MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

June 15, 2009

PERMIT TO INSTALL

No. 15-09A

ISSUED TO

Total Door

LOCATED AT

6145 Delfield Drive Pontiac, Michigan 48329

IN THE COUNTY OF

Oakland

STATE REGISTRATION NUMBER

N1507

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 5/26/2009	REQUIRED BY RULE 203:
DATE PERMIT TO INSTALL APPROVED: 6/15/2009	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

	Common Appreviat	1	Collutant/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
СОМ	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	NO _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	PM less than 10 microns diameter
NSPS	New Source Performance Standards	PM2.5	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
PTE	Permanent Total 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).

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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, 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 AQD District Supervisor shall be notified, in writing, of a change in ownership or operational control of the stationary source or emission unit(s) authorized by this Permit to Install pursuant to R 336.1219. The notification shall include all of the information required by R 336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R 336.1219(1)(c), agreeing to and accepting the terms and conditions of this Permit to Install, and shall notify the AQD District Supervisor of any change in the contact person for this Permit to Install. (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.

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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)

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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 ID Emission Unit Description (Process Equipment & Control Devices)	
EU-ELECTRO	A spray coating line consisting of a booth with two automated electrostatic applicators and two associated cure ovens common to EU-ELECTRO and EU-HANDHLD used to apply primer and topcoat to metal doors. Includes purge and clean-up operations associated with the coating line.	FGFACILITY, FG-COATING
- I I-HANDHI I)		FGFACILITY, FG-COATING
EU-ROLL	A roll coat line used to apply adhesive to metal doors and foam core material with flow-coat and roll-coat applicators. Includes purge and clean-up operations associated with the coating line.	FGFACILITY, FG-COATING

The following conditions apply to: EU-ELECTRO

<u>DESCRIPTION:</u> A spray coating line consisting of a booth with hand held HVLP applicators and two associated cure ovens common to EU-ELECTRO and EU-HANDHLD used to apply primer and topcoat to metal doors and topcoat to color samples. Includes purge and clean-up operations associated with the coating line.

Flexible Group ID: FGFACILITY, FG-COATING

POLLUTION CONTROL EQUIPMENT: Dry filters or a water curtain for particulate control. A properly operated thermal oxidizer or catalytic oxidizer may be used to meet the applicable VOC limits.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC*	10.0 tpy	12-month rolling time period as determined at the end of each calendar month	EU-ELECTRO	FG-COATING SCs VI.1, 2, and 3	R 336.1225, R 336.1702(d)
2. VOC*	2,000 lbs/month	Calendar Month	EU-ELECTRO	FG-COATING SCs VI.1, 2, and 3	R 336.1702(d)
*Includes VOC emissions from this coating line and purge and clean-up operations associated with the line.					

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II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EU-ELECTRO unless dry filters or a water curtain is installed and operating properly. (R 336.1910, R 336.1331)
- 2. EU-ELECTRO may not be used to coat cans, coils, large appliances, metal furniture, magnet wire, fabrics, paper, vinyl, or graphic arts products. (R 336.1201a(1))

IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not operate EU-ELECTRO unless the line is equipped with dry filters or a water curtain for particulate control. A properly operated thermal oxidizer or catalytic oxidizer may be used to meet the applicable VOC limits. Proper operation of a thermal or catalytic oxidizer requires an overall minimum of 76 percent reduction of VOC emissions to the atmosphere. (R 336.1224, R 336.1910, R 336.1331, R 336.1702(d))
- 2. The permittee shall equip and maintain EU-ELECTRO with high volume-low pressure (HVLP) spray or equivalent technology with equal or better transfer efficiency (e.g., electrostatic spray, dip, flowcoat, roller, dip-spin). (R 336.1702(d))

V. <u>TESTING/SAMPLING</u>

NA

VI. MONITORING/RECORDKEEPING

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

1. The exhaust gases from EU-ELECTRO shall be discharged unobstructed vertically upwards to the ambient air at an exit point not less than one and one half times the building height (from ground level to point of discharge). (R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

IX. OTHER REQUIREMENTS

NA

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The following conditions apply to: EU-HANDHLD

<u>DESCRIPTION</u>: A spray coating line consisting of a booth with hand held HVLP applicators and two associated cure ovens common to EU-ELECTRO and EU-HANDHLD used to apply primer and topcoat to metal doors and topcoat to color samples. Includes purge and clean-up operations associated with the coating line.

Flexible Group ID: FGFACILITY, FG-COATING

POLLUTION CONTROL EQUIPMENT: Dry filters or a water curtain for particulate control. A properly operated thermal oxidizer or catalytic oxidizer may be used to meet the applicable VOC limits

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC*	10.0 tpy	12-month rolling time period as determined at the end of each calendar month	EU-HANDHLD	FG-COATING SCs VI.1, 2, and 3	R 336.1225, R 336.1702(d)
2. VOC*	2,000 lbs/month	Calendar Month	EU-HANDHLD	FG-COATING SCs VI.1, 2, and 3	R 336.1702(d)

^{*} Includes VOC emissions from this coating line and purge and clean-up operations associated with the line.

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not operate EU-HANDHLD unless dry filters or a water curtain is installed and operating properly. (R 336.1910, R 336.1331)
- 2. EU-HANDHLD may not be used to coat cans, coils, large appliances, metal furniture, magnet wire, fabrics, paper, vinyl, or graphic arts products. (R 336.1201a(1))

IV. <u>DESIGN/EQUIPMENT PARAMETERS</u>

- 1. The permittee shall not operate EU-HANDHLD unless the line is equipped with dry filters or a water curtain for particulate control. A properly operated thermal oxidizer or catalytic oxidizer may be used to meet the applicable VOC limits. Proper operation of a thermal or catalytic oxidizer requires an overall minimum of 76 percent reduction of VOC emissions to the atmosphere. (R 336.1224, R 336.1910, R 336.1331, R 336.1702(d))
- 2. The permittee shall equip and maintain EU-HANDHLD with high volume-low pressure (HVLP) spray or equivalent technology with equal or better transfer efficiency (e.g., electrostatic spray, dip, flowcoat, roller, dip-spin). (R 336.1702(d))

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V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

1. The exhaust gases from EU-HANDHLD shall be discharged unobstructed vertically upwards to the ambient air at an exit point not less than one and one half times the building height (from ground level to point of discharge). (R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

IX. OTHER REQUIREMENTS

N/A

The following conditions apply to: EU-ROLL

<u>DESCRIPTION</u>: A curtain coat line used to apply adhesive to metal doors and foam core material with flow-coat and roll-coat applicators. Includes purge and clean-up operations associated with the coating line.

Flexible Group ID: FGFACILITY, FG-COATING

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC*	5.8 tpy	12-month rolling time period as determined at the end of each calendar month	EU-ROLL	FG- COATING SCs VI.1, 2, and 3	R 336.1225, R 336.1702(d)
2. VOC*	2,000 lb/month	Calendar Month	EU-ROLL	FG- COATING SCs VI.1, 2, and 3	R 336.1702(d)

*Includes VOC emissions from this coating line and purge and clean-up operations associated with the line.

Total Door June 15, 2009 Permit No. 15-09A Page 9 of 16 **II. MATERIAL LIMITS** NA III. PROCESS/OPERATIONAL RESTRICTIONS NA IV. <u>DESIGN/EQUIPMENT PARAMETERS</u> 1. The permittee shall equip and maintain EU-ROLL with flow-coat and roll-coat applicators or comparable technology with equivalent transfer efficiency. (R 336.1702(a)) V. TESTING/SAMPLING NA VI. MONITORING/RECORDKEEPING NA VII. REPORTING NA VIII. STACK/VENT RESTRICTIONS

NA

NA

IX. OTHER REQUIREMENTS

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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-COATING	Includes any coating line covered by this permit, any permit to install issued pursuant to Rule 201, and any coating line exempt from the requirement to obtain a permit pursuant to Rule 287 and/or Rule 290.	EU-HANDHLD
FG-FACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

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

Associated Emission Unit IDs: EU-ELECTRO, EU-HANDHLD, EU-ROLL

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC*	30.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-COATING	SC VI.1, 2, and 3	R 336.1225, R 336.1702(d)
2. VOC**	2,000 lbs/month	Calendar Month	FG - COATING	SC VI.1, 2, and 4	R 336.1620(5)
3. Xylene (CAS No. 1330-20-7)	56.54 lbs/day	Calendar Day	FG - COATING	SC VI.5	R 336.1225, R 336.1901
4. P-chlorobenzotrifluoride (CAS No. 98-56-6)	39.57 lbs/day	Calendar Day	FG - COATING	SC VI.5	R 336.1224, R 336.1225, R 336.1901

^{*} Includes VOC emissions from all coating lines and all associated purge and clean-up operations at the stationary source. This includes the combined emissions from any coating line covered by this permit, any general permit, any permit to install issued pursuant to Rule 201, and any coating line exempt from the requirement to obtain a permit pursuant to Rule 287 and/or Rule 290.

^{**}Combined actual VOC emissions from all flat wood paneling lines within the stationary source while coating flat wood paneling.

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II. MATERIAL LIMITS

 The melamine resin content of any coating used in FG-COATING shall not exceed 4 percent by weight. Further, the free formaldehyde content of any coating used in FG-COATING shall not exceed 0.2 percent by weight. Compliance with the melamine resin content and free formaldehyde content limits shall be determined from the supplier's current formulation data or material safety data sheets (MSDS). (R 336.1225, R 336.1901)

2. The usage of any coatings containing free formaldehyde and/or melamine resins shall not exceed 1,000 gallons per 12-month rolling time period. (R 336.1225, R 336.1901)

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall capture all waste coatings, adhesives, reducers, and purge and clean-up solvents and shall store them in closed containers. The permittee shall dispose of all waste coatings, adhesives, reducers, and purge and clean-up solvents 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, adhesives, reducers, and purge and clean-up solvents, 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), R 336.1901)
- 4. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart HHHHHH for spray application of coatings to a plastic and/or metal substrate by the initial compliance date. (40 CFR Part 63, Subpart A and Subpart HHHHHHH)

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 VOC content, water content and density of any coatings, adhesives, reducers, and purge and clean-up solvents, 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 336.1225, R 336.1702, R 336.1901, R 336.2001, R 336.2003, 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 336.1224, R 336.1225, R 336.1702, R 336.1901)
- 2. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, adhesive, reducer, and purge and clean-up solvent, including the weight percent of each component.

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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, R 336.1901)

- 3. The permittee shall keep the following information on a monthly basis for FG-COATING:
 - a) Monthly record of purchase orders and invoices for all coatings, reducers, and purge/clean-up solvents. (R 336.1225, R 336.1702(d))
 - b) Monthly record of the VOC content in pounds per gallon of all reducers and purge/clean-up solvents, the usage rate in gallons and disposal records. (R 336.1225, R 336.1702(d))
 - c) Monthly record of the VOC content in pounds per gallon of each coating and the usage rate in gallons. (R 336.1225, R 336.1702(d))
 - d) Monthly and annual VOC emission rate calculations for each coating line, in tons per month and tons per 12-month rolling time period, using the method specified in Appendix A. (R 336.1225, R 336.1702(d))
 - e) Annual records, based upon a 12-month rolling time period, of the actual VOC emission rate in tons per year for all coating lines and associated purge and clean-up operations at the stationary source. (R 336.1702(d))
 - f) Date and description of any modification or new installation of process or control equipment for the coating line. (R 336.1201a(1))
 - g) Date and description of any coating change or replacement on the coating line. (R 336.1201a(1))
 - h) For a coating line using add-on control to meet the requirements of this general permit, see Section IX for additional monitoring requirements.
- 4. The permittee shall keep the following information on a monthly basis for FG-COATING:
 - a) Gallons usage (with water) of any coating containing free formaldehyde (CAS No. 50-00-0) and/or melamine resins per 12-month rolling time period as determined at the end of each calendar month.
 - b) The free formaldehyde (CAS No. 50-00-0) content and melamine resin content in weight percent of each material used based on a current material safety data sheet, environmental data sheet, and/or formulation data for any coating containing free formaldehyde and/or melamine resin.

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 336.1901)

- 5. The permittee shall keep the following information on a calendar day basis for FG-COATING:
 - a) Gallons (with water) of each Xylene (CAS No. 1330-20-7) containing material and P-chlorobenzotrifluoride (CAS No. 98-56-6) containing material used.
 - b) Where applicable, gallons (with water) of each Xylene (CAS No. 1330-20-7) containing material and P-chlorobenzotrifluoride (CAS No. 98-56-6) containing material reclaimed.
 - c) The Xylene (CAS No. 1330-20-7) content (with water) and P-chlorobenzotrifluoride (CAS No. 98-56-6) content (with water) in pounds per gallon of each material used.
 - d) Xylene (CAS No. 1330-20-7) and P-chlorobenzotrifluoride (CAS No. 98-56-6) mass emission calculations determining the daily emission rates 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. (R 336.1224, R 336.1201)

- 6. The permittee shall keep the following information on a monthly basis for all flat wood paneling lines within the stationary source for operation during the coating of flat wood paneling:
 - a) Monthly record of the VOC content in pounds per gallon of each coating and the usage rate in gallons.
 - b) Monthly record of the VOC content in pounds per gallon of all reducers and purge/clean-up solvents, the usage rate in gallons and disposal records.

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c) Monthly combined actual VOC emission rate calculations for all flat wood paneling lines within the stationary source due to coating of flat wood paneling, using the method specified in Appendix A.

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 336.1620(5))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

- 1. For a coating line using a thermal oxidizer: Proper operation requires an overall minimum of 76 percent reduction of VOC emissions to the atmosphere. The oxidizer shall be operated at a minimum temperature of 1400°F and a minimum residence time of 0.5 seconds in the combustion chamber. (R 336.1224, R 336.1910, R 336.1702(d))
- 2. For a coating line using a thermal oxidizer: The permittee shall monitor and record the temperature in the thermal oxidizer near the combustion chamber outlet on a continuous basis, in a manner and with instrumentation acceptable to the Air Quality Division. All temperature data shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1201a(1))
- 3. For a coating line using a catalytic oxidizer: Proper operation requires an overall minimum of 76 percent reduction of VOC emissions to the atmosphere. The oxidizer shall be operated at a minimum temperature of 600°F at the inlet of the catalyst bed. (R 336.1224, R 336.1910, R 336.1702(d))
- 4. For a coating line using a catalytic oxidizer: The permittee shall monitor and record the temperature at the inlet to the catalyst bed of the catalytic oxidizer at least every 15 minutes, in a manner and with instrumentation acceptable to the Air Quality Division. All temperature data shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1201a(1))
- 5. For a coating line using a thermal or catalytic oxidizer: The permittee shall keep records of the date, duration and description of any malfunction of the control equipment, any maintenance performed, any replacement of catalyst and any testing results. (R 336.1201a(1))

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

POLLUTION CONTROL EQUIPMENT: NA

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)

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

NA

IV. <u>DESIGN/EQUIPMENT PARAMETERS</u>

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, adhesive, reducer, and purge and clean-up solvent 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))

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 monthly 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.

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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 cumulative emission rate of each during the first 12-months and the annual emission rate of each thereafter, in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA.

IX. OTHER REQUIREMENTS

NA

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APPENDIX A VOC Emission Calculations for 10 TPY Coating Line

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MONTH / YEAR					
	Α	В	C = A x B		
MATERIAL IDENTIFICATION** (Coating, Reducer, Catalyst, or Purge/Clean-up Solvent)	MATERIAL USED (Gallons)*	VOC CONTENT** (Pounds VOC / Gallon)	VOC EMISSIONS (Pounds)		
Total pounds VOCs und	controlled, D = Sum of	С	D		
Total tons VOCs uncon	trolled, E = D/2000		E		
Control Factor F : For a coating line us	sing a properly operate	d thermal or catalytic oxidiz	zer to meet the requirements		
of the general permit, $\mathbf{F} = 1-(76/100)$	= 0.24. If uncontrolle	ed, F = 1	F		
Total tons VOCs emitted this month, G = E x F					
Total tons VOCs emitted 11 previous months, H = Sum of G for 11 previous months					
Total tons VOCs emitted over 12-mor	Total tons VOCs emitted over 12-month period, J = G + H				
J can not exceed 10 tons per year f source. These limits include emission					

^{*} For purge/clean-up solvents, subtract amount reclaimed

^{*} Reducers and purge/cleanup solvents composed entirely of VOC-exempt solvents shall be identified under the "MATERIAL IDENTIFICATION" and "MATERIAL USED" columns and listed as "0.0" in the "VOC CONTENT" and "VOC EMISSIONS" columns.