

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

July 6, 2011

PERMIT TO INSTALL
225-05D

ISSUED TO
Multi Packaging Solutions, Inc.

LOCATED AT
504 Eastern Avenue
Allegan, Michigan

IN THE COUNTY OF
Allegan

STATE REGISTRATION NUMBER
N6727

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:

June 23, 2011

DATE PERMIT TO INSTALL APPROVED:

July 6, 2011

SIGNATURE:

DATE PERMIT VOIDED:

SIGNATURE:

DATE PERMIT REVOKED:

SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant/Measurement Abbreviations	
AQD	Air Quality Division	BTU	British Thermal Unit
ANSI	American National Standards Institute	°C	Degrees Celsius
BACT	Best Available Control Technology	CO	Carbon Monoxide
CAA	Clean Air Act	dscf	Dry standard cubic foot
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit
COM	Continuous Opacity Monitoring	gr	Grains
EPA	Environmental Protection Agency	Hg	Mercury
EU	Emission Unit	hr	Hour
FG	Flexible Group	H ₂ S	Hydrogen Sulfide
GACS	Gallon of Applied Coating Solids	hp	Horsepower
GC	General Condition	lb	Pound
HAP	Hazardous Air Pollutant	m	Meter
HVLP	High Volume Low Pressure *	mg	Milligram
ID	Identification	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	NO _x	Oxides of Nitrogen
MDEQ	Michigan Department of Environmental Quality (Department)	PM	Particulate Matter
MIOSHA	Michigan Occupational Safety & Health Administration	PM10	PM less than or equal to 10 microns diameter
MSDS	Material Safety Data Sheet	PM2.5	PM less than or equal 2.5 microns 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	Reasonably Available Control Technology	sec	Seconds
ROP	Renewable Operating Permit	SO ₂	Sulfur Dioxide
SC	Special Condition	THC	Total Hydrocarbons
SCR	Selective Catalytic Reduction	tpy	Tons per year
SRN	State Registration Number	µg	Microgram
TAC	Toxic Air Contaminant	VOC	Volatile Organic Compounds
TEQ	Toxicity Equivalence Quotient	yr	Year
VE	Visible Emissions		

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

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.

12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). **(R 336.1370)**

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

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-LabelPress01	Flexographic Printing Press, Model: Mark Andy 2200/7, Web Width: 7 inches, Substrate: Label Paper, Press Cleanup: Auto and/or Manual. Stack ID: SV-LabelPress02	01/03/2005 05/07/2009	FGAllPermittedEU
EU-LabelPress02	Flexographic Printing Press, Model: Mark Andy 2200-10, Web Width 10", Substrate Paper Board, Press Clean up: Auto and/or Manual Stack ID: SV-LabelPress01	01/14/2010	FGAllPermittedEU
EU-LabelPress03	Flexographic Printing Press, Model: Mark Andy 2200-10, Web Width 10", Substrate Paper Board, Press Clean up: Auto and/or Manual Stack ID: SV-LabelPress02	01/14/2010	FGAllPermittedEU
EU-LabelPress06	Flexographic Printing Press, Model: Mark Andy 2200/7, Web Width 7 inches, Substrate: Label Paper, Press Cleanup: Auto and/or Manual. Stack ID: SV-LabelPress02	01/03/2005 05/07/2009	FGAllPermittedEU
EU-LabelPress07	Flexographic Printing Press, Model: Mark Andy 2200/7, Web Width 7 inches, Substrate: Label Paper, Press Cleanup: Auto and/or Manual. Stack ID: SV-LabelPress02	01/03/2005 05/07/2009	FGAllPermittedEU
EU-LabelPress08	Flexographic Printing Press, Model: Mark Andy 2200/10, Web Width 10 inches, Substrate: Label Paper, Press Cleanup: Auto and/or Manual. Stack ID: SV-LabelPress02	01/03/2005 05/07/2009	FGAllPermittedEU
EU-LabelPress09	Flexographic Printing Press, Model: Mark Andy 2200/10 8C, Web Width 10 inches, Substrate: Label Paper, Press Cleanup: Auto and/or Manual. Stack ID: SV-LabelPress01	01/03/2005 05/07/2009	FGAllPermittedEU
EU-CartonPress01	Flexographic Printing Press, Model Comco PG 13", Web Width, 13 inches, Substrate: Paper Board, Press Cleanup: Auto and/or Manual. Stack ID: SV-CartonPress01	07/06/2011	FGAllPermittedEU
EU-CartonPress02	Flexographic Printing Press, Model Comco PG 13", Web Width, 13 inches, Substrate: Paper Board, Press Cleanup: Auto and/or Manual. Stack ID: SV-CartonPress02	07/06/2011	FGAllPermittedEU
EU-CartonPress03	Flexographic Printing Press, Model Comco PG 13", Web Width, 13 inches, Substrate: Paper Board, Press Cleanup: Auto and/or Manual. Stack ID: SV-CartonPress03	07/06/2011	FGAllPermittedEU
EU-PlateMaking	A Plate Making Process. Stack IDs: SV-PlateMaking01 & SV-PlateMaking02	01/03/2005 05/07/2009	FGAllPermittedEU
EU-FolderGluer01	Carton Folder-Gluer for Labels and Cartons: Bobst Media 45	07/06/2011	FGAllPermittedEU

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-FolderGluer02	Carton Folder-Gluer for Labels and Cartons: IPBM 6FX	07/06/2011	FGAIIPermittedEU
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 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
FGAIIPermittedEU	Total Seven (7) Label Presses, Three (3) Carton Presses, One (1) Plate Making Process, and Two (2) Folder-Gluers.	EU-LabelPress01, EU-LabelPress02, EU-LabelPress03, EU-LabelPress06, EU-LabelPress07, EU-LabelPress08, EU-LabelPress09, EU-CartonPress01, EU-CartonPress02, EU-CartonPress03, EU-PlateMaking, EU-FolderGluer01, and EU-FolderGluer02

The following conditions apply to: FGAIIPermittedEU

DESCRIPTION: To Total Seven (7) Label Presses, Three (3) Carton Presses, One (1) Plate Making Process, and Two (2) Folder-Gluers.

Emission Unit IDs: EU-LabelPress01, EU-LabelPress02, EU-LabelPress03, EU-LabelPress06, EU-LabelPress07, EU-LabelPress08, EU-LabelPress09, EU-CartonPress01, EU-CartonPress02, EU-CartonPress03, EU-PlateMaking, EU-FolderGluer01, and EU-FolderGluer02

POLLUTION CONTROL EQUIPMENT: NA

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	22.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGAIIPermittedEU	SC VI.1, SC VI.2, SC VI.4	R 336.1225, R 336.1702(a)
2. Acetone	4.5 tpy	12-month rolling time period as determined at the end of each calendar month	FGAIIPermittedEU	SC VI.1, SC VI.3, SC VI.4	R 336.1224

* 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))**

II. MATERIAL LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC content of the inks and coatings	shall not exceed 25%, by volume of the total volatile fraction, as applied Or, the non-volatile fraction must be greater than 60% by volume of coating or ink, minus water*, as applied.	Instantaneous basis	FGAIIPermittedEU	SC VI.1, SC VI.2, SC VI.4	R 336.1225, R 336.1702(a)

* 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))**

III. PROCESS/OPERATIONAL RESTRICTIONS

1. All waste inks, coatings, clean up solvents (blanket wash, press wash), adhesives, makeup solvents, coatings, *etc.* (materials) shall be captured and stored in closed containers and shall be disposed of 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)**
2. 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 336.1224, R 336.1225, R 336.1702(a), R 336.1901)**

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 VOC content of any material, as received and as applied, shall be determined using federal Reference Test Method 24 (inks, coatings, fountain solution additives and cleaning solvents) or 24A (only applies to solvent-borne inks and related coatings used in the publication rotogravure industry) pursuant to Rule 1040(5). Upon prior written approval by the AQD District Supervisor, VOC content may be determined from manufacturer's formulation data. If the Method 24 or 24A and the formulation values should differ, the Method 24 or 24A results shall be used to determine compliance. **(R 336.1702(a), 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(a))**
2. The permittee shall keep a written record of the following for the FGAllPermittedEU on a calendar month basis:
 - a) The type of each material used.
 - b) Chemical composition of each material, *i.e.* name of each component/ingredients/toxic air contaminants with the CAS number, including weight percent of each component/ingredients/toxic air contaminants.
 - c) The VOC content of each material, with and without water and exempt solvents, (in percent by weight or pounds per gallon), as received and as applied.
 - d) The usage rate (in pounds or gallons) of each material as applied.
 - e) If applicable, the amount (in pounds or gallon) of materials reclaimed.
 - f) 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.
 - g) VOC emission calculations determining the volume of VOCs in the inks (including additives) and coatings, as a percentage of the total volatile fraction, including water, on an instantaneous basis; or the non-volatile volume fraction of the inks and coatings as a percent of the ink or coating total volume, minus water, based upon an instantaneous basis.

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))**

3. The permittee shall keep a written record of the following information on a calendar month basis for the total combined acetone used in FGAllPermittedEU:
 - a) The acetone content of each material (in percent by weight or pounds per gallon) as applied.
 - b) The usage rate (in pounds or gallons) of each material as applied.
 - c) If applicable, the amount (in pounds or gallons) of acetone reclaimed.
 - d) Acetone 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 336.1224, R 336.1225, R 336.1702(a))**

4. 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, R 336.1901)**

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 each emission unit of the FGAllPermittedEU. **(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-LabelPress01	14	38.4	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SV-LabelPress02	18	37.8	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SV-CartonPress01	15	40	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SV-CartonPress02	15	40	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SV-CartonPress03	15	40	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6. SV-PlateMaking01	14	47	R 336.1225, 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. SV-PlateMaking02	14	47	R 336.1225, R 336.1901, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENTS

1. Within thirty (30) days of issuance of this permit, the permittee shall label the new Emission Unit according to a method acceptable to the AQD District Supervisor. Within seven (7) 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)**

Footnotes:

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