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

July 25, 2024
REVISED August 15, 2024

PERMIT TO INSTALL
89-24

ISSUED TO
Magna EV Structures – Michigan

LOCATED AT
1811 South Range Road
St. Clair, Michigan 48079

IN THE COUNTY OF
St. Clair

STATE REGISTRATION NUMBER
P1199

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 28, 2024**	
DATE PERMIT TO INSTALL APPROVED: **July 25, 2024**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS

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

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

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO_2e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H_2S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO_x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**

2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**

4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**

5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**

6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**

7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
    a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
    b) A visible emission limit specified by an applicable federal new source performance standard.
    c) A visible emission limit specified as a condition of this Permit to Install.

12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-ECOAT1	One e-coat coating line, consisting of dip coating in a mixed resin and pigment paste solution and dried in a natural gas-fired oven. This line also includes two natural gas-fired boilers. This line consists of 2 dip tanks.	*	FG-ECOAT
EU-ECOAT2	One e-coat coating line, consisting of dip coating in a mixed resin and pigment paste solution and dried in a natural gas-fired oven. This line consists of 3 dip tanks.		FG-ECOAT
EU-TOUCHUP	A touch-up station where coatings are applied manually with foam rollers, utilizing a 2-part coating.		FG-ECOAT
EU-PRETREAT1	Metal pretreatment operations consisting of dip tanks for cleaning, descaling, conditioning, phosphatizing, and sealing parts.		FG-PRETREAT
EU-PRETREAT2	Metal pretreatment operations consisting of dip tanks for cleaning, descaling, conditioning, phosphatizing, and sealing parts.		FG-PRETREAT
EU-BURNOFFOVEN	A burn-off oven used to remove cured paint from coating racks.		
EU-WELDING	Welding operations used for the assembly of metal parts including laser tactile, remote laser, spot laser, and MIG welding techniques. All welding operations are equipped with an overhead fume hood to direct particulate to one of seven dust collectors.		
EU-LASERCUT1	Laser cutting machine used for cutting metal parts. Particulate emissions are collected by a filter box.		FG-LASERCUT
EU-LASERCUT2	Laser cutting machine used for cutting metal parts. Particulate emissions are collected by a filter box.		FG-LASERCUT
EU-LASERCUT3	Laser cutting machine used for cutting metal parts. Particulate emissions are collected by a filter box.		FG-LASERCUT
EU-PARTSWASHER	One parts washer used for cleaning parts.		FG-MAINTENANCE
EU-SANDBLAST	A sand blasting cabinet.		FG-MAINTENANCE
EU-METALWORKING	Miscellaneous maintenance operations including milling, drilling, sawing, and grinding.		FG-MAINTENANCE

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

EU-BURNOFFOVEN
EMISSION UNIT CONDITIONS

DESCRIPTION

A burn-off oven used to remove cured paint from coating racks.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Secondary chamber (afterburner)

I. EMISSION LIMIT(S)

1. There shall be no visible emissions from EU-BURNOFFOVEN. **(R 336.1301, R 1910)**

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in EU-BURNOFFOVEN. **(R 336.1224, R 336.1225)**

2. The permittee shall not process any material in EU-BURNOFFOVEN other than cured coatings on metal parts, racks and/or hangers.[1] **(R 336.1224, R 336.1225)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not use EU-BURNOFF for the thermal destruction or removal of rubber, plastics, uncured paints, or any other materials containing halogens (chlorine, fluorine, bromine, etc.) such as plastisol, polyvinyl chloride (PVC), or Teflon.[1] **(R 336.1224, R 336.1225)**

2. The permittee shall not load any transformer cores, which may be contaminated with PCB-containing dielectric fluid, wire or parts coated with lead or any waste materials such as paint sludge or waste powder coatings into EU-BURNOFF.[1] **(R 336.1224, R 336.1225)**

3. The permittee shall operate EU-BURNOFF according to the manufacturer's recommendations. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-BURNOFFOVEN unless a secondary chamber or afterburner is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the secondary chamber or afterburner includes maintaining a minimum temperature of 1400°F and a minimum retention time of 0.5 seconds. **(R 336.1224, R 336.1225, R 336.1301, R 336.1910)**

2. The permittee shall not operate EU-BURNOFFOVEN unless an automatic temperature control system for the primary chamber and secondary chamber or afterburner is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1301, R 336.1910)**

3. The permittee shall not operate EU-BURNOFFOVEN unless an interlock system is installed, maintained, and operated in a satisfactory manner. The interlock system shuts down the primary chamber burner when the secondary chamber or afterburner is not operating properly, such as in the following scenarios: **(R 336.1224, R 336.1225, R 336.1301, R 336.1910)**
   a) Loss of afterburner flame,
   b) Low air flow, and
   c) Upon startup, preventing the primary chamber burner from firing until after the afterburner is greater than 1400°F.

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1301)**

2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to continuously monitor the temperature in the secondary chamber or afterburner portion of EU-BURNOFFOVEN and record the temperature at least once every 15 minutes. The records shall be kept in a format acceptable to the AQD District Supervisor. The permittee shall keep the records on file at the facility and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1301, R 336.1910)**

3. The permittee shall calibrate the thermocouples associated with the primary and secondary chamber portions of EU-BURNOFFOVEN at least once per year. **(R 336.1224, R 336.1225, R 336.1910)**

4. Upon installation of the temperature recording device as required by SC VI.1, the permittee shall keep, in a satisfactory manner, temperature data records for the secondary chamber or afterburner portion of EU-BURNOFFOVEN. The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1301, R 336.1910)**

5. The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction of the control equipment, any maintenance performed and any testing results for EU-BURNOFFOVEN. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1910, R 336.1912)**

6. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (cured coatings) processed in EU-BURNOFFOVEN, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both. All records shall be kept on file for a period of at least five years and made available to the Department upon request.[1] **(R 336.1224, R 336.1225)**

7. The permittee shall maintain current information from the manufacturer that EU-BURNOFFOVEN is equipped with a secondary chamber or afterburner, an automatic temperature control system for the primary chamber and secondary chamber or afterburner, and an interlock system that shuts down the primary chamber burner when the secondary chamber or afterburner is not operating properly. All records shall be kept on file for a period of at least five years and made available to the Department upon request.[1] **(R 336.1224, R 336.1225)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-Burn-Off	12	58	40 CFR 52.21(c) & (d), R 336.1225

IX. OTHER REQUIREMENT(S)

NA

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

EU-WELDING
EMISSION UNIT CONDITIONS

DESCRIPTION

Welding operations used for the assembly of metal parts including laser tactile, remote laser, spot laser, and MIG welding techniques. All welding operations are equipped with an overhead fume hood to direct particulate to one of seven dust collectors.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Seven dust collectors

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Opacity	20%, except for one 6-minute average per hour of not more than 27%	6-minute average	Each dust collector in EU-WELDING	SC.V.1, SC.VI.2, SC VI.3	R 336.1301 40 CFR 52.21(c) and (d)
2. PM	0.10 pounds per 1,000 pounds of exhaust gas[a]	Hourly	Each dust collector in EU-WELDING exhausting to the atmosphere	SC V.1	R 336.331 40 CFR 52.21(c) and (d)

[a] Calculated on a dry gas basis.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

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

Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EU-WELDING unless the respective dust collector system is installed, maintained, and operated in a satisfactory manner per the manufacturer's specifications. Satisfactory operation includes but is not limited to maintaining the dust collector as specified by the malfunction abatement plan required by SC III.1. **(R 336.1301, R 336.1331, R 336.1910)**

2. The permittee shall equip and maintain the dust collectors with devices which continuously monitor the pressure drop. **(R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

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

1. Upon request from the AQD District Supervisor, the permittee shall verify the PM emission rate and/or visible emissions from the dust collectors, in FG-TM by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
Visible Emissions	40 CFR Part 51, Appendix M; 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 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 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) and (d))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1331, 40 CFR 52.21(c) & (d))**

2. The permittee shall keep a log of all inspections and maintenance performed on any air emission control system associated with EU-WELDING (pursuant to SC III.1). The permittee shall maintain this record on site and make it available to the Department upon request. **(R 336.1225, R 336.1301, R 336.1331, R 336.1911, 40 CFR 52.21(c) & (d))**

3. The permittee shall conduct and record the results of non-certified visible emission checks when the collector is discharging to the outside air on a monthly basis. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**

4. The permittee shall verify the presence of visible emissions by taking six-minute visible emission readings for the dust collectors associated with EU-WELDING a minimum of once per month while operating. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. Each visible emission check shall be taken during routine operating conditions and be a minimum of 6

minutes If the permittee observes any visible emissions, the permittee shall immediately implement the following procedures:

a) A certified reader shall determine the opacity using Federal Reference Test Method 9 (40 CFR Part 60, Appendix A).

b) If the results of the Federal Reference Test Method 9 visible emission observation indicate an exceedance of the opacity standard specified in SC I.3, the permittee shall immediately initiate corrective actions. **(R 336.1301, R 336.1303)**

5. The permittee shall monitor and record, in a manner satisfactory to the AQD District Supervisor, pressure drop on a daily basis, as specified in the MAP. The permittee shall keep all records on file at the facility and make them available to the Department upon request in an acceptable format as determined by the AQD District Supervisor. **(R 336.1224, R 336.1225, R 336.1301 R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-DC4 (Dust Collector 4)	54 x 66	13	40 CFR 52.21(c) & (d), R 336.1225
2. SV-DC5 (Dust Collector 5)	54 x 66	13	40 CFR 52.21(c) & (d), R 336.1225
3. SV-DC6 (Dust Collector 6)	54 x 66	13	40 CFR 52.21(c) & (d), R 336.1225
4. SV-DC7 (Dust Collector 7)	54 x 66	13	40 CFR 52.21(c) & (d), R 336.1225

IX. OTHER REQUIREMENT(S)

NA

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

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-ECOAT	Includes two (2) e-coat lines consisting of 5 dip tanks total, each equipped with a natural gas-fired oven. This also includes touch-up paint operations.	EU-ECOAT1 EU-ECOAT2 EU-TOUCHUP
FG-LASERCUT	Three (3) laser cutting machines used for cutting metal parts. Particulate emissions are collected by a filter box.	EU-LASERCUT1 EU-LASERCUT2 EU-LASTERCUT3
FG-MAINTENANCE	A variety of equipment within a maintenance shop for repair and upkeep of plant process equipment.	EU-PARTSWASHER EU-METALWORKING EU-SANDBLAST

FG-ECOAT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Includes two (2) e-coat lines consisting of 5 dip tanks total, each equipped with a natural gas-fired oven. This also includes touch-up paint operations.

Emission Unit: EU-ECOAT1, EU-ECOAT2, EU-TOUCHUP

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	77.85 tpy	12-month rolling time period as determined at the end of each calendar month	FG-ECOAT	SC VI.3	R 336.1205 R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	3.0 lb/gal (minus water)[a] as applied	Daily volume-weighted average	FG-ECOAT	SC V.1 SC VI.3	R 336.1702(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1225, R 336.1702(a))**

2. The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EU-TOUCHUP with a roll coater applicator or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. **(R 336.1702(a))**

V. TESTING/SAMPLING

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

1. The permittee shall determine the VOC content, water content and density of any material, as applied and as received, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. **(R 336.1702)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702)**

2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702)**

3. The permittee shall keep the following information on a monthly basis for the use of coatings and cleanup solvents associated with FGECOAT:
   a) Gallons (with water) of each material used.
   b) VOC content (minus water and with water) of each material as applied.
   c) VOC emission calculations determining the volume-weighted average VOC content of the materials as applied on a calendar day basis.
   d) VOC mass emission calculations determining the monthly emission rate for FGECOAT in pounds per calendar month and in tons per 12-month rolling time period as determined at the end of each calendar month.
   e) VOC mass emission calculations determining the annual emission rate by emission unit and in tons per 12-month rolling time period as determined at the end of each calendar month.

   The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-1-1 (E-Coat #1, Cure Oven)	48	60	40 CFR 52.21(c) & (d), R 336.1225
2. SV-2-1 (E-Coat #2, Cure Oven)	32	60	40 CFR 52.21(c) & (d), R 336.1225
3. SV-2-2 (E-Coat #2, Cure Oven)	32	60	40 CFR 52.21(c) & (d), R 336.1225
4. SV-B1-1 (Boiler 1-1)	22	54	40 CFR 52.21(c) & (d), R 336.1225
5. SV-B2-2 (Boiler 1-2)	22	54	40 CFR 52.21(c) & (d), R 336.1225
6. SV-B2-2 (Boiler 2-2)	22	54	40 CFR 52.21(c) & (d), R 336.1225

IX. OTHER REQUIREMENT(S)

NA

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

FG-LASERCUT
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Three (3) laser cutting machines used for cutting metal parts. Particulate emissions are collected by a filter box.

Emission Unit: EU-LASERCUT1, EU-LASERCUT2, EU-LASERCUT3

POLLUTION CONTROL EQUIPMENT

Filter box

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 emission unit in FG-LASERCUT unless the respective filter boxes are installed, maintained, and operated in a satisfactory manner. **(R 336.1910)**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from FG-LASERCUT shall be released only into the general in-plant environment. **(40 CFR 52.21 (c) and (d))**

IX. OTHER REQUIREMENT(S)

NA

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

FG-MAINTENANCE
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A variety of equipment within a maintenance shop for repair and upkeep of plant process equipment.

Emission Unit: EU-PARTSWASHER, EU-METALWORKING, EU-SANDBLAST

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from FGMETALWORKING shall be released only into the general in-plant environment. **(40 CFR 52.21 (c) and (d))**

IX. OTHER REQUIREMENT(S)

NA

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

FGFACILITY CONDITIONS

DESCRIPTION

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

POLLUTION CONTROL EQUIPMENT

Include a description of control equipment if applicable. Use NA if no control equipment used.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	Less than 89.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
2. Each Individual HAP	Less than 8.9 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2, SC VI.3	R 336.1205(3)
3. Aggregate HAPs	Less than 22.4 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2, SC VI.3	R 336.1205(3)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Natural Gas	270 MMcf/yr	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.4	R 336.1205(3)

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 permittee shall determine the HAP content of any material, as received and as applied, using manufacturer's formulation data. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311. **(R 336.1205(3))**

2. The permittee shall determine the VOC content, water content, and density of any material as applied and as received, using federal Reference Test Method 24. Upon prior approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. **(R 336.1205(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(3))**

2. The permittee shall keep the following information on a calendar month basis for FGFACILITY:
   a) Gallons or pounds of each VOC containing material used.
   b) Where applicable, gallons or pounds of each VOC containing material reclaimed.
   c) The VOC content, in pounds per gallon or percent by weight, of each material used.
   d) VOC emission calculations determining the monthly emission rate in pounds per calendar month.
   e) VOC emission calculations determining the cumulative emission rate during the first 12-months and the annual emission rate thereafter, in tons per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(3))**

3. The permittee shall keep the following information on a calendar month basis for FGFACILITY:
   a) Gallons or pounds of each HAP containing material used.
   b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
   c) HAP content, in pounds per gallon or percent by weight, of each HAP containing material used.
   d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
   e) Individual and aggregate HAP emission calculations determining the cumulative emission rate of each during the first 12-months and the annual emission rate of each thereafter, in tons per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1205(3))**

4. The permittee shall keep the natural gas usage in MMcf/yr for FGFACILITY on a monthly and 12-month rolling basis for FGFACILITY. The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205(3))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. NA

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