MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

November 21, 2007

PERMIT TO INSTALL

No. 829-90C



STATE REGISTRATION NUMBER N2344

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:

11/16/2007	
DATE PERMIT TO INSTALL APPROVED: 11/21/2007	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

NEW SOURCE REVIEW PERMIT TO INSTALL

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Common Abbreviations / Acronyms Used in this Permit to Install

Common Acronyms			Iutant / 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	H₂S	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	MM	Million
	Technology		
MAERS	Michigan Air Emissions Reporting	MW	Megawatts
MAP	System Malfunction Abatement Plan	NOx	Ovideo of Nitrogon
MDEQ	Michigan Department of Environmental	PM	Oxides of Nitrogen Particulate Matter
MDEQ	Quality		
MSDS	Material Safety Data Sheet	PM-	Particulate Matter less than 10 microns
		10	diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	pph	Pound per hour
NSPS	New Source Performance Standards	ppm	Parts per million
NSR	New Source Review	ppmv	Parts per million by volume
PS	Performance Specification	ppmw	Parts per million by weight
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge
PTI	Permit to Install	scf	Standard cubic feet
RACT	Reasonable Available Control	sec	Seconds
SC	Technology Special Condition	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number		Tons per year
TAC	Toxic Air Contaminant	tpy	Microgram
VE	Visible Emissions	μg VOC	Volatile Organic Compounds
			Year
		yr	ισαι

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

GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (**R 336.1201(1)**)
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909, 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))**
- 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 R336.1210, 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 R336.1219. The notification shall include all of the information required by R336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R336.1219(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 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 nor does it affect any liability for past violations under the Natural Resources and Environmental Protection Act, 1994 PA 451.
- 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 R336.1301, 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 R336.1303. (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 R336.1370(2). **(R 336.1370)**
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. (**R 336.2001**)

SPECIAL CONDITIONS

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification			
EUCoatingLine-02	Roll Coating Line No. 2; exhaust from Oven Zone 1 is	SVCoatingLine-02			
	controlled by a Solvent Recovery System (captures,				
	condenses, and recycles solvents)				
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.					

Flexible Group Identification

Flexible Group Emission Units Included in Flexible Group		Stack Identification
FGFacility	All equipment at the stationary source including equipment covered by other permits, grand-fathered	Not Applicable (NA)
	equipment and exempt equipment.	

The following conditions apply to: EUCoatingLine-02

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
1.1a	VOCs	EUCoatingLine-02	15.8 tons*	Cumulative emissions for the entire temporary operating period *	SC 1.8, SC 1.10, SC 1.12 - SC 1.13	R 336.1702(a)
1.1b	Acetone	EUCoatingLine-02	4.9 tons*	Cumulative emissions for the entire temporary operating period*	SC 1.10 - SC 1.13	R 336.1224
1.1e	VOCs	EUCoatingLine-02	2.9 lbs/gal (minus water)** as applied	Daily volume- weighted average	SC 1.8, SC 1.10, SC 1.12	R 336.1702 (d)
1.1c	Isopropyl Alcohol (CAS# 67- 63-0)	EUCoatingLine-02	4.3pph	Test Protocol***	GC 13	R 336.1225
1.1d	Isopropyl Alcohol (CAS# 67- 63-0)	EUCoatingLine-02	73.2 Ibs/day	Calendar day	SC 1.10, SC 1.11, SC 1.14	R 336.1225

Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements	
*Cumulative total emissions for the entire temporary operating period beginning upon approval of this permit and terminating on or before February 29, 2008.						
**The phrase "minus water" shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. (R 336.1602(4))						
***Test Protocol shall specify averaging time.						

Material Usage Limits

1.2 The coating usage on EUCoatingLine-02 shall not exceed 250 gallons of coating per calendar day nor 14,000 gallons for the entire temporary operating period beginning upon approval of this permit and terminating on or before February 29, 2008. (R 336.1224, R 336.1225, R 336.1702(a))

Process / Operational Limits

- 1.3 The permittee shall capture all waste coating materials and solvents and shall store them in closed containers. The permittee shall dispose of all waste coating materials and solvents in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)
- 1.4 All waste inks, coatings, cleanup and purge solvents, *etc.* (material) shall be captured and stored in closed containers and shall be disposed of in an acceptable manner in compliance with all applicable rules and regulations. (R 336.1224, R 336.1702(a))
- 1.5 The EUCoatingLine-02 roll coating line run speed shall not exceed 80 feet per minute. (R 336.1224, R 336.1225, R 336.1702(a))

Equipment

- 1.6 The permittee shall equip and maintain the EUCoatingLine-02 with a roll coater applicator system or equivalent technology with comparable transfer efficiency. (R 336.1702(a))
- 1.7 The permittee shall not operate EUCoatingLine-02 unless the exhaust from oven zone 1 is directed to the Solvent Recovery System that captures, condenses and recycles solvents and is installed, maintained and operated in a satisfactory manner. Satisfactory operation includes maintaining a minimum solvent recovery percentage of 56 percent by weight of all solvents used on EUCoatingLine-02 and a maximum exhaust temperature of 15 °F. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)

Testing

1.8 The VOC content, water content, and density of any material as applied and as received shall be determined using federal Reference Test Method 24. Upon prior approval by the AQD District Supervisor, the VOC content may be determined from manufacturer's formulation data. If the Method 24 and the formulation values should differ, then the Method 24 results shall be used to determine compliance. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

Monitoring

1.9 The permittee shall monitor, in a satisfactory manner, the Solvent Recovery System exhaust temperature on a continuous basis in a manner and with instrumentation acceptable to the Air Quality Division. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

Recordkeeping / Reporting / Notification

- 1.10 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 recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225, R 336.1702, R 336.1901)
- 1.11 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. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)
- 1.12 The permittee shall keep the following information on a calendar day basis for EUCoatingLine-02:
 - a) Gallons (with water) and pounds of each coating material used.
 - b) Gallons and pounds of each solvent used.
 - c) VOC and Acetone content (minus water and with water) of each coating material as applied in pounds per gallon.
 - d) The amount of solvent recovered in gallons and pounds using the Solvent Recovery System and the Solvent Recovery System recovery percentage for the calendar day.
 - e) VOC and Acetone mass emission calculations determining the emission rates of each in pounds per calendar day.
 - f) VOC emission calculations determining the volume-weighted average VOC content of all coatings which belong to the same coating category and which are used during each calendar day averaging period.
 - g) Hours of operation.

The records shall be kept in a format acceptable to the AQD Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1702(d), R 336.1901)

- 1.13 The permittee shall keep the following information on a calendar month basis for EUCoatingLine-02:
 - a) Cumulative gallons of coating usage since the beginning of the temporary operating period that begins upon approval of this permit and terminates on or before February 29, 2008.

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- b) VOC and Acetone mass emission calculations determining the cumulative total emissions in tons for the entire temporary operating period beginning upon approval of this permit and terminating on or before February 29, 2008. (R 336.1224, R 336.1702(a))
- 1.14 The permittee shall keep the following information on a calendar day basis for EUCoatingLine-02:
 - a) Gallons (with water) of each Isopropyl Alcohol (CAS# 67-63-0) containing material used.
 - b) Where applicable, gallons (with water) of each Isopropyl Alcohol (CAS# 67-63-0) containing material reclaimed.
 - c) The Isopropyl Alcohol (CAS# 67-63-0) content (with water) in pounds per gallon of each material used and reclaimed.
 - d) Isopropyl Alcohol (CAS# 67-63-0) mass emission calculations determining the emission rate in pounds per calendar day taking into account the Solvent Recovery System recovery percentage for the 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 for a period of at least five years and make them available to the Department upon request. (R 336.1225, R 336.1901)

- 1.15 The permittee shall record the EUCoatingLine-02 roll coating line run speed at least once per shift. The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702, R 336.1901)
- 1.16 The permittee shall record the EUCoatingLine-02 roll coating line Solvent Recovery System exhaust temperature at least once per shift. The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702, R 336.1901)

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirement	
1.17	SVCoatingLine-02	24	38	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)	
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

Permit Dates

1.16 The temporary operation of EUCoatingLine-02 shall not extend beyond February 29, 2008, without approval of a Permit to Install authorizing continued operation. (R 336.1201)

The following conditions apply to: FGFacility

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
2.1a	Each Individual HAP	FGFacility	Less than 9.0 tpy	12-month rolling time period as determined at the end of each calendar month	SC 2.4	R 336.1205(3)
2.1b	Aggregate HAPs	FGFacility	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month	SC 2.4	R 336.1205(3)

Testing

2.2 The HAP content of any material as applied and as received shall be determined using manufacturer's formulation data. Upon request of the AQD District Supervisor, the manufacturer's HAP formulation data shall be verified using EPA Test Method 311. (R 336.1205(3))

Recordkeeping / Reporting / Notification

- 2.3 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 recordkeeping, reporting or notification special condition. (R 336.1205(3))
- 2.4 The permittee shall keep the following information on a calendar month basis for FGFacility:
 - a) Gallons or pounds of each HAP containing material used.
 - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
 - c) HAP content, in pounds per gallon or 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. For the first month following permit issuance, the calculations shall include the summation of emissions from the 11-month period immediately preceding the issuance date. For each month thereafter, calculations shall include the summation of emissions for the appropriate number of months prior to permit issuance plus the months following permit issuance for a total of 12 consecutive months.

The records shall be kept in a format acceptable to the AQD Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **(R 336.1205(3))**

Appendix

The permittee shall perform following restrictions to minimize the introduction of contaminants to the outer air. (R 336.1702(d), R 336.1225, R 336.1224, R 336.1901)

- 1. The permittee shall not operate the twelve solvent tanks unless the submerged fill pipes, pressure relief valves, dispensing covers and coupled fill hoses are installed and operating properly.
- 2. The permittee shall maintain the fill pipe in each solvent tank below the liquid surface at all times.
- 3. The permittee shall not operate the mix area tanks unless the covers are installed and operating properly. The permittee shall maintain the covers in the closed position, except when the openings are in actual use.
- 4. The permittee shall not operate the grind/storage area drums unless the tight-fitting covers are installed and operating properly.
- 5. The permittee shall not operate the coater prep area mixing vessels and pumps unless the covers are installed and operating properly.
- 6. The permittee shall not operate the wash tanks unless the foot operated lids are installed and operating properly.