repair operations including a coating area.

Flexible Group ID: FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROLS

POLLUTION CONTROL EQUIPMENT

Dry filter particulate control 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 EUFNLRPR2020 unless the respective dry filter particulate control systems are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the particulate controls includes conducting the required monitoring and recordkeeping pursuant to FGAUTOASSEMBLY, 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 EUFNLRPR2020, 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. SVFR1 (Final Repair Stack 1)	42	50	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVFR2 (Final Repair Stack 2)	18	50	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).

EUGLASSBOND EMISSION UNIT CONDITIONS

DESCRIPTION

Installation of glass to the coated automobile in the final assembly area. Glass bonding emissions are emitted to the general in-plant environment.

Flexible Group ID: FGAUTOASSEMBLY, FGAUTOMACT

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The VOC content, water content and density of any material as applied in EUGLASSBOND, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the District Supervisor, the VOC content, water content and density of any material shall be verified by testing 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 glass bonding 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).

**EUEMENG
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A 346 kilowatts (kW) diesel-fueled emergency engine with a model year of 2011 or later, and a displacement of <30 liters/cylinder.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NMHC ^A + NO _x	3.0 g/hp-hr ^B	Hourly	EUEMENG	SC VI.2	40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
2. CO	2.6 g/hp-hr ^B	Hourly	EUEMENG	SC VI.2	40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112
3. PM	0.15 g/hp-hr ^B	Hourly	EUEMENG	SC VI.2	40 CFR 60.4205(b), 60.4202(a)(2), Table 1 of 40 CFR 89.112

^ANMHC = non-methane hydrocarbon

^BThese emission limits are for certified engines; if testing becomes required to demonstrate compliance, then the tested values must be compared to the Not to Exceed (NTE) requirements determined through 40 CFR 60.4212(c).

II. MATERIAL LIMIT(S)

- The permittee shall burn only diesel fuel, in EUEMENG with the maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(R 336.1205(1)(a) & (b), 40 CFR 60.4207(b), 40 CFR 80.510(b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EUEMENG for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.2. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**
- The permittee may operate EUEMENG for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4211(f)(2))**

3. The permittee may operate EUEMENG up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in §60.4211(f)(2). Except as provided in §60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f)(3))**
4. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart IIII, for the same model year, the permittee shall meet the following requirements for EUEMENG:
 - a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.
 - b) Change only those emission related settings that are permitted by the manufacturer.
 - c) Meet the requirements as specified in 40 CFR 89, 94, and/or 1068, as it applies to you.

If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine. **(40 CFR 60.4211(a), R 336.1702)**

5. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EUEMENG and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g)(2), R 336.1702)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each EUEMENG with non-resettable hours meters to track the operating hours. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4209(a))**
2. The maximum nameplate engine power of EUEMENG shall not exceed 464 HP. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), Table 1 of 40 CFR 89.112)**

V. TESTING/SAMPLING

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

1. If EUEMENG is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
 - a) Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
 - b) If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.

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. **(40 CFR 60.4211(g)(2), 40 CFR 60.4212)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep all required records and calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(1)(a)&(b), R 336.1225, 40 CFR 52.21 (c) & (d), 40 CFR Part 60 Subpart IIII)**
2. The permittee shall keep, in a satisfactory manner, the following records for EUEMENG:
 - a) For a certified engine: The permittee shall keep records of the manufacturer certification documentation.
 - b) For an uncertified engine: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for EUEMENG:
 - a) For a certified engine: The permittee shall keep records of the manufacturer's emission-related written instructions, and records demonstrating that the engine has been maintained according to those instructions, as specified in SC III.4.
 - b) For an uncertified engine: The permittee shall keep records of a maintenance plan, as required by SC III.5, and maintenance activities.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

4. The permittee shall keep, in a satisfactory manner, test reports for EUEMENG, as required by SC V.1, on file at the facility. The permittee shall make the records available to the Department upon request. **(R 336.1205(1)(a) & (b), R 336.2001, R 336.2003, R 336.2004)**
5. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EUEMENG, on a monthly and 12-month rolling time period basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of EUEMENG, including what classified the operation as emergency. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), 40 CFR 60.4211, 40 CFR 60.4214)**
6. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EUEMENG, demonstrating that the fuel meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(R 336.1205(1)(a) & (b), 40 CFR 52.21(c) & (d), 40 CFR 60.4207(b), 40 CFR 80.510(b))**

VII. REPORTING

1. The permittee shall submit a notification specifying whether EUEMENG will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. **(R 336.1201(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. SVNEWEG	6	11	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart IIII, as they apply to EUEMENG. **(40 CFR Part 60 Subparts A & IIII, 40 CFR 63.6590(c)(6))**
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to EUEMENG. **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

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
FGAUTOASSEMBLY	This flexible group covers equipment used for the automotive assembly and painting operations for the entire Detroit-Hamtramck Assembly Plant.	EUPRETREAT, EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, EUMISCSOLVENTS, EUSEALERS, EUFLUIDFILL, EUFNLRPR2020, EUGLASSBOND, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUNGHEAT
FGCONTROLS	Control equipment associated with the reconstructed automotive manufacturing process at the Detroit-Hamtramck Assembly Plant.	EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, EUSEALERS, EUMISCSOLVENTS, EUFNLRPR2020
FGAUTOMACT	Each new, reconstructed, or existing affected source as defined in Title 40 of the Code of Federal Regulations (CFR), Part 63.3082, that is located at a facility which applies topcoat to new automobile or new light duty truck bodies or body parts for new automobiles or new light duty trucks; AND/OR in which you choose to include, pursuant to 40 CFR 63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light duty trucks or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light duty trucks or other motor vehicles; and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAPs) except as provided in 63.3081(c). This includes equipment covered by other permits, grandfathered equipment, and exempt equipment.	EUPRETREAT, EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, EUGLASSBOND, EUMISCSOLVENTS, EUSEALERS, EUFNLRPR2020

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGBOILERMACT	Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These new boilers or process heaters must comply with this subpart upon startup.	EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6
FGNGEQUIP	All new natural gas-fired equipment installed at the Detroit-Hamtramck Assembly Plant as part of the reconstructed automotive manufacturing project, including dock heaters, hot water generators, cure ovens, RTOs, and Air Handling Units/Air Supply Houses.	EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUNGHEAT
FGTOPCOAT	An automatic topcoat spray application process with a maximum of six modular topcoat processes, each consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, a clearcoat observation zone, and a natural gas-fired curing oven	EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6
FGNETTING2020	These emission units were used to establish creditable emissions for the 2020 netting analysis performed for the new automotive manufacturing process.	EUPRETREATMENT, EUELPOSYSTEM, EUPRIMERSURFACER, EUTOPCOATSYSTEM, EUFINALREPAIR, EUSEALERADH, EUBOOTHCLEAN, EUPURGE, EUMISCSOLV, all gasoline fuel filling operations, and all gasoline storage tanks containing fuel for vehicle fuel filling operations

**FGAUTOASSEMBLY
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

This flexible group covers equipment used for the automotive assembly and painting operations for the entire Detroit-Hamtramck Assembly Plant.

Emission Unit: EUPRETREAT, EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, EUMISCSOLVENTS, EUSEALERS, EUFLUIDFILL, EUFNLRPR2020, EUGLASSBOND, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUNGHEAT

POLLUTION CONTROL EQUIPMENT

One bank of three RTOs (RTO 110, RTO 120, and RTO 130) used for control of VOC exhaust from primer booth, all basecoat booths, all clearcoat booths, and all observation zones. One bank of two RTOs (RTO 210 and RTO 220) used for control of VOC emissions from the ELPO tank, ELPO oven, primer curing ovens, basecoat heated flash-off areas, and all topcoat curing ovens. Water wash particulate controls on the primer, basecoat, and clearcoat spray booths. Dry filter particulate control systems in the final repair booths.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	29.0 ^{A,B} tpy	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY during the initial low production period as defined in SC III.1	SC VI.1	R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2902(2)
2. VOC	329.9 ^{A,C} tpy	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC VI.1	R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2902(2)
3. VOC	3.0 ^{A,C} pounds per job	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC VI.1	R 336.1702(a) , R 336.2902(2)
4. PM	18.5 tpy ^A	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC V.1, SC VI.1	R 336.1205(1)(a) & (b), 40 CFR 52.21(c) &(d)
5. PM10	18.5 tpy ^A	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC V.1, SC VI.1	R 336.1205(1)(a) & (b), R 336.2802(d), 40 CFR 52.21(c) &(d)
6. PM2.5	18.5 tpy ^A	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC V.1, SC VI.1	R 336.1205(1)(a) & (b), R 336.2802(d), 40 CFR 52.21(c) &(d)
7. NOx	39.4 tpy ^A	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC V.2, SC VI.1	R 336.1205(1)(a) & (b), R 336.2802(d), R 336.2902(2), 40 CFR 52.21(c) &(d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
8. CO	45.9 tpy ^A	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC VI.1	R 336.1205(1)(a) & (b), 40 CFR 52.21(c) &(d)
9. SO2	0.4 tpy ^A	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC VI.1	R 336.1205(1)(a) & (b), 40 CFR 52.21(c) &(d)
10. GHGs as CO2e	65,335 tpy ^A	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC VI.1	R 336.1205(1)(a) & (b)

^AThis limit includes emissions from all sources at the Detroit-Hamtramck Assembly Plant, including combustion sources, with the exception of the diesel-fired emergency engine EUEMENG and the following equipment existing prior to the reconstruction of the automotive assembly line: one powerhouse boiler, two powerhouse temporary boilers, the wastewater treatment plant, natural gas-fired dock heaters with a capacity of 7.2 MMBTU/hr, one natural gas-fired emergency generator, five diesel-fired emergency generators, and two diesel-fired pump engines.

^BBeginning on the startup of production, and continuing for the first 12 calendar months, this limit applies to the cumulative total VOC emissions. Thereafter, the limit shall become a 12-month rolling limit.

^CThis limit shall become applicable upon the end of the low production period as defined in SC III.1.

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Natural Gas	1,094 Million standard cubic feet per year ^D	12-month rolling time period as determined at the end of each calendar month	FGAUTOASSEMBLY	SC VI.1	R 336.1205, R 336.1225, R 336.2802(d), R 336.2902(2), 40 CFR 52.21(c) & (d)

^D This limit includes natural gas usage at all natural gas combustion sources at the Detroit-Hamtramck Assembly Plant, with the exception of the following equipment that was existing prior to the reconstruction of the automotive assembly line: one powerhouse boiler, two powerhouse temporary boilers, the wastewater treatment plant, natural gas-fired dock heaters with a capacity of 7.2 MMBTU/hr, and one natural gas-fired emergency generator.

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not produce more than 10,000 vehicles (or “jobs”) per 12-month rolling time period as determined at the end of each calendar month during the initial low production period. The initial low production period for the Detroit-Hamtramck Assembly Plant shall last until the earlier of:
 - a) 36 months after the beginning of saleable vehicle production, or
 - b) Production of saleable vehicles exceeds 10,000 vehicles per 12-month rolling time period.

After the initial low production period ends, the emission and operational limits in SC I.1 and III.1 shall no longer be applicable and the emission limits in SC I.2 and SC I.3 shall become applicable. **(R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2902(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each spray coating booth with a waterwash particulate control system. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

1. Within 180 days of the end of the initial low production period as specified in SC III.1, the permittee shall conduct initial testing and, at least once every five years thereafter unless the permittee maintains a yearly demonstration that the most recent acceptable test remains valid and representative, the permittee shall verify PM, PM10, and PM2.5 emission rates from each RTO and EUFNLRPR2020 stack as identified in a complete test plan by testing at owner's expense, in accordance with Department requirements. Alternatively for EUFNLRPR2020, test results of similar sources can be used upon approval of the AQD District Supervisor. 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, R 336.2802, 40 CFR 52.21(c) & (d))**

2. Within 180 days of the end of the initial low production period as specified in SC III.1, the permittee shall conduct initial testing and, at least once every five years thereafter unless the permittee maintains a yearly demonstration that the most recent acceptable test remains valid and representative, the permittee shall verify NOx emission rates from the RTO portions of FGAUTOASSEMBLY, as agreed to by the AQD District Supervisor, by testing at owner's expense, in accordance with Department requirements. One EU (or portion of an EU) may be tested if the permittee provides a demonstration to the AQD that the tested unit(s) is identical to and/or the emission rates from the tested unit(s) are representative of the other unit(s). Alternatively, the permittee may submit vendor guarantees for NOx emission rates from representative emission units in a manner acceptable to the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 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 336.2802, R 336.2902, 40 CFR 52.21(c) & (d))**
3. Within 365 days after the beginning of saleable vehicle production, the permittee shall conduct initial testing and, at least once every five years thereafter unless the permittee maintains a yearly demonstration that the most recent acceptable test remains valid and representative, the permittee shall verify the overall transfer efficiency for each booth in EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, and EUTOPCOAT6, by testing at owner's expense, in accordance with Department requirements and the U.S. EPA "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," September 2008, EPA-453/R-08-002, as amended. One basecoat booth and one clearcoat booth may be tested if the permittee provides a demonstration to the AQD that the tested booth(s) is identical to and/or the transfer efficiencies from the tested booth(s) are representative of the other booth(s). No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed

after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2902)**

4. The permittee shall verify the capture efficiency through panel testing for each spray booth, flash-off area, observation zone, and oven portion of FGAUTOASSEMBLY to the respective VOC control device(s), by testing at owner's expense, in accordance with Department requirements and the U. S. EPA "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," September 2008, EPA 453/R-08-002, as amended. The testing shall be performed according to the following schedule:
 - a) Within 365 days after the beginning of saleable vehicle production.
 - b) Within 3 years after the beginning of saleable vehicle production.
 - c) Within 5 years after the beginning of saleable vehicle production.
 - d) At least once every five years from the last testing date thereafter.

Per the U. S. EPA "Protocol for Determining the Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," September 2008, EPA 453/R-08-002, the permittee must maintain a yearly demonstration that the most recent acceptable test remains valid and representative. This capture efficiency testing includes materials (sealers, et al) applied after EUDELPO and prior to EUPRIMER that are cured in primer curing oven. One spray booth, flash-off area, observation zone, and oven portion may be tested if the permittee provides a demonstration to the AQD that the tested spray booth, flash-off area, observation zone, and oven are representative. 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, R 336.2902)**

5. The permittee shall verify the destruction efficiency of each RTO in FGAUTOASSEMBLY by testing at the owner's expense, in accordance with Department requirements and according to the following schedule:
 - a) Within 365 days after the beginning of saleable vehicle production.
 - b) Within 180 days of the end of the initial low production period as specified in SC III.1.
 - c) Within 2 years of the testing required in SC V.5(b).
 - d) Within 2.5 years of the testing required in SC V.5(c).
 - e) At least once every five years thereafter.

Alternatively, the permittee may perform testing on representative RTO(s) upon receiving written approval from the AQD District Supervisor. 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, R 336.2902)**

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 FGAUTOASSEMBLY:

- i. Material identification.
 - ii. Material VOC content.
 - iii. Material usage.
- b) The amount of natural gas burned during each calendar month and 12-month rolling time period, in cubic feet.
- c) Number of jobs each calendar month, where a job is defined as a painted vehicle leaving the assembly line.
- d) Calculations showing the FGAUTOASSEMBLY monthly emission rates, in tons per month, and annual mass VOC emission rates, as a cumulative emission rate for the first 12 months of operation and in tons per 12-month rolling time period thereafter, 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. 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.
- e) After the end of the initial low production period as specified in SC III.1, 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 FGAUTOASSEMBLY.
- f) Calculations showing the PM, PM10, PM2.5, SO₂, NO_x, and CO mass emission rates in tons on a monthly and 12-month rolling time period, as determined at the end of each calendar month for the equipment in FGAUTOASSEMBLY. These calculations shall be done according to a method acceptable to the AQD District Supervisor and shall use AP-42 (or other agreed upon emission factors) or emission factors developed from the testing required in SC V.2 or SC V.3.
- g) Calculations showing the GHGs as CO_{2e} 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 FGAUTOASSEMBLY.
- h) Hours of operation for each calendar month and 12-month rolling time period.

All records/calculations shall be kept on file and made available to the Department upon request. **(R 336.1225, R 336.1301, R 336.1331, R 336.1702, R 336.2908(3), 40 CFR 52.21(c) & (d))**

2. The permittee shall monitor the condition of each waterwash particulate control system through weekly visual inspections (except during weeks with no production) of each primer, basecoat, and clearcoat spray booth. The permittee shall keep records of visual inspections of each waterwash particulate control system which include the dates and results of the inspections, and the dates and reasons for repairs. All records shall be kept on file and made available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
3. The permittee shall keep records of operation for EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, RTO 110, RTO 120, RTO 130, RTO 210, and RTO 220 during vehicle painting to determine proper operation of the appropriate RTOs as specified in Appendix A. All records shall be kept in a manner acceptable to the AQD District Supervisor, kept on file, and made available to the Department upon request. **(R 336.1702, R 336.1910, R 336.2908(3))**

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, PM10, PM2.5, NO_x, CO, SO₂, and GHGs as CO_{2e} emission rates for each limit included in the permit. **(R 336.1205, R 336.1702, R 336.2802, R 336.2902, 40 CFR 52.21(c) & (d))**
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. Within 30 days of the start of producing saleable vehicles under this permit to install, 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:

NA

IX. OTHER REQUIREMENT(S)

1. This permit covers automotive body, paint, and assembly operations for the Detroit-Hamtramck Assembly Plant. 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 SC I.10 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.* and R 336.1610. Accordingly, compliance with the limitations in this permit meets all applicable emission limit requirements of 40 CFR Part 60, Subpart MM and R 336.1610. **(R 336.1610, 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 requirement¹, 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, R 336.2802, R 336.2902, 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, R 336.2802, R 336.2902, 40 CFR 52.21(c) & (d))**
7. The permittee shall send written notification to the AQD District Supervisor within 30 days of the end of the initial low production period as specified in SC III.1. **(R 336.1702)**

Footnotes:

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

FGCONTROLS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Control equipment associated with the reconstructed automotive manufacturing process at the Detroit-Hamtramck Assembly Plant.

Two banks of RTOs used for control of VOC emissions from the ELPO tank, primer spray booth, all basecoat and clearcoat spray booths, all heated flash-off areas, all observation zones, and all curing ovens. Waterwash on all paint spray booths and dry filter particulate control on all final repair booths.

Emission Unit: EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, EUMISC SOLVENTS, EUSEALERS, EUFNLRPR2020

POLLUTION CONTROL EQUIPMENT

One bank of two RTOs used for control of VOC emissions from the ELPO tank, the ELPO oven, all basecoat heated flash-off areas, and all curing ovens. One bank of three RTOs used for control of the primer spray booth, all basecoat spray booths, all clearcoat spray booths, and all topcoat observation zones. The portion of solventborne purge used inside the primer and clearcoat spray booths during the vehicle painting operation will be captured and recovered in a purge solvent collection system. The portion of solventborne purge used inside the booths during the vehicle painting operation that is not captured in the purge solvent collection system is controlled by the bank of three RTOs. The waterborne purge used in the basecoat spraybooth during the vehicle painting operation is controlled by the bank of three RTOs (ID RTOs). Waterwash particulate control systems on primer, basecoat, and clearcoat spray booths. Dry filter particulate control systems on all final repair booths.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGCONTROLS unless a malfunction abatement plan (MAP) has been submitted within 90 days following the beginning of saleable vehicle production and is implemented and maintained as described in Rule 911(2), for the RTO add on control devices. The MAP shall be submitted to the AQD District Supervisor for review and approval. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the

MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1702, R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall install, maintain and operate in a satisfactory manner, combustion chamber temperature monitoring devices for the RTOs in FGCONTROLS 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 336.1702, R 336.1910)**
2. The permittee shall maintain records of maintenance and repair activities for FGCONTROLS. Records shall identify the equipment inspected and the date of the inspection. The permittee shall also record any maintenance activities or corrective actions taken as a result of equipment inspections or due to malfunction. All records shall be kept on file and made available to the Department upon request. **(R 336.1910)**
3. For the RTOs, 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)**
4. The permittee shall keep records of maintenance inspections which include the dates, results of the inspections and the dates and reasons for repairs if made. The following items shall be inspected for the RTO control device used to demonstrate compliance with the applicable VOC emission limits: **(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.

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:

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

FGAUTOMACT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EUPRETREAT, EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, EUGLASSBOND, EUMISCSOLVENTS, EUSEALERS, EUFNLRPR2020

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Organic HAP	0.30 lb per GACS	Calendar Month	New/Reconstructed-FGMACT with EUELPO	SC III.3, SC V.1, SC VI.3	40 CFR 63.3090(a)
2. Organic HAP*	0.5 lb per GACS	Calendar Month	New/Reconstructed-FGMACT	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	New/Reconstructed-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	New/Reconstructed-Deadener Materials	SC III.3, SC V.1, SC VI.3	40 CFR 63.3090(d) or 63.3091(d)
<ul style="list-style-type: none"> • FGMACT 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. • FGMACT WITH EUELPO also includes all Electrocoat operations in addition to all of the operations in FGAUTOMACT. • 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 EUELPO meets either of the following requirements. **(40 CFR 63.3092)**
 - a) Each individual material added to EUELPO 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 EUELPO 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:
 - d) Vehicle body wipe pursuant to 40 CFR 63.3094(c)(1)(i).
 - e) Coating line purging pursuant to 40 CFR 63.3094(c)(1)(ii).
 - f) Coating system flushing pursuant to 40 CFR 63.3094(c)(1)(iii).
 - g) Cleaning of spray booth grates pursuant to 40 CFR 63.3094(c)(1)(iv).
 - h) Cleaning of spray booth walls pursuant to 40 CFR 63.3094(c)(1)(v).
 - i) Cleaning of spray booth equipment pursuant to 40 CFR 63.3094(c)(1)(vi).
 - j) Cleaning of external spray booth areas pursuant to 40 CFR 63.3094(c)(1)(vii).
 - k) Additional housekeeping measures pursuant to 40 CFR 63.3094(c)(1)(viii).

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

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

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

3. The permittee shall determine the mass fraction of each organic HAP for each material used according to the procedures established under 40 CFR 63.3151(a)(1) through (5). The permittee may use 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 FGMACT, or FGMACT with EUELPO, the volume used in each month, the mass fraction organic HAP content, the density, and the volume fraction of solids. **(40 CFR 63.3130(c))**
 - d) For each material used in EUSEALERS, the mass used in each month and the mass organic HAP content. **(40 CFR 63.3130(c))**
 - e) Calculations of the organic HAP emission rate for FGMACT, or FGMACT with EUELPO, in pounds per gallon of applied coating solids. If permittee chooses to comply with the option identified in Special Condition I.5.a., a record of the weight fraction of each organic HAP in each material added to the Electrocoat systems. These calculations and records must include all raw data, algorithms, and intermediate calculations. If the "Protocol for Determining Daily Volatile Organic Compound Emission Rate of Automobile and Light-Duty Truck Topcoat Operations," EPA-450/3-88-018 (Docket ID No. OAR-2002-0093 and Docket ID No. A-2001-22), is used, all data input to this protocol must be recorded. If these data are maintained as electronic files, the electronic files, as well as any paper copies must be maintained. **(40 CFR 63.3130(c), 40 CFR 63.3163, 40 CFR 63.3173)**
 - f) Calculation of the average monthly mass organic HAP content in pounds per pound of coating, separately for EUSEALERS. **(40 CFR 63.3130(c), 40 CFR 63.3152)**
 - g) The name, volume, mass fraction organic HAP content and density of each cleaning material used. **(40 CFR 63.3130(d) - (f))**
 - h) Any additional records pertaining to deviations; transfer efficiency determinations; and work practice plans; pursuant to 40 CFR 63.3130(g), (m), and (n). **(40 CFR 63.3130(g), (m), and (n))**

VII. REPORTING

1. The permittee shall submit all semiannual compliance reports as required by 40 CFR 63.3120(a). The first time period covered by these reports shall be shortened so as to end on either June 30 or December 31, whichever comes first. These reports shall be due March 15 for the reporting period July 1 to December 31 and September 15 for the reporting period January 1 to June 30. **(40 CFR 63.3120(a))**
2. The Permittee shall submit applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8(f)(4) and 63.9(b) through (e) and (h), as specified in 40 CFR 63.3110. **(40 CFR 63, Subparts A and IIII)**

VIII. STACK/VENT RESTRICTION(S)

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

NA

IX. OTHER REQUIREMENT(S)

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

**FGBOILERMACT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

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

Emission Units:

Less than 5 MMBtu/hr	NA
Equal to or greater than 5 MMBtu/hr and less than 10 MMBtu/hr	EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6
Equal to or greater than 10 MMBtu/hr	NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall only burn fuels as allowed in the Unit designed to burn gas 1 subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(I))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must meet the applicable requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) and (e) of 40 CFR 63.7500, stated in SC III.2 and SC III.3. The permittee must meet these requirements at all times the affected unit is operating. **(40 CFR 63.7500(a))**
 - a) The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to the boiler or process heater, for each boiler or process heater at the source. **(40 CFR 63.7500(a)(1))**
 - b) At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490, stated in SC IX.1), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**
2. As provided in 40 CFR 63.6(g), EPA may approve use of an alternative to the work practice standards. **(40 CFR 63.7500(b))**
3. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 of 40 CFR Part 63, Subpart DDDDD, or the operating limits in Table 4 of 40 CFR Part 63, Subpart DDDDD. Boilers and process heaters in the units designed to burn gas 1 fuel subcategory with a heat input capacity: **(40 CFR 63.7500(e))**
 - a) Greater than 5 MMBtu per hour and less than 10 MMBtu per hour must complete a tune-up every 2-years as specified in 40 CFR 63.7540, stated in SC IX.7. **(40 CFR 63.7500(e))**

4. The permittee must demonstrate initial compliance with the applicable work practice standards in Table 3 to 40 CFR Part 63, Subpart DDDDD within the applicable biennial schedule as specified in 40 CFR 63.7515(d), stated in SC III.5, following the initial compliance date specified in 40 CFR 63.7495(a), stated in SC IX.3. Thereafter, you are required to complete the applicable biennial tune-up as specified in 40 CFR 63.7515(d), stated in SC III.5. **(40 CFR 63.7510(g))**
5. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must:
(40 CFR 63.7515(d))
 - a) Conduct the first biennial tune-up no later than 25-months after the initial startup of the new or reconstructed boiler or process heater.
 - b) Conduct a biennial performance tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.7.b. Each biennial tune-up specified in 40 CFR 63.7540(a)(11) must be conducted no more than 25-months after the previous tune-up.

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The heat input capacity of each hot water generator in FGBOILERMACT shall not be equal to or greater than 10 MMBtu per hour. **(40 CFR Part 63, Subpart DDDDD)**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(40 CFR 63.7560(b))**

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

VII. REPORTING

1. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545, both stated in SC VII.5 through SC VII.6, and in Subpart A of 40 CFR Part 63. **(40 CFR 63.7495(d))**
2. The permittee must report each instance in which they did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that applies. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII.7. **(40 CFR 63.7540(b))**
3. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**
4. As specified in 40 CFR 63.9(b)(4) and (5), if the permittee starts up the new or reconstructed affected source on or after January 31, 2013, the permittee must submit an Initial Notification not later than 15-days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**
5. If the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to 40 CFR Part 63, Subpart DDDDD, and the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of 40 CFR 63.7545, as listed below. **(40 CFR 63.7545(f))**
 - Company name and address. **(40 CFR 63.7545(f)(1))**
 - a) Identification of the affected unit. **(40 CFR 63.7545(f)(2))**
 - b) Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. **(40 CFR 63.7545(f)(3))**
 - c) Type of alternative fuel that the permittee intends to use. **(40 CFR 63.7545(f)(4))**
 - d) Dates when the alternative fuel use is expected to begin and end. **(40 CFR 63.7545(f)(5))**
6. If the permittee has switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30-days of the switch/change. The notification must identify: **(40 CFR 63.7545(h))**
 - a) The name of the owner or operator of the affected source, as defined in 40 CFR 63.7490, stated in SC IX.1, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice. **(40 CFR 63.7545(h)(1))**
 - b) The currently applicable subcategory under 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(h)(2))**
 - c) The date upon which the fuel switch or physical change occurred. **(40 CFR 63.7545(h)(3))**
7. The permittee must submit each report in Table 9 of 40 CFR Part 63, Subpart DDDDD that applies. **(40 CFR 63.7550(a))**
8. Unless the EPA Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report, according to paragraph (h) of 40 CFR 63.7550, stated in SC VII.10, by the date in Table 9 of 40 CFR Part 63, Subpart DDDDD and according to the requirements in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below. For units that are subject only to a requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10), stated in SC IX.7.a, or a biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.7.b, and not subject to emission limits or operating limits, the permittee may submit only an annual or biennial, as applicable, as specified in paragraphs (b)(1) through (4) of 40 CFR 63.7550, as listed below, instead of a semi-annual compliance report. **(40 CFR 63.7550(b))**

- a) When submitting a biennial compliance report, the first compliance report must cover the period beginning on the compliance date specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 2 years, as applicable, after the compliance date that is specified in 40 CFR 63.7495. **(40 CFR 63.7550(b)(1))**
 - b) The first biennial compliance report must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(2), 40 CFR 63.7550(b)(5))**
 - c) Each subsequent biennial compliance report must cover the applicable 2-year periods from January 1 to December 31. **(40 CFR 63.7550(b)(3))**
 - d) Each subsequent biennial compliance report must be postmarked or submitted no later than March 15. **(40 CFR 63.7550(b)(4), 40 CFR 63.7550(b)(5))**
9. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. **(40 CFR 63.7550(c))**
- a) If the facility is subject to the requirements of a tune up the permittee must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii), (xiv), and (xvii) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
 - b) 40 CFR 63.7550(c)(5) is as follows:
 - i. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - ii. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - iii. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
 - iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a biennial tune-up according to 40 CFR 63.7540(a)(11), stated in SC IX.7.b. Include the date of the most recent burner inspection if it was not done biennially and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
 - v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**
10. The permittee must submit the reports according to the procedures specified in paragraph (h)(3) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(h))**
- a) The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's CDX.) The permittee must use the appropriate electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR Part 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90-days after the form becomes available in CEDRI. **(40 CFR 63.7550(h)(3))**

VIII. STACK/VENT RESTRICTION(S)

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

NA

IX. OTHER REQUIREMENT(S)

1. 40 CFR Part 63, Subpart DDDDD applies to new or reconstructed affected sources as described in paragraph (a)(2) of 40 CFR 63.7490, as listed below. **(40 CFR 63.7490(a))**
 - a) The affected source of 40 CFR Part 63, Subpart DDDDD is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in 40 CFR 63.7575, located at a major source. **(40 CFR 63.7490(a)(2))**

2. A boiler or process heater is:
 - a) New if the permittee commences construction of the boiler or process heater after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commences construction. **(40 CFR 63.7490(b))**
 - b) Reconstructed if the permittee meets the reconstruction criteria as defined in 40 CFR 63.2, the permittee commences reconstruction after June 4, 2010, and the permittee meets the applicability criteria at the time the permittee commence reconstruction. **(40 CFR 63.7490(c))**
3. If the permittee has a new or reconstructed boiler or process heater, the permittee must comply with 40 CFR Part 63, Subpart DDDDD upon startup of each boiler or process heater. **(40 CFR 63.7495(a))**
4. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7505(a))**
5. For affected sources, as defined in 40 CFR 63.7490, that switch subcategory consistent with 40 CFR 63.7545(h), stated in SC VII.6, after the initial compliance date, the permittee must demonstrate compliance within 60 days of the effective date of the switch, unless the compliance demonstration for this subcategory has been conducted within the previous 12 months. **(40 CFR 63.7510(k))**
6. For affected sources (as defined in 40 CFR 63.7490, stated in SC IX.1) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi), stated in SC IX.7.a, and the schedule described in 40 CFR 63.7540(a)(13), stated in SC IX.7.c, for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**
7. The permittee must demonstrate continuous compliance with the work practice standards in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))**
 - a) If the boiler or process heater has a heat input capacity of 10 MMBtu per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. The tune-up must be conducted while burning the type of fuel that provided the majority of the heat input to the boiler or process heater over the 12-months prior to the tune-up. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. **(40 CFR 63.7540(a)(10))**
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36-months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36-months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
 - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
 - v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**

- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a)(10)(vi))**
 - (1) The concentrations of CO in the effluent stream in ppm by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - (2) A description of any corrective actions taken as a part of the tune-up. **40 CFR 63.7540(a)(10)(vi)(B))**
 - (3) The type and amount of fuel used over the 12-months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
 - b) If the boiler or process heater has a heat input capacity of less than 10 MMBtu per hour (except as specified in paragraph (a)(12) of 40 CFR 63.7540), the permittee must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540 to demonstrate continuous compliance. **(40 CFR 63.7540(a)(11))**
 - c) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30-calendar days of startup. **(40 CFR 63.7540(a)(13))**
8. Table 10 of 40 CFR Part 63, Subpart DDDDD shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 applies to the permittee. **(40 CFR 63.7565)**

Footnotes:

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

FGNGEQUIP FLEXIBLE GROUP CONDITIONS
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DESCRIPTION

All new natural gas-fired equipment installed at the Detroit-Hamtramck Assembly Plant as part of the reconstructed automotive manufacturing process, including dock heaters, hot water generators, cure ovens, RTOs, and Air Handling Units/Air Supply Houses.

Emission Unit: EUELPO, EUPRIMER, EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6, EUHWG1, EUHWG2, EUHWG3, EUHWG4, EUHWG5, EUHWG6, EUNGHEAT

POLLUTION CONTROL EQUIPMENT

NA

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 FGNGEQUIP (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 any equipment in FGNEQUIP, with the exception of the additional dock heaters, unless that equipment has a NOx emission factor of less than or equal to 72 pounds per one million cubic feet of combusted natural gas. (R 336.1205, R 336.1225, R 336.2802(d), R 336.2902(2), 40 CFR 52.21(c) & (d))

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep records of vendor guarantees for NOx emission rates for all natural gas combustion equipment in FGNGEQUIP. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1225, R 1702(a), 40 CFR 52.21(c) & (d))

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. SVGMPAINT1 (Paint Dock Heater 1)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVGMPAINT2 (Paint Dock Heater 2)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVGMPAINT3 (Paint Dock Heater 3)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVA100DH1 (A100 Dock Heater 1)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVA100DH2 (A100 Dock Heater 2)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVA100DH3 (A100 Dock Heater 3)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVA100DH4 (A100 Dock Heater 4)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVA100DH5 (A100 Dock Heater 5)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVA100DH6 (A100 Dock Heater 6)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVA100DH7 (A100 Dock Heater 7)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVA100DH8 (A100 Dock Heater 8)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVA100DH9 (A100 Dock Heater 9)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
13. SVA100DH10 (A100 Dock Heater 10)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
14. SVA100DH11 (A100 Dock Heater 11)*	6	30	R 336.1225, 40 CFR 52.21(c) & (d)
15. SVR57 (PTED HWG Exhaust)	20	75	R 336.1225, 40 CFR 52.21(c) & (d)
16. SVR58 (Penthouse HWG Exhaust)	30	75	R 336.1225, 40 CFR 52.21(c) & (d)
*This stack exhausts horizontally			

IX. OTHER REQUIREMENT(S)

1. Within 30 days of startup, the permittee shall label all natural gas stacks with its respective name in a manner acceptable to the AQD District Supervisor. **(R 336.1205)**

Footnotes:

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

FGTOPCOAT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

An automatic topcoat spray application process with a maximum of six modular topcoat processes, each consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, a clearcoat observation zone, and a natural gas-fired curing oven

Emission Units: EUTOPCOAT1, EUTOPCOAT2, EUTOPCOAT3, EUTOPCOAT4, EUTOPCOAT5, EUTOPCOAT6

POLLUTION CONTROL EQUIPMENT

Spray booth overspray (basecoat and clearcoat) is controlled by a waterwash particulate control system. Exhaust from all basecoat and clearcoat spray booths and all observation zones is controlled by a bank of three RTOs (RTO 110, RTO 120, and RTO 130) for control of VOCs. Exhaust from all basecoat heated flash-off areas and all topcoat curing ovens is exhausted to a bank of two RTOs (RTO 210 and RTO 220) for control of VOCs. The spot reprocess area is exhausted through downdraft ventilation through a dry filter particulate control system and vented back into the in-plant environment.

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 any coating booth, observation zone, heated flash-off area, or curing oven portion of FGTOPCOAT unless the appropriate RTO portions of FGCONTROLS as specified in Appendix A are installed, maintained and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes: **(R 336.1225, R 336.1702, R 336.1910)**
 - a) A minimum retention time of 0.5 seconds.
 - b) Maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed.
 - c) After the acceptable performance test has been performed, maintaining the RTO combustion chamber temperature, based upon a three-hour average, at the temperature during the most recent control device performance test which demonstrated compliance with either:
 - i. During the initial low production period as specified in FGAUTOASSEMBLY SC III.1, a VOC outlet concentration of less than or equal to 7 ppm as propane, or
 - ii. After the initial low production period ends as specified in FGAUTOASSEMBLY SC III.1, a minimum 95 percent destruction efficiency.
2. The permittee shall not operate any spray booth portions of FGTOPCOAT unless the associated waterwash system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the waterwash system includes conducting the required monitoring and recordkeeping pursuant to FGAUTOASSEMBLY, SC VI.2. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

V. TESTING/SAMPLING

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

1. The VOC content, water content and density of any coating or material as applied in EUTOPCOAT, 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. SVR17 (Mod #1 Flue Exhaust)	10	75	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVR20 (Mod #1 Oven Cooler)	40	75	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVR22 (Mod #2 Flue Exhaust)	10	75	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVR25 (Mod #2 Oven Cooler)	40	75	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVR27 (Mod #3 Flue Exhaust)	10	75	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVR30 (Mod #3 Oven Cooler)	40	75	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVR32 (Mod #4 Flue Exhaust)	10	75	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVR35 (Mod #4 Oven Cooler)	40	75	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVR37 (Mod #5 Flue Exhaust)	10	75	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVR40 (Mod #5 Oven Cooler)	40	75	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVR42 (Mod #6 Flue Exhaust)	10	75	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVR45 (Mod #6 Oven Cooler)	40	75	R 336.1225, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
13. SVR55 (Combined stack of three-bank RTOs serving all booths and all observation zones)	108	126	R 336.1225, 40 CFR 52.21(c) & (d)
14. SVR56 (Combined stack of two-bank RTOs serving ELPO tank, all ovens and all heated flash)	90	126	R 336.1225, 40 CFR 52.21(c) & (d)

15. The exhaust gases from the spot reprocess areas of FGTOPCOAT shall not be directly discharged to the ambient air at any time. **(R 336.1225, 40 CFR 52.21(c) & (d))**

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all 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 FGTOPCOAT, except as provided in FGAUTOASSEMBLY SC IX.2. **(40 CFR 60.390)**

Footnotes:

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

FGNETTING2020 FLEXIBLE GROUP CONDITIONS
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DESCRIPTION

These emission units were used to establish creditable emissions for the 2020 netting analysis performed for the new automotive assembly line.

Emission Units: EUPRETREATMENT, EUELPOSYSTEM, EUPRIMERSURFACER, EUTOPCOATSYSTEM, EUFINALREPAIR, EUSEALERADH, EUBOOTHCLEAN, EUPURGE, EUMISCSOLV, all gasoline fuel filling operations, and all gasoline storage tanks containing fuel for vehicle fuel filling operations

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

1. The permittee shall submit a written notification stating the date that operation of EUPRETREATMENT, EUELPOSYSTEM, EUPRIMERSURFACER, EUTOPCOATSYSTEM, EUFINALREPAIR, EUSEALERADH, EUBOOTHCLEAN, EUPURGE, EUMISCSOLV, all gasoline fuel filling operations, and all gasoline storage tanks containing fuel for vehicle fuel filling operations have permanently ceased within 7 days of July 1, 2020, or the date that construction commences on the new automotive assembly line, whichever is earlier. (R 336.2802(d), R 336.2902(2))

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 permanently cease operation of EUPRETREATMENT, EUELPOSYSTEM, EUPRIMERSURFACER, EUTOPCOATSYSTEM, EUFINALREPAIR, EUSEALERADH, EUBOOTHCLEAN, EUPURGE, EUMISCSOLV, all gasoline fuel filling operations, and all gasoline storage tanks containing fuel for vehicle fuel filling operations by July 1, 2020, or the date that construction commences on the new automotive assembly line, whichever is earlier. **(R 336.2802(d), R 336.2902(2))**

Footnotes:

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

APPENDIX A RTO Operating Scenarios

Indicates that the Process is Operating
 Indicates that the Process is Not Operating

Scenario	1	2	3	4	5	6	7
ELPO Tank	ELPO Tank	ELPO Tank	ELPO Tank	ELPO Tank	ELPO Tank	ELPO Tank	ELPO Tank
ELPO Oven 1	ELPO Oven 1	ELPO Oven 1	ELPO Oven 1	ELPO Oven 1	ELPO Oven 1	ELPO Oven 1	ELPO Oven 1
ELPO Oven 2	ELPO Oven 2	ELPO Oven 2	ELPO Oven 2	ELPO Oven 2	ELPO Oven 2	ELPO Oven 2	ELPO Oven 2
Prime Booth	Prime Booth	Prime Booth	Prime Booth	Prime Booth	Prime Booth	Prime Booth	Prime Booth
Prime Oven 1	Prime Oven 1	Prime Oven 1	Prime Oven 1	Prime Oven 1	Prime Oven 1	Prime Oven 1	Prime Oven 1
Prime Oven 2	Prime Oven 2	Prime Oven 2	Prime Oven 2	Prime Oven 2	Prime Oven 2	Prime Oven 2	Prime Oven 2
TC Mod 1	TC Mod 1	TC Mod 1	TC Mod 1	TC Mod 1	TC Mod 1	TC Mod 1	TC Mod 1
TC Mod 2	TC Mod 2	TC Mod 2	TC Mod 2	TC Mod 2	TC Mod 2	TC Mod 2	TC Mod 2
TC Mod 3	TC Mod 3	TC Mod 3	TC Mod 3	TC Mod 3	TC Mod 3	TC Mod 3	TC Mod 3
TC Mod 4	TC Mod 4	TC Mod 4	TC Mod 4	TC Mod 4	TC Mod 4	TC Mod 4	TC Mod 4
TC Mod 5	TC Mod 5	TC Mod 5	TC Mod 5	TC Mod 5	TC Mod 5	TC Mod 5	TC Mod 5
TC Mod 6	TC Mod 6	TC Mod 6	TC Mod 6	TC Mod 6	TC Mod 6	TC Mod 6	TC Mod 6
Booth RTOs (3)	RTO	Yes	Yes	Yes	Yes	Yes	Yes
	RTO	No	Yes	Yes	Yes	Yes	Yes
	RTO	No	No	No	No	No	Yes
Oven RTOs (2)	RTO	Yes	Yes	Yes	Yes	Yes	Yes
	RTO	No	No	No	Yes	Yes	Yes

Note:
 When a process is "Operating" or "Not Operating", it is irrespective of the number designation.
 For example, in Scenario 2 above, the following would be operational:

- ELPO tank
- One ELPO oven (either of the two)
- Prime booth
- One Primer oven (either of the two)
- Two Topcoat Mods (any two out of six)
- Two booth RTOs (any two out of three)
- One oven RTO (either of the two)