

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

August 7, 2024

**PERMIT TO INSTALL**  
124-22B

**ISSUED TO**  
General Motors LLC Orion Assembly

**LOCATED AT**  
4555 Gidding Road  
Lake Orion, Michigan 48359

**IN THE COUNTY OF**  
Oakland

**STATE REGISTRATION NUMBER**  
B7227

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).

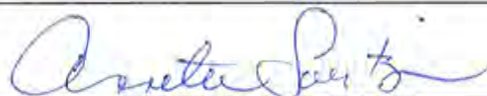
DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

**May 10, 2024**

DATE PERMIT TO INSTALL APPROVED:

**August 7, 2024**

SIGNATURE:



DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

PERMIT TO INSTALL

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## COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

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

## POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H <sub>2</sub> S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO <sub>x</sub>	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in diameter
PM <sub>2.5</sub>	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

## GENERAL CONDITIONS

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

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

## EMISSION UNIT SPECIAL CONDITIONS

### EMISSION UNIT SUMMARY TABLE

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

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUMETALWORKING	Equipment for the forming of metal panels for vehicle bodies with the use of lubricating oil.	TBD	FGAUTOASSEMBLY
EUPRETREAT	Pretreatment of vehicle surface to prepare it for coating, consisting of a series of washers, a series of dip tanks and rinse stages, and a deionized water rinse.	TBD	FGAUTOASSEMBLY, FGAUTOMACT
EUELPO	An electrodeposition coating process (ELPO) consisting of a coating dip tank, followed by a series of rinse tanks, and two (2) natural gas-fired ELPO curing ovens, each with a cooling zone. Repairs will take place in an ELPO sand booth to correct minor imperfections.	TBD	FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROL
EUPRIMER	A prep area, an automatic primer booth for application of solventborne main 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, FGAUTOMACT, FGCONTROL
EUTOPCOAT	An automatic topcoat spray application process with two parallel inline coating systems, each consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, an observation zone, two (2) natural gas-fired curing ovens, each with a cooling tunnel, and a spot reprocessing area.	TBD	FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROL
EUTUTONE	An automatic roof topcoat spray application process consisting of a solventborne tutone coating booth, a natural gas-fired curing oven, and a cooling tunnel.	TBD	FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROL
EUMISCSOLVENTS	Various cleaning solvents, miscellaneous solvents, and purge solvents used throughout the Orion Assembly Plant.	TBD	FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROL

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
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). This emission unit also includes sealers and adhesives applied in the body shop, battery assembly process, and general assembly area. Sealers and adhesives applied in the body shop, battery assembly, and general assembly areas are air-dried and emissions are emitted to the general in-plant environment.	TBD	FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROL
EUFLUIDFILL	Each new vehicle will be filled with various fluids such as antifreeze, brake fluid, and windshield washer fluid.	TBD	FGAUTOASSEMBLY
EUFNLRPR2022	Final repair operations including a coating area.	TBD	FGAUTOASSEMBLY, FGAUTOMACT, 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, FGAUTOMACT
EUMETANK	12,000-gallon capacity storage tank for the storage of windshield washer fluid.	1981	FGAUTOASSEMBLY
EUHWGPS1	Hot water generator with a maximum heat input rating of 8.5 MMBtu/hr located in the Paint Shop penthouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPS2	Hot water generator with a maximum heat input rating of 8.5 MMBtu/hr located in the Paint Shop penthouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPS3	Hot water generator with a maximum heat input rating of 8.5 MMBtu/hr located in the Paint Shop penthouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPS4	Hot water generator with a maximum heat input rating of 8.5 MMBtu/hr located in the Paint Shop penthouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPS5	Hot water generator with a maximum heat input rating of 8.5 MMBtu/hr located in the PTED area.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPS6	Hot water generator with a maximum heat input rating of 8.5 MMBtu/hr located in the PTED area.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPS7	Hot water generator with a maximum heat input rating of 8.5 MMBtu/hr located in the PTED area.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP



<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUHWGPH1	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH2	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH3	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH4	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH5	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH6	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH7	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH8	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH9	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGPH10	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in the Powerhouse.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGBAT1	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in Battery Assembly Complex.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGBAT2	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in Battery Assembly Complex.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUHWGBAT3	Hot water generator with a maximum heat input rating of 9.9 MMBtu/hr located in Battery Assembly Complex.	TBD	FGAUTOASSEMBLY, FGBOILERMACT, FGNGEQUIP
EUNGHEAT	All new natural gas-fired space heaters, air handling units (AHU), air supply houses (ASH), dock heaters and other miscellaneous heaters. This equipment was added as part of the 2022 automotive manufacturing project.	TBD	FGAUTOASSEMBLY, FGNGEQUIP
EUEMENG06	A 383 HP natural gas-fueled emergency engine with a model year of 2011 or later, and a displacement of <30 liters/cylinder.	TBD	FGEMENGINES
EUEMENG07	A 240 HP natural gas-fueled emergency engine with a model year of 2011 or later, and a displacement of <30 liters/cylinder.	TBD	FGEMENGINES

<b>Emission Unit ID</b>	<b>Emission Unit Description (Including Process Equipment &amp; Control Device(s))</b>	<b>Installation Date / Modification Date</b>	<b>Flexible Group ID</b>
EUEMENG08	A 383 HP natural gas-fueled emergency engine with a model year of 2011 or later, and a displacement of <30 liters/cylinder.	TBD	FGEMENGINES
EUEMENG09	A 240 HP natural gas-fueled emergency engine with a model year of 2011 or later, and a displacement of <30 liters/cylinder.	TBD	FGEMENGINES
EU-EMERGENCY ENGINE NATURAL GAS	Spark Ignition Natural Gas fueled emergency generator engine with a 469 HP rating. Subject to NESHAP ZZZZ and NSPS JJJJ.	2011	FG-NSPS JJJJ EMERGENCY > 100 HP BUT < 500 HP, FG-EXISTENGFP
EU-EMERGENCY ENGINE 2	Existing Compression Ignition Diesel fueled emergency generator engine with a 268 HP rating. Subject to NESHAP ZZZZ.	1981	FG-MACT ZZZZ – EXISTING EMERGENCY CI < 500 HP, FG-EXISTENGFP
EU-EMERGENCY ENGINE 4	Existing Compression Ignition Diesel fueled emergency generator engine with a 268 HP rating. Subject to NESHAP ZZZZ.	1981	FG-MACT ZZZZ – EXISTING EMERGENCY CI < 500 HP, FG-EXISTENGFP
EU-EMERGENCY ENGINE 5	Existing Compression Ignition Diesel fueled emergency generator engine with a 1,475 HP rating. Subject to NESHAP ZZZZ.	1981	FG-MACT ZZZZ – EXISTING EMERGENCY CI > 500 HP, FG-EXISTENGFP
EU-FIRE PUMP PH	Existing Compression Ignition Diesel fueled fire pump engine with a 288 HP rating. Subject to NESHAP ZZZZ.	1981	FG-MACT ZZZZ – EXISTING EMERGENCY CI < 500 HP, FG-EXISTENGFP
EU-NEWFIREPUMPA48	Compression Ignition Diesel fueled fire pump engine with a 175 HP rating. Subject to NESHAP ZZZZ and NSPS IIII.	2017	FG-NSPS IIII FIRE PUMP > 100 HP BUT < 500 HP, FG-EXISTENGFP

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.

EUMETALWORKING  
EMISSION UNIT CONDITIONS

**DESCRIPTION**

Equipment for the forming of metal panels for vehicle bodies with the use of lubricating oil.

**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 used in EUMETALWORKING, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer’s formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1225, R 336.1702, R 336.2908)

**VII. REPORTING**

NA

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

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

## **EUPRETREAT EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

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

**Flexible Group ID:** FGAUTOASSEMBLY, FGAUTOMACT

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

1. No materials in EUPRETREAT shall contain any VOCs or HAPs that are emitted from the process.  
(R 336.1702, R 336.2810, R 336.2908)

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

NA

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

NA

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

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

NA

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

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used in EUPRETREAT, 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)
2. The permittee shall keep a record, acceptable to the AQD district supervisor, demonstrating that any VOC and/or HAP compounds contained in the EUPRETREAT materials will not be emitted at the representative operating conditions. (R 336.1225, R 336.1702, R 336.2810, R 336.2908)

#### **VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVR3 (Entry Seal Exhaust)	20	76	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVR4 (Exhaust Stage 1B)	22	76	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVR5 (Exhaust Stage 4)	22	76	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

## **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.

**Flexible Group ID:** FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROLS

### **POLLUTION CONTROL EQUIPMENT**

A bank of two RTOs (Oven RTO 1 and Oven RTO 2) for control of VOC emissions from the coating tank and curing ovens. 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 electrodeposition tank and curing oven portions of EUELPO unless the appropriate RTO portions of FGCONTROL are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the RTO combustion chamber temperature shall be maintained at the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.2810, R 336.2908)**

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

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

1. The VOC content, water content and density of the resin, pigment, and additives, as added to the 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, R 336.2810, R 336.2908)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used in EUDELPO, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2810, R 336.2908)**

## **VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVR9 (Oven Cooler #1)	62	90	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVR11 (Oven Cooler #2)	62	90	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVR1 (Combined stack of two- bank RTOs serving ELPO tank, all ovens, and all heated flash)	88	125	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

4. The sand booth portion of EUDELPO shall not be directly discharged to the ambient air at any time. **(R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

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

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

### **Footnotes:**

<sup>1</sup> 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 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 four RTOs (Booth RTOs 1-4) for control of VOCs. Primer curing oven emissions are exhausted to a bank of two RTOs (Oven RTOs 1 & 2) for control of VOC emissions. The cooling tunnels are exhausted to the atmosphere. The primer sanding repair 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 the coating booth, ambient flash, observation zone, or curing oven portions of EUPRIMER unless the appropriate RTO portions of FGCONTROL are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the RTO combustion chamber temperature shall be maintained at the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.2810, R 336.2908)**
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, R 336.2803, R 336.2804, R 336.2810)**
3. The permittee shall not operate the primer sanding repair process portion of EUPRIMER unless the dry filters are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dry filters means that the filters are fitted snugly without gasps and holes. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

## **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 EUPRIMER, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2810, R 336.2908)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used in EUPRIMER, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2810, R 336.2908)**

## **VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVR14 (Oven Cooler #1)	56	91	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVR15 (Oven Cooler #2)	56	91	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVR1 (Combined stack of two-bank RTOs serving ELPO tank, all ovens, and all heated flash)	88	125	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SVR2 (Combined stack of four-bank RTOs serving all booths and all observation zones)	116	125	R 336.1225, R 336.2803, R 336.2804, 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, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

**IX. OTHER REQUIREMENT(S)**

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

**Footnotes:**

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

## **EUTOPCOAT FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

An automatic topcoat spray application process with two parallel inline coating systems, each consisting of a waterborne basecoat coating booth, a basecoat heated flash-off area, a solventborne clearcoat coating booth, an observation zone, two (2) natural gas-fired curing ovens, each with a cooling tunnel, and a spot reprocessing area.

**Flexible Groups:** FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROLS

### **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 four RTOs (Booth RTOs 1-4) 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 (Oven RTOs 1 & 2) 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, or curing oven portion of EUTOPCOAT unless the appropriate RTO portions of FGCONTROL are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the RTO combustion chamber temperature shall be maintained at the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.2810, R 336.2908)**
2. The permittee shall not operate any spray booth portions of EUTOPCOAT 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 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**
3. The permittee shall not operate any spot reprocess unless the dry filters are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dry filters means that the filters are fitted snugly without gasps and holes. **(R 336.1205, R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

## **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, R 336.2810, R 336.2908)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used in EUTOPCOAT, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2810, R 336.2908)**

## **VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVR18 (TC#1 HF Heater Box #1 Flue Exhaust)	12	105	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVR19 (TC#1 HF Heater Box #2 Flue Exhaust)	12	105	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVR22 (TC#1 Oven #1 Cooler Exhaust)	56	91	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SVR23 (TC#1 Oven #2 Cooler Exhaust)	56	91	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SVR26 (TC#2 HF Heater Box #1 Flue Exhaust)	12	105	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6. SVR27 (TC#2 HF Heater Box #2 Flue Exhaust)	12	105	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
7. SVR30 (TC#2 Oven #3 Cooler Exhaust)	56	91	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
8. SVR31 (TC#2 Oven #4 Cooler Exhaust)	56	91	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
9. SVR1 (Combined stack of two-bank RTOs serving ELPO tank, all ovens and all heated flash)	88	125	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
10. SVR2 (Combined stack of four-bank RTOs serving all booths and all observation zones)	116	125	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

11. The exhaust gases from the spot reprocess areas of EUTOPCOAT shall not be directly discharged to the ambient air at any time. **(R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

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

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

#### **Footnotes:**

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

## **EUTUTONE FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

An automatic roof-only topcoat spray application process consisting of a solventborne monocoat coating booth, an observation zone, a natural gas-fired curing oven, and a cooling tunnel.

**Flexible Groups:** FGAUTOASSEMBLY, FGAUTOMACT, FGCONTROLS

### **POLLUTION CONTROL EQUIPMENT**

Spray booth overspray is controlled by a dry filter particulate control system. Exhaust from the tutone booth and observation zone is controlled by a bank of four RTOs (Booth RTOs 1-4) for control of VOCs. Exhaust from the tutone curing oven is exhausted to a bank of two RTOs (Oven RTOs 1 & 2) for control of VOCs.

#### **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, observation zone, or curing oven portions of EUTUTONE unless the appropriate RTO portions of FGCONTROL are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the RTO combustion chamber temperature shall be maintained at the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.2810, R 336.2908)**
2. The permittee shall not operate the spray booth portion of EUTUTONE unless the associated dry filter system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the dry filter system includes conducting the required monitoring and recordkeeping pursuant to FGAUTOASSEMBLY, SC VI.2. **(R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)**

#### **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 EUTUTONE, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2810, R 336.2908)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used in EUTOPCOAT, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2810, R 336.2908)**

## **VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVR34 (Tutone Oven Cooler Exhaust)	56	91	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVR1 (Combined stack of two-bank RTOs serving ELPO tank, all ovens and all heated flash)	88	125	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVR2 (Combined stack of four-bank RTOs serving all booths and all observation zones)	116	125	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

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

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

### **Footnotes:**

<sup>1</sup>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 Orion Assembly Plant.

**Flexible Group ID:** FGAUTOASSEMBLY, FGCONTROLS, FGAUTOMACT

### **POLLUTION CONTROL EQUIPMENT**

The portion of solventborne purge used inside the primer, clearcoat, and tutone 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 four RTOs (Booth RTOs 1-4). The waterborne purge used in the basecoat spraybooth during the vehicle painting operation is controlled by a bank of four RTOs (Booth RTOs 1-4).

#### **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 purging operations in the coating booth portions of EUPRIMER, EUTOPCOAT, and EUTUTONE during vehicle painting operation unless the appropriate RTO portions of FGCONTROL are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the RTO combustion chamber temperature shall be maintained at the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. (R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.2810, R 336.2908)

#### **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 used in EUMISCSOLVENTS, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1225, R 336.1702, R 336.2810, R 336.2908)

## **VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVPURGERECL (Purge Solvent Reclaim Tank)	6	56	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVR2 (Combined stack of four-bank RTOs serving all booths and all observation zones)	116	125	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

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

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

### **Footnotes:**

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

## **EUSEALERS EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

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 a bank of two RTOs (Oven RTOs 1 and 2). Sealers and adhesives applied in the body shop, battery assembly, 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 (Oven RTOs 1 and 2) 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 FGCONTROL are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each respective RTO includes maintaining a minimum RTO combustion chamber temperature at the manufacturer's recommended temperature until an acceptable performance test has been performed, after which the RTO combustion chamber temperature shall be maintained at the temperature during the most recent control device performance test which demonstrated compliance with a minimum 95 percent destruction efficiency based upon a three-hour average, and a minimum retention time of 0.5 seconds. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910, R 336.2810, R 336.2908)**

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

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

1. The VOC content, water content and density of 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, R 336.2810, R 336.2908)**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used in EUSEALERS, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer’s formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2810, R 336.2908)**

**VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVR1 (Combined stack of two-bank RTOs serving ELPO tank, all ovens and all heated flash)	88	125	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

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

**Footnotes:**

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

**EUFLUIDFILL**  
**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

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 used in EUFLUIDFILL, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer’s formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1225, R 336.1702, R 336.2810, R 336.2908)

**VII. REPORTING**

NA

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

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

## **EUFNLRPR2022 EMISSION UNIT CONDITIONS**

### **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 EUFNLRPR2022 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, R 336.2803, R 336.2804, R 336.2810)**

#### **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 EUFNLRPR2022, shall be determined using federal Reference Test Method 24 or an alternative approved by the AQD District Supervisor. Alternatively, the VOC content may be determined from manufacturer's formulation data. If the tested and the formulation values should differ, the tested results shall be used to determine compliance. Upon request of the AQD District Supervisor, the VOC content, water content and density of any coating or material shall be verified using federal Reference Test Method 24. **(R 336.1702, R 336.2004, R 336.2040, R 336.2041, R 336.2810, R 336.2908)**

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

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

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used in EUFNLRPR2022, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1225, R 336.1702, R 336.2810, R 336.2908)**

#### **VII. REPORTING**

NA

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

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVFR1 (Final Repair Stack 1)	46	50	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVFR2 (Final Repair Stack 2)	46	50	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVFR3 (Final Repair Stack 3)	58	50	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

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

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63 Subpart A and Subpart IIII, as they apply to EUFNLRPR2022. **(40 CFR Part 63, Subparts A and Subpart IIII)**

**Footnotes:**

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



## **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, R 336.2810, R 336.2908)**

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

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

1. The permittee shall 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, R 336.2810, R 336.2908)**

#### **VII. REPORTING**

NA

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

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

NA

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

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

#### **Footnotes:**

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

## 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 Orion Assembly Plant.	EUMETALWORKING, EUPRETREAT, EUELPO, EUPRIMER, EUTOPCOAT, EUTUTONE, EUMISCSOLVENTS, EUSEALERS, EUFLUIDFILL, EUFNLRRPR2022, EUGLASSBOND, EUMETANK, EUHWGPS1, EUHWGPS2, EUHWGPS3, EUHWGPS4, EUHWGPS5, EUHWGPS6, EUHWGPS7, EUHWGPH1, EUHWGPH2, EUHWGPH3, EUHWGPH4, EUHWGPH5, EUHWGPH6, EUHWGPH7, EUHWGPH8, EUHWGPH9, EUHWGPH10, EUHWGBAT1, EUHWGBAT2, EUHWGBAT3, EUNGHEAT
FGCONTROLS	<p>Control equipment associated with the reconstructed automotive manufacturing process at the Orion Assembly Plant.</p> <p>Two banks of RTOs used for control of VOC emissions from the ELPO tank, primer spray booth, tutone spray booth, all basecoat and clearcoat spray booths, all heated flash-off areas, all observation zones, and all curing ovens. Waterwash on all primer, basecoat, and clearcoat spray booths. Dry filter particulate control on all final repair and tutone booths.</p>	EUELPO, EUPRIMER, EUTOPCOAT, EUTUTONE, EUMISCSOLVENTS, EUSEALERS, EUFNLRRPR2022

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGAUTOMACT	Each new, reconstructed, or existing affected source as defined in Title 40 of the Code of Federal Regulations (CFR), Part 63.3082, that is located at a facility which applies topcoat to new automobile or new light duty truck bodies or body parts for new automobiles or new light duty trucks; AND/OR in which you choose to include, pursuant to 40 CFR 63.3082(c), any coating operations which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles; parts intended for use in new automobiles, new light duty trucks or new other motor vehicles; or aftermarket repair or replacement parts for automobiles, light duty trucks or other motor vehicles; and that is a major source, is located at a major source, or is part of a major source of emissions of hazardous air pollutants (HAPs) except as provided in 63.3081(c). This includes equipment covered by other permits, grandfathered equipment, and exempt equipment.	EUPRETREAT, EUELPO, EUPRIMER, EUTOPCOAT, EUTUTONE, EUGLASSBOND, EUMISCSOLVENTS, EUSEALERS, EUFNLRPR2022, EURESS
FGBOILERMACT	Requirements for boilers and process heaters with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn gaseous fuels.	EUHWGPS1, EUHWGPS2, EUHWGPS3, EUHWGPS4, EUHWGPS5, EUHWGPS6, EUHWGPS7, EUHWGPH1, EUHWGPH2, EUHWGPH3, EUHWGPH4, EUHWGPH5, EUHWGPH6, EUHWGPH7, EUHWGPH8, EUHWGPH9, EUHWGPH10, EUHWGBAT1, EUHWGBAT2, EUHWGBAT3,
FGNGEQUIP	All new natural gas-fired equipment installed at the GM Orion 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.	EUELPO, EUPRIMER, EUTOPCOAT, EUTUTONE, EUHWGPS1, EUHWGPS2, EUHWGPS3, EUHWGPS4, EUHWGPS5, EUHWGPS6, EUHWGPS7, EUHWGPH1, EUHWGPH2, EUHWGPH3, EUHWGPH4, EUHWGPH5, EUHWGPH6, EUHWGPH7, EUHWGPH8, EUHWGPH9, EUHWGPH10, EUHWGBAT1, EUHWGBAT2, EUHWGBAT3, EUNGHEAT
FGEMENGINES	Four <500 horsepower (hp) natural gas-fueled emergency engines with model years of 2011 or later, and displacements of <30 liters/cylinder.	EUEMENG06, EUEMENG07, EUEMENG08, EUEMENG09
FGEXISTENGFP	Four emergency engines and two fire pumps at the GM Orion facility. These emission units were existing for the 2022 project.	EU-EMERGENCY ENGINE NATURAL GAS, EU-EMERGENCY ENGINE 2, EU-EMERGENCY ENGINE 4, EU-EMERGENCY ENGINE 5, EU-FIRE PUMP PH, EU-NEWFIREPUMPA48

## FGAUTOASSEMBLY FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

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

**Emission Unit:** EUMETALWORKING, EUPRETREAT, EUELPO, EUPRIMER, EUTOPCOAT, EUTUTONE, EUMISCSOLVENTS, EUSEALERS, EUFLUIDFILL, EUFNLRPR2022, EUGLASSBOND, EUMETANK, EUHWGPS1, EUHWGPS2, EUHWGPS3, EUHWGPS4, EUHWGPS5, EUHWGPS6, EUHWGPS7, EUHWGPH1, EUHWGPH2, EUHWGPH3, EUHWGPH4, EUHWGPH5, EUHWGPH6, EUHWGPH7, EUHWGPH8, EUHWGPH9, EUHWGPH10, EUHWGBAT1, EUHWGBAT2, EUHWGBAT3, EUNGHEAT

### POLLUTION CONTROL EQUIPMENT

One bank of four RTOs (Booth RTOs 1, 2, 3, and 4) used for control of VOC exhaust from primer booth, all basecoat booths, all clearcoat booths, tutone booth, and all observation zones. One bank of two RTOs (Oven RTOs 1 and 2) used for control of VOC emissions from the ELPO tank, ELPO ovens, primer curing ovens, basecoat heated flash-off areas, all topcoat curing ovens, and the tutone curing oven. Water wash particulate controls on the primer, basecoat, clearcoat, and tutone spray booths. Dry filter particulate control systems in the primer, topcoat, and final repair booths.

### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	415.1 tpy <sup>A,B</sup>	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 336.2810(2), R 336.2908(3)
2. VOC	2.9 pounds per job <sup>A</sup>	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 336.2810(2), R 336.2908(3)
3. PM	27.8 tpy <sup>A</sup>	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(4)
4. PM10	27.8 tpy <sup>A</sup>	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 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) & (d)
5. PM2.5	27.8 tpy <sup>A</sup>	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 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) & (d)
6. NOx	75.6 tpy <sup>A</sup>	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(4), R 336.2902(2), 40 CFR 52.21(c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
7. CO	88.2 tpy <sup>A</sup>	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)
8. SO <sub>2</sub>	0.63 tpy <sup>A</sup>	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. GHGs as CO <sub>2</sub> e	125,415 tpy <sup>A</sup>	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(j)
<sup>A</sup> This limit includes emissions from all sources at the Orion Plant, including combustion sources, with the exception of the four natural gas-fired emergency engines listed in FGEMENGINES, the Rechargeable Energy Storage System (RESS) batter assembly process, and the following equipment existing prior to the reconstruction of the automotive assembly line: the wastewater treatment plant, one natural gas-fired emergency generator engine, three diesel-fired emergency generator engines, two diesel-fired fire pump engines, and five landfill gas generators. <sup>B</sup> Beginning 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.					

## II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Natural Gas	2,100 Million standard cubic feet per year (MMSCF/yr) <sup>C</sup>	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(4), R 336.2803, R 336.2804, R 336.2810, R 336.2902(2), R 336.2908(3), 40 CFR 52.21(c) & (d), 40 CFR 52.21(j)
<sup>C</sup> This limit includes natural gas usage at all natural gas combustion sources at the Orion Assembly Plant, with the exception of the following equipment that was existing prior to the reconstruction of the automotive assembly line: the wastewater treatment plant and one natural gas-fired emergency generator engine. , SC IX.1.					

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall equip and maintain each primer, basecoat, and clearcoat spray coating booth with a waterwash particulate control system. The permittee shall equip and maintain each tutone spray coating booth with a dry filter particulate control system. (R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810)

## **V. TESTING/SAMPLING**

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

1. Within 365 days after producing the first saleable vehicle, 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 bank and a representative EUFNLPR2022 stack as identified in a complete test plan by testing at owner's expense, in accordance with Department requirements. Alternatively, for EUFNLPR2022, 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:

<b>Pollutant</b>	<b>Test Method Reference</b>
PM	40 CFR Part 60, Appendix A, Part 10 of the Michigan Air Pollution Control Rules
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 and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 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 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) & (d))**

2. Within 365 days after producing the first saleable vehicle, 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. A representative RTO or RTOs from each RTO bank may be tested if the permittee provides a demonstration acceptable 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 producing the first saleable vehicle, 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, EUTOPCOAT, and EUTUTONE, 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 336.2810, R 336.2908)**

4. Within 365 days after producing the first saleable vehicle, 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 capture efficiency through panel testing for each spray booth (including observation zone), flash-off area, 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. This capture efficiency testing includes materials (sealers, et al) applied after EUELPO 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 and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 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 336.2810, R 336.2908)**
5. Within 365 days after producing the first saleable vehicle, the permittee must conduct initial testing and, at least once every five years thereafter, the permittee shall verify the destruction efficiency of each RTO in FGAUTOASSEMBLY by testing at the owner's expense, in accordance with Department requirements. 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 and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 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 336.2810, R 336.2908)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep 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 from each of the emission units in FGAUTOASSEMBLY, including any material used in the spot repair booth of EUTOPCOAT.
  - 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, VOC loading, 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) 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, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub>, 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.1 or SC V.2.
- g) Calculations showing the GHGs as CO<sub>2e</sub> 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 336.1205, R 336.1225, R 336.2802(4), R 336.2803, R 336.2804, R 336.2810, R 336.2908(3), 40 CFR 52.21(c) & (d), 40 CFR 52.21(j))**

- 2. The permittee shall monitor the condition of each particulate control system based on the following:
  - a) Waterwash particulate control system of each primer, basecoat, and clearcoat spray booth through weekly visual inspections (except during weeks with no production).
  - b) Dry filter particulate control system of each repair and tutone spray booth through monthly visual inspections (except during months with no production).

The permittee shall keep records of visual inspections of each particulate control system, which includes the dates and results of the inspections and the dates and reasons for repairs. All records shall be kept on file and made available to the Department upon request. **(R 336.1301, R 336.1331, R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) and (d))**

- 3. The permittee shall keep records on a calendar day basis of operation for EUELPO, EUPRIMER, EUTOPCOAT, EUTUTONE, and all RTOs during vehicle painting to determine proper operation of the appropriate RTO(s), including changes required due to RTO failure and/or process shutdowns. The records shall indicate the equipment and control devices operating for that calendar day. For any changes required due to RTO failure and/or process shutdowns, the permittee shall record the time of the change, the reasoning for the change, and what operational changes occurred for equipment and/or control devices as a result of the change. 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 336.2810(2), R 336.2908(3))**

## **VII. REPORTING**

- 1. For each emission unit (EU) and flexible group (FG) included in FGAUTOASSEMBLY, the permittee shall submit to the AQD District Supervisor, in an acceptable format, within 30 days following the end of the quarter in which the data was collected, the actual VOC, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, SO<sub>2</sub>, and GHGs as CO<sub>2e</sub> emission rates for each limit included in FGAUTOASSEMBLY. **(R 336.1205, R 336.1702, R 336.2802, R 336.2803, R 336.2804, R 336.2810, R 336.2902, R 336.2908, 40 CFR 52.21(c) & (d), 40 CFR 52.21(j))**
- 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 producing the first saleable vehicle 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, general assembly, and battery assembly operations for the Orion 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 and SC I.2 provides a level of control that is at least equivalent to and not less stringent than the standards in 40 CFR 60.392, *et seq.* 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.9.
  - a) As a state only enforceable requirement<sup>1</sup>, 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)**
  - b) A demonstration that the change to the emission unit(s) does not result in a major modification that would be subject to R336.2802 or R336.2902. A demonstration that the change(s) do not result in a major modification under Part 18 or Part 19 of the Michigan Air Pollution Control Rules shall be kept on file for the life of the emission unit(s) affected by the modification and made available to the department upon request. **(R 336.2802, R 336.2902)**
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.9 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.<sup>1</sup>
  - 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) The installation of the new emission unit or units does not meet the criteria of a major modification pursuant to R 336.2802 nor R 336.2902.
  - e) 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.9 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.9 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 336.2803, R 336.2804, R 336.2810, R 336.2902, R 336.2908, 40 CFR 52.21(c) & (d), 40 CFR 52.21(j))**

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. 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 336.2803, R 336.2804, R 336.2810, R 336.2902, R 336.2908, 40 CFR 52.21(c) & (d), 40 CFR 52.21(j))**

**Footnotes:**

- <sup>1</sup> 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 Orion 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 primer, basecoat, and clearcoat spray booths. Dry filter particulate control on all final repair and tutone booths.

**Emission Unit:** EUELPO, EUPRIMER, EUTOPCOAT, EUTUTONE, EUMISCSOLVENTS, EUSEALERS, EUFNLRPR2022

### **POLLUTION CONTROL EQUIPMENT**

One bank of two RTOs (Oven RTOs 1 and 2) 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 four RTOs (Booth RTOs 1-4) used for control of the primer spray booth, all basecoat spray booths, all clearcoat spray booths, all topcoat observation zones, the tutone booth, and the tutone observation zone. The portion of solventborne purge used inside the primer, clearcoat, and tutone 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 four RTOs. The waterborne purge used in the basecoat spraybooths during the vehicle painting operation is controlled by the bank of four RTOs (Booth RTOs 1-4). Waterwash particulate control systems on primer, basecoat, and clearcoat spray booths. Dry filter particulate control systems on all final repair and tutone 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 after producing the first saleable vehicle 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.
  - d) A description of specific process operational scenarios for equipment controlled by the two RTO banks and a detailed explanation of how GM will ensure sufficient RTO capacity is available and utilized for each scenario.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.2810, R 336.2908, 40 CFR 52.21(c) & (d))**

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

NA

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

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

NA

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

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

1. The permittee shall install, maintain and operate in a satisfactory manner, combustion chamber temperature monitoring devices for the 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, R 336.2810, R 336.2908)**
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, R 336.2810, R 336.2908)**
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:
  - a) Validation of thermocouple accuracy or recalibration of each temperature thermocouple a minimum of once every 12 months. The thermocouple can be replaced in lieu of validation.
  - b) Perform a heat exchange/heat transfer media inspection a minimum of once every 18 months.
  - c) Perform an inspection of the valve seals condition and verify valve timing/synchronization a minimum of once every 18 months.

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

#### **VII. REPORTING**

NA

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

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

## 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, EUTOPCOAT, EUGLASSBOND, EUMISCSOLVENTS, EUSEALERS, EUFNLPR2022, EURESS

### POLLUTION CONTROL EQUIPMENT

RTO for EUELPO if complying with SC I.2 and I.5.b

#### 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.1, SC V.1, SC VI.3	40 CFR63.3090(a)
2. Organic HAP*	0.5 lb per GACS	Calendar Month	New/Reconstructed-FGMACT	SC III.1, SC V.1, SC VI.3	40 CFR63.3090(b)
3. Organic HAP	0.01 lb per lb of coating	Calendar Month	New/Reconstructed-SEALERS & ADHESIVES	SC III.1, SC V.1, SC VI.3	40 CFR63.3090(c)
4. Organic HAP	0.01 lb per lb of coating	Calendar Month	New/Reconstructed-Deadener Materials	SC III.1, SC V.1, SC VI.3	40 CFR63.3090(d)

- **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, 40 CFR Part 63, Subpart IIII, Table 5)**
- a) Each individual material added to EUELPO contains no more than 1.0 percent by weight of any organic HAP and no less than 0.10 percent by weight of any organic HAP in Table 5 of 40 CFR Part 63 Subpart IIII.
  - b) The emissions from all EUELPO bake ovens are captured and ducted to an oven RTO which achieves a minimum destruction efficiency of at least 95 percent (by weight).

#### II. MATERIAL LIMIT(S)

NA

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

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

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

2. The work practice plan shall not become part of the facility's Renewable Operating Permit (ROP). Revisions to the work practice plan likewise do not represent revisions to the facility's ROP. Copies of the current work practice plan and any earlier plan developed within the past 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 IIII)**
2. 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) Monthly records of the following:
    - i. For each coating or thinner used in FGMACT, or FGMACT with EUDELPO, 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))**
    - ii. For each material used in EUSEALERS, the mass used in each month and the mass organic HAP content. **(40 CFR 63.3130(c))**
    - iii. Calculations of the organic HAP emission rate for FGMACT, or FGMACT with EUDELPO, 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 EUDELPO. 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)**
    - iv. Calculation of the average monthly mass organic HAP content in pounds per pound of coating, for sealers/adhesives and deadener portions of EUSEALERS, each separately. **(40 CFR 63.3130(c), 40 CFR 63.3152)**
    - v. The name, volume, mass fraction organic HAP content and density of each cleaning material used. **(40 CFR 63.3130(d) - (f))**

## **VII. REPORTING**

1. For the emission rate without add-on controls, the permittee shall report a deviation, as specified in 40 CFR 63.3110(c)(6) and 40 CFR 63.3120(a)(6), as applicable, if the organic HAP emission rate for any 12-month compliance period exceeds the applicable emission limit specified in 40 CFR 63.3090. **(40 CFR 63.3152(b))**
2. The permittee shall submit the applicable notifications specified in 40 CFR 63.7(b) and (c), 40 CFR 63.8(f)(4), 40 CFR 63.9(b) through (e) and (h), and an initial notification and a notification of compliance status as specified in 40 CFR 63.3110. **(40 CFR 63.3110)**
3. 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))**

4. The permittee must submit the following:
- a) Initial notifications required in 40 CFR 63.9(b) and the notification of compliance status required in 40 CFR 63.9(h) and 40 CFR 63.3110(c) to the USEPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The permittee must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. **(40 CFR 63.3120(e))**
  - b) On and after January 5, 2021, or once the reporting template has been available on the CEDRI website for 1-year, whichever date is later, the semiannual compliance report required in 40 CFR 63.3920(a) to the USEPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The permittee must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the USEPA at the appropriate addresses listed in 40 CFR 63.13. Once the form has been available in CEDRI for 1 year begin submitting all subsequent reports via CEDRI. **(40 CFR 63.3120(f))**

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

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

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

#### **Footnotes:**

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

## FGBOILERMACT FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Requirements for boilers and process heaters with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn gaseous fuels.

#### **Emission Units:**

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels	NA
Greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burns gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels	EUHWGPS1, EUHWGPS2, EUHWGPS3, EUHWGPS4, EUHWGPS5, EUHWGPS6, EUHWGPS7, EUHWGPH1, EUHWGPH2, EUHWGPH3, EUHWGPH4, EUHWGPH5, EUHWGPH6, EUHWGPH7, EUHWGPH8, EUHWGPH9, EUHWGPH10, EUHWGBAT1, EUHWGBAT2, EUHWGBAT3

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

NA

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

1. The permittee must, for boilers or process heaters installed after June 4, 2010, with a heat input capacity of greater than 5 MMBTU/hr and less than 10 MMBTU/hr, complete an initial tune-up as specified in SC III.3 by no later than 25 months after initial startup. **(40 CFR 63.7510(g))**
2. The permittee must, for boilers or process heaters with a heat input capacity of greater than 5 MMBTU/hr and less than 10 MMBTU/hr, conduct a biennial tune-up of the boiler or process heater according to 40 CFR 63.7540(a)(11) no more than 25 months after the previous tune-up. **(40 CFR 63.7500(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(11), 40 CFR Part 63, Subpart DDDDD, Table 3.2)**
3. The permittee must conduct a tune-up of each boiler or process heater as specified in the following: **(40 CFR 63.7540(a)(11) or (12))**
  - a) 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 may delay the burner inspection until the next scheduled unit shutdown. 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))**
  - b) 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))**

- c) 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. **(40 CFR 63.7540(a)(10)(iii))**
  - d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
  - e) 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))**
4. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**
  5. At all times, the permittee must operate and maintain each small boiler or process heater, 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))**

#### **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 must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or 2 year compliance report or one-time energy assessment, as applicable, that the permittee submitted. **(40 CFR 63.7555(a)(1))**
2. The permittee must keep the records in a form suitable and readily available for expeditious review. **(40 CFR 63.7560(a))**
3. 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))**
4. 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. The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(c))**

#### **VII. REPORTING**

1. The permittee must submit boiler or process heater tune-up compliance reports to the appropriate AQD District Office and must be postmarked or submitted by March 15<sup>th</sup> of the year following the applicable 2-year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). If the reporting form is not available in CEDRI at the time the compliance report is

due, a hardcopy of the compliance report shall be submitted to EPA Region 5. **(40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))**

2. The permittee must include the following information in the compliance report. **(40 CFR 63.7550(c)(1))**
  - a) Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
  - b) Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
  - c) Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
  - d) Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
  - e) 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))**

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

NA

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

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and DDDDD)**

#### **Footnotes:**

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

## **FGNGEQUIP FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

All new natural gas-fired equipment installed at the Orion 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, EUTOPCOAT, EUTUTONE, EUHWGPS1, EUHWGPS2, EUHWGPS3, EUHWGPS4, EUHWGPS5, EUHWGPS6, EUHWGPS7, EUHWGPH1, EUHWGPH2, EUHWGPH3, EUHWGPH4, EUHWGPH5, EUHWGPH6, EUHWGPH7, EUHWGPH8, EUHWGPH9, EUHWGPH10, EUHWGBAT1, EUHWGBAT2, EUHWGBAT3, 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 FGNGEQUIP, with the exception of 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 336.1802(d), R 336.1902(2), 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. SVR36 (Paint Skid Cleaner Exhaust)*	32	76	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVR38 (Paint Mix Exhaust Fan)*	44	81	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVR49 (Sludge Room Exhaust Fan)*	50	76	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4-6. SVR56-58 (Paint Shop Penthouse Hot Water Generator Exhaust 1-3)	16	109	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
7-10. SVR59-62 (PTED Hot Water Generator Exhaust 1-4)	16	109	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
11-13. SVR50-52 (Sealer Storage Building Exhaust 1-3)*	48 x 36	12	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
14. SVR53 (PTED Storage H4 building exhaust)*	24 x 24	4	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
15. SVB1_B2 (Powerhouse HWGs 1-2 Exhaust)	36	98	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
16. SVB3_B4 (Powerhouse HWGs 3-4 Exhaust)	36	98	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
17. SVB5_B6 (Powerhouse HWGs 5-6 Exhaust)	36	98	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
18. SVB7_B8 (Powerhouse HWGs 7-8 Exhaust)	36	98	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
19. SVB9_B10 (Powerhouse HWGs 9-10 Exhaust)	36	98	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)



Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
20-22. SVBATB01-03 (Battery Assembly Complex HWG Exhaust 1-3)	20	84	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
23-32. SVASRSN1-10 (ASRS North Dock Heaters 1-10)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
33-55. SVGA_E1-23 (General Assembly East Dock Heaters 1-23)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
56-62. SVBODY_E1 – SVBODY_E7 (Body Shop East Dock Heaters 1-7)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
63-69. SVGA_N1-7 (General Assembly North Dock Heaters 1-7)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
70-73. SVBody2_1 – SVBody2_4 (Body Shop Dock Heaters 1-4)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
74-75. SVBAT_E1 – SVBAT_E2 (Battery Assembly Dock Heaters 1-2)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
76-78. SVBODY_C1 – SVBODY_C3 (Body Shop “C” Heaters 1-3)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
79-80. SVBODY_W1 – SVBODY_W2 (Body Shop West Dock Heaters 1-2)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
80-87. SVGA_S1-8 (General Assembly South Dock Heaters 1-8)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
88-97. SVBAT_W1 – SVBAT_W10 (Battery Assembly West Dock Heaters 1-10)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
98-100. SVASRSE1 – SVASRSE3 (ASRS East Dock Heaters 1-3)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
101-103. SVADMIN_UH1-3 (Admin Unit Heaters 1-3)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
104. SVHWH23 (Powerhouse Lochinvar East and West Boiler Stack)	18	108	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
105. SVADMIN (Administration Boiler)	12	37.75	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
106-115. SVGAEXIST1 – SVGAEXIST10 (General Assembly Dock Heaters 1-10)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
116-118. SVBODEXST1-SVBODEXST3 (Body Shop Dock Heaters 1-3)*	6	18	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
*These stacks are obstructed and may exhaust horizontally			

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

1. Within 30 days of startup, the permittee shall maintain a diagram on file showing the location of each stack with the appropriate Stack ID. **(R 336.1205)**

#### **Footnotes:**

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

## FGEMENGINES FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE), natural gas-fired lean burn emergency engine(s) greater than 25 HP (19 KW) but less than or equal to 500 HP (373 KW). The emergency SI ICE commenced construction after June 12, 2006 and was manufactured on or after January 1, 2009.

**Emission Units:** EUEMENG06, EUEMENG07, EUEMENG08, EUEMENG09

### POLLUTION CONTROL EQUIPMENT

NA

### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NOx	2.0 g/HP-hr - OR - 160 ppmvd at 15% at oxygen	Hourly	Each EU in FGEMENGINES	SC VI.2	40 CFR 60.4233(e), Table 1 to 40 CFR Subpart JJJJ
2. CO	4.0 g/HP-hr - OR - 540 ppmvd at 15% oxygen	Hourly	Each EU in FGEMENGINES	SC VI.2	40 CFR 60.4233(e), Table 1 to 40 CFR Subpart JJJJ
3. PM10	0.010 lb/MMBtu	Hourly	Each EU in FGEMENGINES	SC VI.2	R 336.2803, R 336.2804, R 336.2810
4. PM2.5	0.010 lb/MMBtu	Hourly	Each EU in FGEMENGINES	SC VI.2	R 336.2803, R 336.2804, R 336.2810
5. VOCs	1.0 g/HP-hr <sup>A</sup> - OR - 86 ppmvd at 15% oxygen <sup>A</sup>	Hourly	Each EU in FGEMENGINES	SC V.2, SC VI.5	R 336.1702(a), R 336.2810, 40 CFR 60.4233(e), 40 CFR Subpart JJJJ Table 1
6. GHGs as CO2e	291.4 tpy	12-month rolling time period as determined at the end of each calendar month	FGEMENGINES	SC VI.1	R 336.1205(1)(a) & (b). 40 CFR 52.21(j)

<sup>A</sup>For compliance purposes, this limit includes formaldehyde for PSD and Nonattainment New Source Review, but does not include formaldehyde for the NSPS.

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

NA

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

1. The permittee shall not operate any EU in FGEMENGINES 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), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21 (c) & (d), 40 CFR 52.21(j))**
2. The permittee may operate each EU in FGEMENGINES for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4243(d)(2))**
3. The permittee may operate any EU in FGEMENGINES up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in §60.4243(d). The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d)(3))**
4. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for each respective EU in FGEMENGINES:
  - 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 1068, as they apply to each respective EU in FGEMENGINES.

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. **(R 336.1702, 40 CFR 60.4243(a))**

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 each respective EU in FGEMENGINES and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions. **(R 336.1702, 40 CFR 60.4243(a) (2))**

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

1. The permittee shall equip and maintain each EU in FGEMENGINES with a non-resettable hours meter to track the operating hours. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) & (d), 40 CFR 52.21(j), 40 CFR 60.4237 (b))**
2. The maximum nameplate engine power of EUEMENG06 and EUEMENG08 shall not exceed 383 HP. The maximum nameplate engine power of EUEMENG07 and EUEMENG09 shall not exceed 240 HP. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) & (d), 40 CFR 52.21(j))**

## **V. TESTING/SAMPLING**

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

1. If any EU in FGEMENGINES 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 60.4244.

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 60.4243(a)(2), 40 CFR 60.4244)**

2. Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates from all EUs in FGEMENGINES by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 51, Appendix M. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 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 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c) & (d))**
3. Upon request of the AQD District Supervisor, 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 VOC mass emissions from all EUs in FGEMENGINES by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2810)**

## **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, R 336.2810, 40 CFR 52.21(c) & (d), 40 CFR 52.21(j), 40 CFR Part 60 Subpart JJJJ)**
2. The permittee shall keep, in a satisfactory manner, the following records for each EU in FGEMENGINES:
  - 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 60.4243)**

3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each EU in FGEMENGINES:
- 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 60.4243)**

4. The permittee shall keep, in a satisfactory manner, test reports for each EU in FGEMENGINES, as required by SC V.1, V.2, and SC V.3, 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, R 336.2803, R 336.2804, R 336.2810)**
5. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for each EU in FGEMENGINES, 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 each EU in FGEMENGINES, including what classified the operation as emergency. **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4243, 40 CFR 60.4245)**
6. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling CO<sub>2</sub>e mass emissions for FGEMENGINES, as required by SC I.6. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, 40 CFR 52.21(j))**

## **VII. REPORTING**

1. The permittee shall submit a notification specifying whether each EU in FGEMENGINES 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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVGEN06	6	11	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SVGEN07	6	11	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SVGEN08	6	11	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SVGEN09	6	11	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart JJJJ, as they apply to each EU in FGEMENGINES. **(40 CFR Part 60 Subparts A & JJJJ, 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 each EU in FGEMENGINES. **(40 CFR Part 63 Subparts A and ZZZZ, 40 CFR 63.6595)**

**Footnotes:**

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

## **FGOLDMACT FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

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

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

**Emission Unit:** EUMETANK

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

NA

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

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

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

NA

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

Records shall be maintained on file for a period of five years. **(R 336.1201(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 documentation, including a record of the annual average true vapor pressure of the total Table 1 Organic liquid, that verifies the storage tank is not required to be controlled under this subpart. The documentation shall be kept up-to-date and must be in a format acceptable to AQD. **(63.2343(b)(3))**



## **VII. REPORTING**

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

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

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

NA

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

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

### **Footnotes:**

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

## **FGEXISTENGFP FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Four emergency engines and two fire pumps at the GM Orion facility. These emission units were existing for the 2022 project.

**Emission Units:** EU-EMERGENCY ENGINE NATURAL GAS, EU-EMERGENCY ENGINE 2, EU-EMERGENCY ENGINE 4, EU-EMERGENCY ENGINE 5, EU-FIRE PUMP PH, EU-NEWFIREPUMPA48

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

1. The permittee shall burn only pipeline quality natural gas in EU-EMERGENCY ENGINE NATURAL GAS. **(R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**
2. The permittee shall burn only diesel fuel in EU-EMERGENCY ENGINE 2, EU-EMERGENCY ENGINE 4, EU-EMERGENCY ENGINE 5, EU-FIRE PUMP PH, and EU-NEWFIREPUMPA48. **(R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

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

1. The permittee shall not operate EU-EMERGENCY ENGINE 5 for more than 12 hours per calendar day for non-emergency use. **(R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. EU-EMERGENCY ENGINE 5 shall be equipped with a non-resettable hour meter. **(R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

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

NA

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

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

1. The permittee shall monitor and record the hours of operation during non-emergency use for EU-EMERGENCY ENGINE 5 on a calendar day basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of EU-EMERGENCY ENGINE 5, including what classified the operation as emergency. **(R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

#### **VII. REPORTING**

NA

### **VIII. STACK/VENT RESTRICTIONS**

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

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-DCEG (EU-EMERGENCY ENGINE NATURAL GAS)	3.5	8	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SV-E2EG (EU-EMERGENCY ENGINE 2)	8	7.5	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SV-E5EGA (EU-EMERGENCY ENGINE 5 Stack A)	12	10	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SV-E5EGB (EU-EMERGENCY ENGINE 5 Stack B)	12	10	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SV-PHFP (EU-FIRE PUMP PH)	7	9	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6. SV-ADMFP (EU-NEWFIREPUMPA48)	6	34	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
7. SV-E4EG (EU-EMERGENCY ENGINE 4)	8	8	R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

### **IX. OTHER REQUIREMENTS**

NA

#### **Footnotes:**

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