MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

February 22, 2012

PERMIT TO INSTALL 2-12

ISSUED TO ADAC Plastics, Inc. d.b.a. ADAC Automotive, Inc.

LOCATED AT 1801 Keating Avenue Muskegon, Michigan

IN THE COUNTY OF

Muskegon

STATE REGISTRATION NUMBER B6528

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:

 January 13, 2012

 DATE PERMIT TO INSTALL APPROVED:
 SIGNATURE:

 February 22, 2012
 SIGNATURE:

 DATE PERMIT VOIDED:
 SIGNATURE:

 DATE PERMIT REVOKED:
 SIGNATURE:

PERMIT TO INSTALL

Table of Contents

Section	Page
Alphabetical Listing of Common Abbreviations / Acronyms	2
General Conditions	
Special Conditions	5
Emission Unit Summary Table	5
Emission Unit Special Conditions for EU-FLATRACKLINE	6
Emission Unit Special Conditions for EU-COELINE	10
Emission Unit Special Conditions for EU-AUTOLINE	14
Flexible Group Summary Table	17
Flexible Group Special Conditions for FG-FACILITY	17

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	СО	Carbon Monoxide	
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot	
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter	
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit	
EPA	Environmental Protection Agency	gr	Grains	
EU	Emission Unit	Hg	Mercury	
FG	Flexible Group	hr	Hour	
GACS	Gallon of Applied Coating Solids	H ₂ S	Hydrogen Sulfide	
GC	General Condition	hp	Horsepower	
HAP	Hazardous Air Pollutant	lb	Pound	
HVLP	High Volume Low Pressure *	m	Meter	
ID	Identification	mg	Milligram	
LAER	Lowest Achievable Emission Rate	mm	Millimeter	
MACT	Maximum Achievable Control Technology	MM	Million	
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts	
MAP	Malfunction Abatement Plan	ng	Nanogram	
MDEQ	Michigan Department of Environmental Quality (Department)	NOx	Oxides of Nitrogen	
MSDS	Material Safety Data Sheet	PM	Particulate Matter	
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM ₁₀	PM less than 10 microns diameter	
NSPS	New Source Performance Standards	PM _{2.5}	PM less than 2.5 microns diameter	
NSR	New Source Review	pph	Pound per hour	
PS	Performance Specification	ppm	Parts per million	
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume	
NFE	Non Fugitive Enclosure	ppmw	Parts per million by weight	
PTI	Permit to Install	psia	Pounds per square inch absolute	
RACT	Reasonably Available Control Technology	psig	Pounds per square inch gauge	
ROP	Renewable Operating Permit	scf	Standard cubic feet	
SC	Special Condition	sec	Seconds	
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide	
SRN	State Registration Number	THC	Total Hydrocarbons	
TAC	Toxic Air Contaminant	tpy	Tons per year	
TEQ	Toxicity Equivalence Quotient	μg	Microgram	
VE	Visible Emissions	VOC	Volatile Organic Compounds	
		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

- 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 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.
- 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-FLATRACKLINE	Interior and exterior automotive plastic parts coating line. The coating line consists of prime-coat booth, prime-coat cure oven, two base-coat booths, MICA- coat booth, two clear-coat booths, and top-coat cure oven. The VOC emissions from this line will be controlled by Non-Fugitive Enclosure (NFE) and a Regenerative Thermal Oxidizer (K-RTO). Location: 1801 Keating Avenue	02-15-2012	FG-FACILITY
EU-COELINE	A plastic parts coating line consists of an uncontrolled parts loading and unloading tunnel, an uncontrolled 5-stage parts washer with dry-off oven and dry-off tunnel; and two (2) primecoating booths with flash-off, a prime cure oven, three (3) basecoat booths with flash-off, three (3) clearcoat booths with flash-off, associated tunnels, and a final cure oven all controlled by a Regenerative Thermal Oxidizer (PC- RTO). Location: 2050 Port City Blvd.	12-16-1993 / 02-17-1999 / 04-25-2005 / 05-31/2007 / 12-01-2007	FG-FACILITY
EU-AUTOLINE	Automatic prime-coat spray booth, flash-off zone, and cure oven controlled by a catalytic oxidizer (PRIME). Automatic basecoat spray booth, automatic clearcoat spray booth, flash-off zone, and cure oven controlled by a catalytic oxidizer (BASE/CLEAR). Location: 1801 Keating Avenue	04-27-2000 / 05-21-2001	FG-FACILITY
Changes to the equipm allowed by R 336.1278	hent described in this table are subject to the requirement to R 336.1290.	ts of R 336.1201,	except as

The following conditions apply to: EU-FLATRACKLINE

DESCRIPTION: Interior and exterior automotive plastic parts coating line. The coating line consists of primecoat booth, prime-coat cure oven, two base-coat booths, MICA-coat booth, two clear-coat booths, and top-coat cure oven. The coating line is located at 1801 Keating Avenue.

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: The VOC emissions from this line will be controlled by Non-Fugitive Enclosure (NFE) and a Regenerative Thermal Oxidizer (K-RTO). Particulate matter will be controlled by the water wash system.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements		
1. VOCs	29.8 tpy	12-month rolling time period as determined at the end of each calendar month	EU-FLATRACKLINE	SC VI.1, SC VI.4	R 336.1702(a)		
2. VOCs	7.5 pph	Test Protocol [*]	EU-FLATRACKLINE	SC V.2	R 336.1205, R 336.1702(a)		
* Test Prot	Test Protocol shall specify averaging time						

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall recover and reclaim, recycle, or dispose of, in accordance with all applicable regulations, a minimum of 90 percent by weight of all purge and cleanup solvents used for EU-FLATRACKLINE. (R 336.1702(a))
- 2. The permittee shall capture all waste coatings, reducer, thinners, and purge and cleanup solvents, *etc.* (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 336.1702(a))
- 3. 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)
- 4. The permittee shall handle all VOC and / or HAP containing materials 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))
- 5. The permittee shall not operate EU-FLATRACKLINE unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 180 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.
- d) A description of the procedures to capture, handle, and disposes of all materials to minimize the generation of fugitive emissions per SC numbers III.1, III.2, and III.4.

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 AQD 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 336.1702(a), R 336.1910, R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate any spray booth portion of EU-FLATRACKLINE unless the water wash particulate control system is installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1301, R 336.1910)
- 2. The permittee shall equip and maintain each spray booth portion of EU-FLATRACKLINE with High Volume Low Pressure (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 EU-FLATRACKLINE unless K-RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC capture efficiency of 100 percent (by weight), a minimum VOC destruction efficiency of 95 percent (by weight), maintaining a minimum combustion chamber temperature of 1450°F, and a minimum retention time of 0.5 seconds. In lieu of a minimum temperature, the permittee may use an average temperature of 1450°F based upon a three-hour rolling average. (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 K-RTO to monitor and record the temperature on a continuous basis, during operation of EU-FLATRACKLINE. (R 336.1225, R 336.1702(a))
- 5. The permittee shall not operate EU-FLATRACKLINE unless the NFE is installed, maintained and operated in a satisfactory manner. Satisfactory operation requires that the NFE is operating at a pressure lower than all adjacent areas, so that air flows into the NFE through all natural draft openings (NDOs). NDO is defined as any opening that is not connected to a duct in which a fan or blower is installed. **(R 336.1225, 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 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 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

- 2. Within 180 days of initial startup, the permittee shall verify the VOC emission rate specified in SC I.2, the destruction efficiency of the K-RTO, and the capture efficiency of NFE (as required by SC V.3), by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission limits 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 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)
- 3. During the initial capture efficiency performance test of the NFE and quarterly basis thereafter, the permittee shall verify that the direction of air flow at each NDO of the NFE for EU-FLATRACKLINE is into the NFE. 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. The permittee shall submit a notice of the anticipated test date to the AQD Technical Programs Unit and District Office no later than 30 days prior to the test date and a complete test report shall be submitted to the AQD Technical Programs Unit and District Office within 30 days after the completion of the testing. All test methods, plans, and procedures shall be approved by the AQD prior to testing. After two consecutive tests demonstrate that the direction of air flow at all NDOs is into the NFE, 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))

VI. MONITORING/RECORDKEEPING

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

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring / recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1901)
- The permittee shall monitor, in a satisfactory manner, the temperature in the combustion chamber of the K-RTO on a continuous basis, during operation of EU-FLATRACKLINE. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. (R 336.1225, R 336.1702(a))
- 3. 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 336.1225, R 336.1702(a))
- 4. The permittee shall keep the following information on a calendar month basis for the EU-FLATRACKLINE:
 - a) Gallons (with water) of each material used.
 - b) VOC content (with water) 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 336.1225, R 336.1702(a))

5. The permittee shall keep, in a satisfactory manner, operating temperature records for K-RTO as required by SC IV.3. If the measured operating temperature of the RTO falls below 1450°F during operation of EU-FLATRACKLINE, the permittee may demonstrate compliance based upon a three-hour average temperature, by calculating the average operating temperature for each three hour period which includes

one or more temperature readings below 1450°F. The permittee shall keep all records and calculations on file and make them available to the Department upon request. (R 336.1225, R 336.1702(a))

VII. <u>REPORTING</u>

 Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EU-FLATRACKLINE authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-FLATRACKLINE. (R 336.1201(7)(a))

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. SV-K-RTO	34.6	59.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

1. Within thirty days of completion of installation (EU-FLATRACKLINE), the permittee shall label the emission unit including their associated control equipment according to a method acceptable to the AQD District Supervisor. Within seven days of completing the labeling, the permittee shall notify the AQD District Supervisor, in writing, as to the date the labeling was completed. (R 336.1201)

The following conditions apply to: EU-COELINE

DESCRIPTION: A plastic parts coating line consists of an uncontrolled parts loading and unloading tunnel, an uncontrolled 5-stage parts washer with dry-off oven and dry-off tunnel; and two (2) primecoating booths with flash-off, a prime cure oven, three (3) basecoat booths with flash-off, three (3) clearcoat booths with flash-off, associated tunnels, and a final cure oven all controlled by a Regenerative Thermal Oxidizer (PC-RTO). The coating line is located at 2050 Port City Blvd.

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: The VOC emissions from this line will be controlled by a Regenerative Thermal Oxidizer (PC-RTO). Overspray will be controlled by exhaust filters.

I. EMISSION LIMITS

Р	ollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1.	VOCs	40.1 tpy	12-month rolling time period as determined at the end of each calendar month	EU-COELINE	SC V.4	R 336.1205, R 336.1702(a)
2.	VOCs	400.8 lb/day	calendar day	EU-COELINE	SC V.4	R 336.1205

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 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 336.1224, 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 336.1225, R 336.1702(a), R 336.1901)
- 4. The permittee shall not operate EU-COELINE unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 180 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.
- d) A description of the procedures to capture, handle, and disposes of all materials to minimize the generation of fugitive emissions per SC numbers III.1 and III.3.

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 AQD 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 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate the coating booth portions of EU-COELINE unless all respective exhaust filters are installed and operating in a satisfactory manner. (R 336.1224, R 336.1301, R 336.1331, R 336.1901, R 336.1910)
- 2. The permittee shall equip and maintain each spray booth portion of EU-COELINE with High Volume Low Pressure (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 the coating booths, flash-offs/tunnels, and cure oven portions of EU-COELINE unless PC-RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of PC-RTO includes a minimum VOC capture efficiency of 99.5 percent (by weight), a minimum VOC destruction efficiency of 95.0 percent (by weight), and maintaining a minimum temperature of 1450°F and a minimum retention time of 0.5 seconds. (R 336.1205, R 336.1225, R 336.1702, R 336.1910)

V. TESTING/SAMPLING

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

The permittee shall determine the VOC content, water content, and density of any coating, catalyst, thinner, and cleanup solvent 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, R 336.1225, R 336.1702, R 336.1901, R 336.2001, R 336.2004, R 336.2040(5))

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, for the previous calendar month, unless otherwise specified in any monitoring / recordkeeping special condition. (R 336.1205, R 336.1225, R 336.1702, R 336.1901)
- 2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of PC-RTO to monitor and record the temperature on a continuous basis, during operation of EU-COELINE. Temperature data recording shall consist of

measurements made at equally spaced intervals, not to exceed 15 minutes per interval. (R 336.1205, R 336.1702, R 336.1910)

- 3. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, catalyst, thinner, cleanup solvent, etc., 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, R 336.1901)
- 4. The permittee shall keep the following information on a monthly basis for the EU-COELINE:
 - a) Daily for each coating, catalyst, thinner, and cleanup solvent used:
 - i. The coating, catalyst, thinner, and cleanup solvent identification;
 - ii. The amount used in gallons (with water); and
 - iii. The VOC content in pounds per gallon (with water).
 - b) Calculate the VOC emissions in pounds per calendar day.
 - 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 336.1225, R 336.1702, R 336.1901)

5. The permittee shall keep, in a satisfactory manner, continuous records of the temperature in PC-RTO. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1225, R 336.1702, R 336.1910)

VII. <u>REPORTING</u>

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 Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SV0001 – Chain-on-edge (COE) parts loading tunnel	12.0	33.0	R 336.1901
2.	SV0002 – Parts washer system (PWS) entrance	12.0	33.0	R 336.1901
3.	SV0003 – PWS cleaning tank #1 combustion byproduct	6.0	32.0	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4.	SV0004 – PWS rinse tank #1 combustion byproduct	6.0	33.0	R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5.	SV0005 – PWS exit	12.0	34.0	R 336.1901
6.	SV0006 – PWS dry-off oven and combustion byproduct	12.0	38.0	R 336.1901, 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
7.	SV0007 – PWS dry-off oven exit cooling tunnel to spray booths	12.0	37.0	R 336.1901
8.	SV0008 – COE parts unloading cooling tunnel	12.0	32.0	R 336.1901
9.	SV0009 – regenerative thermal oxidizer	53 x 30	35.0	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

The following conditions apply to: EU-AUTOLINE

DESCRIPTION: Automatic prime-coat spray booth, flash-off zone, and cure oven. Automatic basecoat spray booth, automatic clearcoat spray booth, flash-off zone, and cure oven. The coating line is located at 1801 Keating Avenue.

Flexible Group ID: FG-FACILITY

POLLUTION CONTROL EQUIPMENT: The VOC emissions from this line will be controlled by two catalytic oxidizers. Automatic prime-coat spray booth, flash-off zone, and cure oven will be controlled by a catalytic oxidizer (PRIME) and automatic basecoat spray booth, automatic clearcoat spray booth, flash-off zone, and cure oven controlled by a catalytic oxidizer (BASE/CLEAR). Overspray will be controlled by exhaust filters.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	300 pounds	Per calendar day	EU-AUTOLINE	SC V.2, SC VI.4	R 336.1225 R 336.1901
2. VOCs	45.0 tpy	12-month rolling time period as determined at the end of each calendar month	EU-AUTOLINE	SC VI.4	R 336.1205 R 336.1702(a)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. All waste solvents and coatings shall be collected and stored in closed containers to minimize the release of air contaminants to the ambient air. (R 336.1205, R 336.1225, R 336.1702(a), R 336.1901)
- The permittee shall not operate EU-AUTOLINE unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 180 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.
 - e) 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.
 - f) A description of the procedures to capture, handles, and disposes of all materials to minimize the generation of fugitive emissions per SC number III.1.

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 AQD 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 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate any spray booth portion of EU-AUTOLINE unless its respective dry panel filter is in place and operating properly. (R 336.1301, R 336.1331, R 336.1901, R 336.1910)
- 2. The permittee shall equip and maintain each spray booth portion of EU-AUTOLINE with high volume low pressure (HVLP) or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. (R 336.1205, R 336.1225, R 336.1702(a))
- 3. The permittee shall not operate EU-AUTOLINE unless the totally enclosed purge solvent system is in place and operating properly. (R 336.1205, R 336.1702(a))
- 4. The permittee shall not operate EU-AUTOLINE unless each respective catalytic oxidizer is installed and operating properly. Proper operation of each catalytic oxidizer is defined as a minimum combined VOC capture and destruction efficiency of 93.1 percent (by weight), and a minimum catalyst bed inlet temperature of 650 degrees Fahrenheit. (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 VOC content of any coating, catalyst, thinner, and cleanup solvent, as received and as applied, shall be determined using federal Reference Test Method 24 or other EPA approved reference method. Upon prior approval of the District Supervisor, Air Quality Division, VOC content may alternatively be determined from manufacturer's formulation data. (R 336.1225, R 336.1702(a), R 336.1901)
- 2. Within 180 days after commencement of trial operation, verification of VOC emission rates and proper operation of control equipment on EU-AUTOLINE by testing, at owner's expense, in accordance with Department requirements, will be required. Verification of emission rates includes the submittal of a complete report of the test results. No less than 60 days prior to testing, a complete stack testing plan must be submitted to the Air Quality Division. The final plan must be approved by the Air Quality Division prior to testing. (R 336.1225, R 336.1702(a), R 336.2001)

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, for the previous calendar month, unless otherwise specified in any monitoring / recordkeeping special condition. (**R 336.1205, R 336.1225, R 336.1702**)
- The permittee shall monitor and record the bed inlet temperature on each respective catalytic oxidizer for EU-AUTOLINE on a continuous basis in a manner and with instrumentation acceptable to the District Supervisor, Air Quality Division. All temperature data shall be kept on file and made available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1910)

- 3. The permittee shall maintain a current listing from the manufacturer, of the chemical composition of each coating, solvent, etc., including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. (R 336.1225, R 336.1702(a), R 336.1901)
- 4. The permittee shall keep a record for each calendar month of the following information for EU-AUTOLINE:
 - a) Daily for each coating, catalyst, thinner, and cleanup solvent used:
 - i. The coating, catalyst, thinner, and cleanup solvent identification;
 - ii. The amount used in gallons (with water and exempt solvents); and
 - iii. The VOC content in pounds per gallon (with water and exempt solvents).
 - b) Calculate the VOC emissions in pounds per calendar day for EU-AUTOLINE.
 - c) VOC emission calculations determining the calendar month emission rate in tons per month, and a 12-month rolling time period as determined at the end of each calendar month emission rate in tons per year for EU-AUTOLINE.

The records are for the purpose of compliance demonstration and shall be kept in a format that has been approved by the Air Quality Division District Supervisor. All such records shall be kept on file and made available to the District Supervisor upon request. (R 336.1225, R 336.1702(a), R 336.1901)

VII. <u>REPORTING</u>

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 Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	Prime-coat Catalytic Oxidizer Exhaust (SV-PRIME)	24	35	R 336.1225, R 336.1901 40 CFR 52.21(c) & (d)
2.	Basecoat / Clearcoat Catalytic Oxidizer Exhaust (SV-BASE-CLEAR)	30	35	R 336.1225, R 336.1901 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

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
	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	All Source-Wide Equipment

The following conditions apply Source-Wide to: FG-FACILITY

<u>DESCRIPTION</u>: All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

Emission Unit ID: All Source-Wide Equipment

POLLUTION CONTROL EQUIPMENT: As mentioned in the each Emission Unit Special Conditions

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	FG-FACILITY	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	FG-FACILITY	SC VI.2	R 336.1205(3)
3.	VOCs	Less than 89.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-FACILITY	SC VI.3	R 336.1205(3)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

V. TESTING/SAMPLING

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

- The permittee shall determine the HAP content of any coatings, reducer, thinners, purge and cleanup solvents, *etc.* (material) as received and as applied, 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))
- 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 336.1205(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, 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 FG-FACILITY:
 - 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 pounds per pound, 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 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))

- 3. The permittee shall keep the following information on a calendar month basis for FG-FACILITY:
 - a) Gallons or pounds of each VOC containing material used.
 - b) Where applicable, gallons or pounds of each VOC containing material reclaimed.
 - c) VOC content, in pounds per gallon or pounds per pound, of each VOC containing material used.
 - d) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - e) VOC 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(3))**

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTIONS

IX. OTHER REQUIREMENTS