MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

February 6, 2015

PERMIT TO INSTALL
2-03M

ISSUED TO
Pioneer Metal Finishing

LOCATED AT
24600 Industrial Highway
Warren, Michigan

IN THE COUNTY OF
Macomb

STATE REGISTRATION NUMBER
N5747

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. 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: **December 28, 2014**	
DATE PERMIT TO INSTALL APPROVED: **February 6, 2015**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
CO_2e	Carbon Dioxide Equivalent	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H_2S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	kW	Kilowatt
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO_x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	PM less than 10 microns diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	PM less than 2.5 microns diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO_2	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (psig).

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 Environmental Quality, 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 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 R 336.1219 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(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 R 336.1301, 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 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 R 336.1370(2). **(R 336.1370)**

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

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 (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-LINE1-MODEL24	One Dip Spin Machine Model #24 with an in-line Natural Gas Fired Curing Oven all connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	09-23-1997 / 01-31-2014	FGLINES, FGFACILITY
EU-LINE3-COE1	Two Chain on Edge Spray Booths each equipped with a permanent total enclosure and One Natural Gas Fired Curing Oven connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	09-23-1997	FGLINES, FGFACILITY
EU-LINE4-COE2	Two Chain on Edge Spray Booths each equipped with a permanent total enclosure, One Natural Gas Fired Curing Oven connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	07-01-1999	FGLINES, FGFACILITY
EU-LINE5-COE3	One Enclosed Sprimag Chain on Edge Spray Booth with an electric oven equipped with a common permanent total enclosure connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	06-14-2004	FGLINES, FGFACILITY
EU-LINE6-MODEL10	One Dip Spin Machine Model #10 equipped with an enclosure with parts routed to EU-BATCHOVEN, both connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	10-15-2008 01-29-2015	FGLINES, FGFACILITY
EU-LINE7-MODEL25	One Dip Spin Machine Model #24 with an in-line Natural Gas Fired Curing Oven all connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	09-23-1997 / 01-31-2014	FGLINES, FGFACILITY

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-LINE8-TUMBLE1	One Tumble Spray Unit connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	05-01-2009	FGLINES, FGFACILITY
EU-LINE9-TUMBLE2	One Tumble Spray Unit connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	05-01-2009	FGLINES, FGFACILITY
EU-LINE10-TUMBLE3	One Tumble Spray Unit connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	05-01-2009	FGLINES, FGFACILITY
EU-LINE12-TUMBLE4	One Tumble Spray Unit connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	11-03-2011	FGLINES, FGFACILITY
EU-LINE13-MODEL26	One Dip Spin Machine Model #24 with two dip spin booths and an in-line Natural Gas Fired Curing Oven, all connected to and exhausted through a regenerative thermal oxidizer. Note: Including purge and cleanup solvents usage associated with the line.	07-20-2012 / 01-31-2014	FGLINES, FGFACILITY
EUBATCHOVEN	One Natural Gas Fired Batch Oven connected to and exhausted through a regenerative thermal oxidizer.	10-27-2005	FGLINES, FGFACILITY
EUPARTSWASHLINE1	A multi-stage surface preparation line consisting of cleaning, rinsing, pickling and phosphate treatment. Emissions are controlled by a packed bed wet scrubber.	10-22-1997	FGPARTSWASHLINES, FGFACILITY
EUPARTSWASHLINE2	A multi-stage surface preparation line consisting of cleaning, rinsing, pickling and phosphate treatment. Emissions are controlled by a packed bed wet scrubber.	10-22-1997	FGPARTSWASHLINES, FGFACILITY
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 336.1290. Appendix A includes a detailed parts description table which further clarifies the emission units.			

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
FGLINES	Facility coating operations including purge and cleanup solvent usage with regenerative thermal oxidizer control system.	EU-LINE1-MODEL24, EU-LINE3-COE1, EU-LINE4-COE2, EU-LINE5-COE3, EU-LINE6-MODEL10, EU-LINE7-MODEL25, EU-LINE8-TUMBLE1, EU-LINE9-TUMBLE2, EU-LINE10-TUMBLE3, EU-LINE12-TUMBLE4, EU-LINE13-MODEL26, EU-BATCHOVEN
FGPARTSWASHLINES	Each parts washer line is a multi-stage surface preparation line consisting of cleaning, rinsing, pickling and phosphate treatment. Emissions are controlled by a packed bed wet scrubber.	EUPARTSWASHLINE1, EUPARTSWASHLINE2
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

The following conditions apply to: FGLINES

DESCRIPTION: Facility coating operations including purge and cleanup solvent usage with regenerative thermal oxidizer control system.

Emission Units: EU-LINE1-MODEL24, EU-LINE3-COE1, EU-LINE4-COE2, EU-LINE5-COE3, EU-LINE6-MODEL10, EU-LINE7-MODEL25, EU-LINE8-TUMBLE1, EU-LINE9-TUMBLE2, EU-LINE10-TUMBLE3, EU-LINE12-TUMBLE4, EU-LINE13-MODEL26 and EUBATCHOVEN

POLLUTION CONTROL EQUIPMENT: Regenerative thermal oxidizer (RTO) system

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	35.31 tpy	12-month rolling time period as determined at the end of each calendar month	FGLINES	SC VI.6	R 336.1205, R 336.1702(a)
2. Xylene (CAS #1330-20-7)	384 lb/day	Calendar Day	FGLINES	SC VI.7	R 336.1225
3. Ethylbenzene (CAS # 100-41-4)	Less than 18,000 lb/yr	12-month rolling time period as determined at the end of each calendar month	FGLINES	SC VI.8	R 336.1225
4. Formaldehyde (CAS # 50-00-0)	560 lbs/yr	12-month rolling time period as determined at the end of each calendar month	FGLINES	SC VI.8	R 336.1225

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

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

2. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. **(R 336.1224, R 336.1370)**

3. The permittee shall handle all VOC and 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 336.1205(3), R 336.1225, R 336.1702(a))**

4. The permittee shall maintain a minimum of 0.007 inches of water pressure differential between the permanent total enclosure (PTE) and the adjacent area on a continuous basis for each of the chain on edge spray booths within EU-LINE3-COE1 and EU-LINE4-COE2, and the Sprimag Booth/Oven of EU-LINE5-COE3. **(R 336.1225, R 336.1702(a), R 336.1910)**

5. The permittee shall not operate FGLINES unless a malfunction abatement plan (MAP) as described in Rule 911(2), 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 336.1205, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FGLINES unless all respective exhaust filters are installed and operating in a satisfactory manner. **(R 336.1224, R 336.1301, R 336.1331, R 336.1910)**

2. The permittee shall equip and maintain the spray coating booths within FGLINES with HVLP or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. **(R 336.1702(a))**

3. The permittee shall not operate FGLINES unless the capture system of each emission unit and the regenerative thermal oxidizer are installed, maintained and operated in a satisfactory manner. Satisfactory operation of the capture system of each emission unit and the regenerative thermal oxidizer includes a minimum VOC capture efficiency of 90 percent (by weight) for EU-LINE1-MODEL24, EU-LINE6-MODEL10, EU-LINE7-MODEL25 and EU-LINE13-MODEL26, a minimum VOC capture efficiency of 100 percent (by weight) for EU-LINE3-COE1, EU-LINE4-COE2, EU-LINE5-COE3, EU-LINE8-TUMBLE1, EU-LINE9-TUMBLE2, EU-LINE10-TUMBLE3, EU-LINE12-TUMBLE4 and EUBATCHOVEN, a minimum VOC destruction efficiency of 95 percent (by weight), and maintaining a minimum combustion zone temperature no less than that demonstrated during the most recent acceptable stack test which achieved a minimum overall destruction efficiency of 95%, and which is specified in the MAP required in SC III.5, and a minimum retention time of 0.5 seconds. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the regenerative thermal oxidizer to monitor the temperature on a continuous basis, during operation of FGLINES. **(R 336.1205, R 336.1225, R 336.1702(a))**

5. The permittee shall not operate any chain on edge spray booths within EU-LINE3-COE1 and EU-LINE4-COE2, and the Sprimag Booth/Oven of EU-LINE5-COE3, unless the respective permanent total enclosure (PTE) for each is installed, maintained and operated in a satisfactory manner. Satisfactory operation requires that the PTE is operating at a pressure lower than all adjacent areas, so that air flows into the PTE through all Natural Draft Openings (NDOs). NDO is defined as any permanent opening in the enclosure that remains open during operation of the line and is not connected to a duct in which a fan or blower is installed. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

6. The permittee shall calibrate, maintain and operate in a satisfactory manner, device(s) to monitor on a continuous basis, the pressure differential between the permanent total enclosure (PTE) and the outside area for each chain on edge spray booth within EU-LINE3-COE1 and EU-LINE4-COE2, and the Sprimag Booth/Oven of EU-LINE5-COE3 to verify that air is entering the PTE. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

7. The permittee shall not operate EU-LINE1-MODEL24, EU-LINE3-COE1 oven, EU-LINE4-COE2 oven, EU-LINE6-MODEL10, EU-LINE7-MODEL25, EU-LINE13-MODEL26 and EUBATCHOVEN unless the respective enclosure for each is installed, maintained and operated in a satisfactory manner. Satisfactory operation requires that each oven and/or booth is operating at a pressure lower than all adjacent areas, so that air flows into the ovens or booths through all natural draft openings (NDOs). NDO is defined as any permanent opening in the enclosure that remains open during operation of the line and is not connected to a duct in which a fan or blower is installed. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

8. The permittee shall not operate the Tumble Spray Units (EU-LINE8-TUMBLE1, EU-LINE9-TUMBLE2, EU-LINE10-TUMBLE3, and EU-LINE12-TUMBLE4) unless these units are operated as sealed enclosures whenever coatings are applied within these units. During coating application, the door seal shall be in place and in proper working order, the door shall be held in the closed position using a vacuum seal and the associated exhaust fan shall be operated to exhaust captured VOC to the regenerative thermal oxidizer. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

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 coating as received, using federal Reference Test Method 24. Upon prior approval by the AQD District Supervisor, the permittee may determine the as received 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(a))**

2. On a semi-annual basis, the permittee shall verify that the direction of air flow at each NDO for EU-LINE1-MODEL24, EU-LINE3-COE1 oven, EU-LINE4-COE2 oven, EU-LINE6-MODEL10, EU-LINE7-MODEL25, EU-LINE13-MODEL26 and EUBATCHOVEN is into the respective enclosure. The verification of the direction of air flow at the NDOs shall be conducted using the smoke tube test method, or an alternate method approved by the AQD Technical Programs Unit and District Office. 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 the capture efficiency includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 30 days following the last date of the test. After two consecutive tests demonstrate that the direction of air flow at all NDOs is into the respective enclosure, the permittee may request that the testing schedule be revised to a less frequent time period as approved by the AQD District Supervisor. **(R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.3964(a))**

3. The permittee shall verify the destruction efficiency for the regenerative thermal oxidizer by testing at owner's expense, in accordance with Department requirements. The permittee must complete the testing once every five years. 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. Verification of control efficiency includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 30 days following the last date of the test. **(R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.3964(a))**

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 15th day of the calendar month to show compliance with the limits, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1225, R 336.1702(a))**

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

3. The permittee shall monitor and record, in a satisfactory manner, the temperature in the combustion zone of the regenerative thermal oxidizer on a continuous basis (at least once every 15 minutes) when FGLINES are operating. The monitoring and recording device(s) shall be operated in accordance with manufacturer's recommendations as well as incorporating standard industry practices. 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), R 336.1225, R 336.1702)**

4. Within one year of permit issuance, the permittee shall install a data logger or data acquisition system that will record a minimum of four valid equally spaced temperature readings per hour. Following installation of the data logger/data acquisition system, the permittee must have valid data from at least 90 percent of the hours during which any portion of FGLINES operated in a given calendar month. The temperature measurement accuracy shall be 1 percent of the temperature value or 5 °F, whichever is larger. Within 30 days following the end of the calendar month, the permittee shall prepare a summary for that month identifying any time periods in which the combustion chamber temperature was below the minimum required operating temperature specified in SC IV.3. **(R 336.1205(3), R 336.1225, R 336.1702)**

5. The permittee shall calibrate the temperature monitoring device of the regenerative thermal oxidizer at least once per year. The calibration shall be conducted consistent with manufacturer's specifications. The permittee shall keep records of the dates and results of each temperature monitoring device calibration. 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), R 336.1225, R 336.1702)**

6. The permittee shall keep the following information on a monthly basis for FGLINES:

   a) Gallons or pounds of each coating, reducer, purge and cleanup solvent used and reclaimed.
   b) VOC content, in pounds per gallon or pounds per pound, of each material as applied.
   c) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
   d) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

   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, R 336.1702(a))**

7. The permittee shall keep the following information on a calendar day basis for the FGLINES:

   a) Gallons (with water) of each xylene (CAS # 1330-20-7) containing coating and reducer used.
   b) Where applicable, the gallons (with water) of each xylene (CAS # 1330-20-7) containing coating and reducer reclaimed.
   c) The xylene (CAS # 1330-20-7) content (with water) in pounds per gallon of each coating and reducer used.
   d) Xylene (CAS # 1330-20-7) mass emission calculations determining the daily emission rate in pounds per calendar day.

   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.[1] **(R 336.1225)**

8. The permittee shall keep the following information on a monthly basis for the FGLINES:

   a) Gallons (with water) of each ethyl benzene (CAS # 100-41-4) and formaldehyde (CAS # 50-00-0) containing coating and reducer used.
   b) Where applicable, the gallons (with water) of each ethyl benzene (CAS # 100-41-4) and formaldehyde (CAS # 50-00-0) containing coating and reducer reclaimed.
   c) The ethyl benzene (CAS # 100-41-4) and formaldehyde (CAS # 50-00-0) content (with water) in pounds per gallon of each coating and reducer used.
   d) Ethyl benzene (CAS # 100-41-4) and formaldehyde (CAS # 50-00-0) mass emission calculations determining the monthly emission rate of each in pounds per calendar month.
   e) Ethyl benzene (CAS # 100-41-4) and formaldehyde (CAS # 50-00-0) mass emission calculations determining the annual emission rate of each in pounds per 12-month rolling time period as determined at the end of each calendar month.

   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.[1] **(R 336.1225)**

9. The permittee shall monitor and keep records on a weekly basis, in a satisfactory manner, the pressure differential between the permanent total enclosure (PTE) and the outside area for each chain on edge spray booth within EU-LINE3-COE1 and EU-LINE4-COE2, and the Sprimag Booth/Oven of EU-LINE5-COE3, to verify that air is entering the PTE. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

10. The permittee shall monitor on a continuous basis and record on a weekly basis the differential pressure between the chamber and the surrounding environment during operation of each tumble spray unit of EU-LINE8-TUMBLE1, EU-LINE9-TUMBLE2 EU-LINE10-TUMBLE3, and EU-LINE12-TUMBLE4. Each tumble spray unit shall be equipped with an electronic interlock that prohibits operation unless the cover is in place and the differential pressure between the chamber and the surrounding environment is at least 25 Pascal (Pa) or other value approved by the AQD District Supervisor. **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**

VII. REPORTING

1. The permittee shall submit all records, reports, and certification for FGLINES as required by Appendix B to the AQD District Supervisor in an acceptable format. **(R 336.1201(3))**

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:

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVRTO1	23 x 50	36	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

N/A

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

The following conditions apply to: FGPARTSWASHLINES

DESCRIPTION: Each parts washer line is a multi-stage surface preparation line consisting of cleaning, rinsing, pickling and phosphate treatment. Emissions are controlled by a packed bed wet scrubber.

Emission Units: EUPARTSWASHLINE1 and EUPARTSWASHLINE2

POLLUTION CONTROL EQUIPMENT: Packed bed wet scrubber

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. Prior to wet scrubber maintenance, heated tanks shall be cooled to ambient temperature to minimize emissions[1]. **(R 336.1224)**

2. The disposal of spent and/or waste materials shall be performed in a manner which minimizes the introduction of air contaminants to the outer air. **(R 336.1370)**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate FGPARTSWASHLINES unless the wet scrubber is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the wet scrubber includes being equipped with properly designed hoods and ductwork to capture and control emissions from Cleaning, Acid Rinse, and Phosphating. **(R 336.1224, R 336.1225, R 336.1910)**

2. The permittee shall not operate FGPARTSWASHLINES unless a gauge, which monitors the water flow to the wet scrubber, is installed, maintained and operated in a satisfactory manner. The gauge shall be equipped with an alarm that sounds or flashes red (or yellow) when the water flow malfunctions. **(R 336.1224, R 336.1225, R 336.1910)**

3. The permittee shall install, maintain and operate in a satisfactory manner a device to monitor the operating temperature of each heated tank in FGPARTSWASHLINES on a once every 8-hour shift basis. **(R 336.1224, R 336.1225, R 336.1910)**

V. TESTING/SAMPLING

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

N/A

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 raw material used in FGPARTSWASHLINES, 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. All records shall be kept on file and made available to the Department upon request. **(R 336.1224, R 336.1225)**

2. The permittee shall keep, in a satisfactory manner, monthly records of the amounts, in gallons, of raw materials used in FGPARTSWASHLINES. (Note: these records should include materials used for recharging.) All records shall be kept on file and made available to the Air Quality Division upon request.[1] **(R 336.1224, R 336.1225)**

3. The permittee shall record the operating temperature of each heated tank in FGPARTSWASHLINES at least once every 8-hour shift. **(R 336.1224, R 336.1225, R 336.1910)**

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:

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. EUPARTSWASHLINE1	36	35	R 336.1225, 40 CFR 52.21(c) & (d)
2. EUPARTSWASHLINE2	48	28	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

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

Footnotes:

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

The following conditions apply Source-Wide to: FGFACILITY

POLLUTION CONTROL EQUIPMENT: N/A

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 9.0 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)
2. Aggregate HAPs	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.2	R 336.1205(3)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

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 coating as received, using manufacturer's formulation data. 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))**

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 15th day of the calendar month to show compliance with the limits, 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 at least a monthly 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 weight percent, 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 annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep 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 RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

APPENDIX A

PARTS DESCRIPTION TABLE

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

Emission Unit ID	Emission Unit Description	Booth / Oven	Perm. Total Encl. (Y/N)	Capture Efficiency (%)	Destruct Efficiency (%)	Capture Efficiency Verification Method*
EU-LINE1-MODEL24	One Dip Spin Machine Model #24 with an in-line Natural Gas Fired Curing Oven.	Booth & Oven	N	90	RTO = 95	Smoke Tube Test
EU-LINE3-COE1	Two Chain on Edge Spray Booths each equipped with a permanent total enclosure and One Natural Gas Fired Curing.	Booths	Y	100	RTO = 95	Water Pressure Differential
		Oven	N			Smoke Tube Test
EU-LINE4-COE2	Two Chain on Edge Spray Booths each equipped with a permanent total enclosure, One Natural Gas Fired Curing.	Booths	Y	100	RTO = 95	Water Pressure Differential
		Oven	N			Smoke Tube Test
EU-LINE5-COE3	One Enclosed Sprimag Chain on Edge Spray Booth with an electric oven each equipped with a common permanent total enclosure.	Booth & Oven	Y	100	RTO = 95	Water Pressure Differential
EU-LINE6-MODEL10	One Dip Spin Machine Model #10 equipped with an enclosure with parts routed to EUBATCHOVEN.	Booth	N	90	RTO = 95	Smoke Tube Test
EU-LINE7-MODEL25	One Dip Spin Machine Model #24 with an in-line Natural Gas Fired Curing Oven.	Booth & Oven	N	90	RTO = 95	Smoke Tube Test
EU-LINE8-TUMBLE1	One Tumble Spray.	Booth	N	100	RTO = 95	N/A
EU-LINE9-TUMBLE2	One Tumble Spray Unit.	Booth	N	100	RTO = 95	N/A
EU-LINE10-TUMBLE3	One Tumble Spray.	Booth	N	100	RTO = 95	N/A
EU-LINE12-TUMBLE4	One Tumble Spray.	Booth	N	100	RTO = 95	N/A

Emission Unit ID	Emission Unit Description	Booth / Oven	Perm. Total Encl. (Y/N)	Capture Efficiency (%)	Destruct Efficiency (%)	Capture Efficiency Verification Method*
EU-LINE13-MODEL26	One Dip Spin Machine Model #24 with two dip-spin booths and an in-line Natural Gas Fired Curing Oven.	Booth & Oven	N	90	RTO = 95	Smoke Tube Test
EUBATCHOVEN	One Natural Gas Fired Batch.	Oven	N	100	RTO = 95	Smoke Tube Test
*Destruction Efficiency verified through temperature monitoring and stack testing.						

APPENDIX B

Certification and Reporting

According to the conditions 1 through 8 below, the permittee shall comply with the following reporting requirements:

i. The Company shall promptly report any deviations.
ii. The Company shall submit a semiannual report of monitoring and deviations by March 15th each year for the reporting period July 1 to December 31 and September 15 each year for the reporting period January 1 to June 30.
iii. The company shall submit an annual certification of compliance by March 15th each year for the previous calendar year.
iv. The Company shall report by March 15th each year the actual emissions for the previous calendar year of each regulated air pollutant for each emission unit utilizing emissions inventory forms.

Certification & Reporting

1. Any document / report required to be submitted to AQD shall contain an original certification by a responsible official which states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

2. A responsible official shall certify to the AQD SEMI (Warren) District Office the stationary source is and has been in compliance with all terms and conditions contained in the permit except for deviations that have been or are being reported to the SEMI AQD District Office. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete.

3. The certification of compliance shall be submitted annually.

4. The permittee shall promptly report any deviations from the permit requirements and certify the reports.
   a. For deviations that exceed the emissions allowed under the permit, prompt reporting means reporting consistent with the requirements of Rule 912
   b. For deviations which exceed the emissions allowed under the permit and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports. The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
   c. For deviations that do not exceed the emissions allowed under the permit, prompt reporting means the reporting of all deviations in the semiannual reports. The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

5. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department.

6. 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 appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor 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 conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a responsible official in a manner consistent with the CAA.