

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

February 20, 2018

PERMIT TO INSTALL
57-05C

ISSUED TO
Hutchinson Aerospace & Industry

LOCATED AT
1300 South County Farm Road
Ithaca, Michigan

IN THE COUNTY OF
Gratiot

STATE REGISTRATION NUMBER
N6496

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 12, 2017

DATE PERMIT TO INSTALL APPROVED:

February 20, 2018

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	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO _{2e}	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H ₂ S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO _x	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable 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
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 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-RUBBERMOLDING	Rubber injection molding and compression presses, not to exceed 56 presses. A central ventilation system with a fabric filter will control a minimum of 70% of the installed presses. Any presses in excess of the minimum of 70% shall be vented to the in-plant environment.	November 17, 1998 / March 18, 2016	FGFACILITY
EU-DESPATCH1	Post-cure of metal and rubber parts, and some post-cure of adhesive coated metal parts in an electric heated oven.	March 24, 2005	FG-DESPATCH, FGFACILITY
EU-DESPATCH2	Post-cure of metal and rubber parts, and some post-cure of adhesive coated metal parts in an electric heated oven.	March 22, 2006	FG-DESPATCH, FGFACILITY
EU-ADHESIVEDIP1	An enclosed dual tank adhesive dip machine with overhead cure oven, all controlled by a regenerative thermal oxidizer (RTO).	March 1, 2000	FG-RTO, FG-FACILITY
EU-ADHESIVEDIP2	An enclosed dual tank adhesive dip machine with overhead cure oven, all controlled by an RTO.	October 1, 2002	FG-RTO, FG-FACILITY
EU-MANUALBOOTH	Manual spray booth with dry filters controlled by an RTO.	May 1, 2005	FG-RTO, FG-FACILITY
EU-APM1	Automatic spray paint/adhesive machine/booth with dry filters and a hot air dryer all controlled by an RTO.	May 1, 2005	FG-RTO, FG-FACILITY
EU-APM2	Automatic spray paint/adhesive machine/booth with dry filters and a hot air dryer all controlled by an RTO.	May 1, 2005	FG-RTO, FG-FACILITY
EU-PRODPLUS	Production plus machine that applies a coating to tubes and washers using a brush-type applicator. The parts are hot air dried in the machine after coating application. Emissions from the machine are controlled by an RTO.	May 1, 2005	FG-RTO, FG-FACILITY
EUTURBOSPRAY	Rotary spray booth that will apply adhesive to both metal and plastic parts using HVLP or equivalent applicators. Emissions from the booth are controlled by a permanent total enclosure (PTE) and an RTO	TBD / NA	FG-RTO, FG-FACILITY
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.			

The following conditions apply to: EURUBBERMOLDING

DESCRIPTION: Rubber injection molding and compression presses, not to exceed 56 presses. A central ventilation system with a fabric filter will control a minimum of 70% of the installed presses. Any presses in excess of the minimum of 70% shall be vented to the in-plant environment.

Flexible Group ID: FGFACILITY

POLLUTION CONTROL EQUIPMENT: Centralized fabric filter shall control a minimum of 70% of the installed presses.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs (due to rubber processing)	3.1 tpy	12-month rolling time period as determined at the end of each calendar month	EU-RUBBERMOLDING	SC VI.5	R336.1702(a)
2. PM (from the fabric filter)	0.01 lbs per 1000 lbs of exhaust gas ^a	Test Protocol*	EU-RUBBERMOLDING	GC 13, SC VI.4	R 336.1331
3. PM10 (from the fabric filter)	2.1 lb/hr	Test Protocol*	EU-RUBBERMOLDING	GC 13	40 CFR 52.21(c) & (d)
4. PM2.5 (from the fabric filter)	2.1 lb/hr	Test Protocol*	EU-RUBBERMOLDING	GC 13	40 CFR 52.21(c) & (d)
^a Calculated on a wet gas basis *Test protocol shall specify averaging time					

5. Visible emissions from the fabric filter for EU-RUBBERMOLDING shall not exceed a six-minute average of five (5) percent opacity. **(R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**

II. MATERIAL LIMITS

Material	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
1. Rubber, non-specific	6,000,000 lb per year	12-month rolling time period as determined at the end of each calendar month.	SC VI.5	R 336.1702(a), R 336.1901

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU-RUBBERMOLDING unless the central ventilation system with a fabric filter is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating the fabric filter within the pressure drop range specified by the manufacturer. The central ventilation system fabric filter shall control a minimum of 70% of the installed presses. Any presses installed in EU-RUBBERMOLDING in excess of the minimum of 70% that must be controlled by the central fabric filter shall be exhausted to the in-plant environment. **(R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the pressure drop for the fabric filter portion of EU-RUBBERMOLDING on a continuous basis. **(R 336.1225, 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))**

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 and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each type of rubber, 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 336.1702(a))**
3. The permittee shall maintain a current listing of the presses that are installed and a current listing of whether each installed press exhausts to the fabric filter or to the in-plant environment. The total number of presses installed shall not exceed 56. The permittee shall keep all records on file and make them available to the Department upon request. **(R336.1225)**
4. The permittee shall monitor and record the pressure drop for the fabric filter portion of EU-RUBBERMOLDING on a daily basis. **(R 336.1301, R 336.1331, 40 CFR 52.21(c) and (d))**
5. The permittee shall keep the following information on a monthly basis for EU-RUBBERMOLDING:
 - a. The amount and type of rubber processed in pounds per calendar month.
 - b. The amount and type of rubber processed in pounds per 12-month rolling time period as determined at the end of each calendar month.
 - c. The VOC emission factor for each type of rubber processed. (VOC emissions are based on emission factors from AP-42 Section 4.12, Table 4.12-8 Platen Press Curing Emission Factors or an alternative method acceptable to the AQD District Supervisor.)
 - d. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - e. 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 using mass balance or an alternative method and format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1702(a))**

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 Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-FFRUBBER	48 X 48	40	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

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-DESPATCH	Post-cure of metal and rubber parts in two electric heated ovens.	EU-DESPATCH1, EU-DESPATCH 2
FG-RTO	Adhesive rubber-to-metal coating operations.	EU-ADHESIVEDIP1, EU-ADHESIVEDIP2, EU-MANUALBOOTH, EU-APM1, EU-APM2, EU-PRODPLUS, EU-TURBOSPRAY
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

The following conditions apply to: FG-DESPATCH

DESCRIPTION: Post-cure of metal and rubber parts in two electric heated ovens.

Emission Units: EU-DESPATCH1, EU-DESPATCH 2

POLLUTION CONTROL EQUIPMENT: Regenerative Thermal Oxidizer

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs (due to rubber processing)	4.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-DESPATCH	SC VI.4	R336.1702(a)

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Rubber, non-specific	140,500 lb/yr	12-month rolling time period as determined at the end of each calendar month	FG-DESPATCH	SC VI.4	R336.1702(a)

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))**

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 and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1702(a))**
2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each type of rubber, 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 336.1702(a))**
3. The permittee shall monitor and record the pressure drop for the fabric filter portion of EU-RUBBERMOLDING on a daily basis. **(R 336.1301, R 336.1331, R 336.1910, 40 CFR 52.21(c) and (d))**
4. The permittee shall keep the following information on a monthly basis for FG-DESPATCH:
 - a. The amount and type of rubber processed in pounds per calendar month.
 - b. The amount and type of rubber processed in pounds per 12-month rolling time period as determined at the end of each calendar month.
 - c. The VOC emission factor for each type of rubber processed. (VOC emissions are based on emission factors from AP-42 Section 4.12, Table 4.12-8 Platen Press Curing Emission Factors or an alternative method acceptable to the AQD District Supervisor.)
 - d. VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - e. 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 using mass balance or an alternative method and format acceptable to the AQD District Supervisor and make them available to the Department upon request. **(R 336.1702(a))**

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 Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-DESPATCH1	12	42	R336.1225, 40 CFR 52.21(c) and (d)
2. SV-DESPATCH2	12	42	R336.1225, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply to: FG-RTO

DESCRIPTION: Adhesive rubber-to-metal coating operations.

Emission Units: EU-ADHESIVEDIP1, EU-ADHESIVEDIP2, EU-MANUALBOOTH, EU-APM1, EU-APM2, EU-PRODPLUS, EU-TURBOSPRAY

POLLUTION CONTROL EQUIPMENT: Permanent Total Enclosure (PTE) on EU-TURBOSPRAY, all EUs are controlled by an RTO

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOCs	30.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-RTO	SC VI.2, SC VI.4	R 336.1205(1)(a), R 336.1702(a)
2. VOCs	1.30 tpy	12-month rolling time period as determined at the end of each calendar month	EU-TURBOSPRAY	SC V.2, SC VI.2, SC VI.4	R 336.1205(1)(a), R 336.1702(a)

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 / 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 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))**
4. The permittee shall not operate the RTO portion of FG-RTO unless a malfunction abatement plan (MAP) as described in Rule 911(2) has been submitted within 45 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 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

5. The permittee shall maintain a minimum of 0.007 inches of water (H₂O) pressure differential between the PTE of EU-TURBOSPRAY and the adjacent area on a continuous basis. **(R 336.1205, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate the spray booth portions of FG-RTO 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 booth portions of FG-RTO 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 EU-ADHESIVEDIP1, EU-ADHESIVEDIP2, EU-MANUALBOOTH, EU-APM1, EU-APM2, or EU-PRODPLUS unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO includes a minimum VOC control (combined capture and destruction) efficiency of 85 percent (by weight), maintaining a minimum temperature of 1400°F, and a minimum retention time of 0.5 seconds. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
4. The permittee shall not operate EU-TURBOSPRAY unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO includes a minimum VOC capture efficiency of 100 percent (by weight), a minimum VOC destruction efficiency of 95 percent (by weight), maintaining a minimum temperature of 1400°F, and a minimum retention time of 0.5 seconds. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
5. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the RTO to monitor and record the temperature on a continuous basis, during operation of FGRT0. **(R 336.1224, R 336.1225, R 336.1702(a))**
6. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a differential pressure gauge to monitor the pressure differential between the PTE in EU-TURBOSPRAY and the respective outside area on a continuous basis during operation of EU-TURBOSPRAY. **(R 336.1205, R 336.1702(a), R 336.1902, 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 adhesive and coating 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 336.2001, R 336.2003, R 336.2004, R 336.2040(5))**

2. Within 180 days after commencement of trial operation, the permittee shall verify the destruction efficiency of the RTO by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1702, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (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 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)**
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 monitor and record, in a satisfactory manner, the temperature in the combustion chamber of the RTO on a continuous basis. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702)**
4. The permittee shall keep the following information on a monthly basis for EUTURBOSPRAY and FG-RTO, each separately:
 - a. Gallons (with water) of each adhesive, coating, and solvent used.
 - b. VOC content (with water) of each adhesive, coating, and solvent 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 using mass balance or an alternative method and format acceptable to the AQD District Supervisor and make them available to the Department upon request. **(R 336.1205, R 336.1702(a))**

5. The permittee shall monitor and record, in a satisfactory manner, the pressure differential between the PTE for EUTURBOSPRAY and the outside area, on a continuous basis, to verify that air is entering the PTE. Pressure differential data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1205, R 336.1702, R 336.1910)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification 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-TURBOSPRAY. **(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-RTO	30	42	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

NA

The following conditions apply Source-Wide to: FGFACILITY

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

POLLUTION CONTROL EQUIPMENT: RTO to control FG-RTO and the associated emission units.

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.3	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.3	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 material, as applied and 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, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(3))**
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 336.1205(3))**

3. The permittee shall keep the following information on 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 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 using mass balance or an alternative method and format acceptable to the AQD District Supervisor 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