DATE: June 9, 2008

TO: Interested Parties / Applicant

RE: Job Management, Incorporated dba Exhibit House / E097-26429-00640

FROM: Timothy J. Method
Environmental Coordinator

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 501, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures

June 9, 2008

Mr. Greg Scholer
Job Management, Incorporated dba Exhibit House
3500 North Arlington Avenue
Indianapolis, IN 46218 Certified Mail Number: 7007 0710 0005 3966 2252

Dear Mr. Scholer:

Re: Exempt Construction and Operation Status,
E097-26429-00640

The application from Job Management, Incorporated dba Exhibit House received on April 15, 2008 has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following exhibit display manufacturing operation located at 3500 North Arlington Avenue, Indianapolis, Indiana, 46218 is classified as exempt from air pollution permit requirements:

(a) One (1) paint spray booth, identified as CF-1000 Cross Flow Paint Spray booth, constructed in 2002, using HVLP coating application method, with a maximum capacity of 0.25 gallons of coating per unit and 0.125 units per hour, using dry filters as control, and exhausting to stack/vent ID CF-1.

(b) One (1) lamination process, identified as Lamination, constructed in 2002, utilizing VOC containing glue, with a maximum capacity of 0.16 gallons of glue per unit and 1.0 units per hour, using no control and exhausting indoors.

(c) Activities performed using hand-held equipment including the following: buffing, carving, cutting (excluding cutting torches), drilling, grinding, machining wood, metal, or plastic, polishing, routing, sanding, sawing, turning wood, metal, or plastic. Each of these activities is not controlled by dust control equipment and is not directly exhausted outdoors.

The following conditions shall be applicable:

(1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

(2) Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

Department of Public Works
Office of Environmental Services
2700 Belmont Avenue
Indianapolis, IN 46221
317-327-2234
Fax 327-2274
TDD 327-5186
indygov.org/dpw

(3) If actual Volatile Organic Compound (VOC) emissions should increase to a level of greater than fifteen (15) pounds per day in emission unit CF-1000 Cross Flow Paint Spray booth or in emission unit Lamination, prior approval from IDEM, OAQ and OES must be obtained such that compliance with 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) and 326 IAC 8-2-12 (Surface Coating Emission Limitations: Wood Furniture and Cabinet Coating) is demonstrated.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

ORIGINAL SIGNED BY

Timothy J. Method
Environmental Coordinator
Department of Public Works

mbc

cc: OES Files - 2 copies
Compliance - Matt Mosier
Marion County Health Dept.
IDEM, Mindy Hahn

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Office of Environmental Services

Technical Support Document (TSD)
for an Exemption

Source Description and Location

Source Name:	**Job Management, Incorporated dba Exhibit House**
Source Location:	**3500 North Arlington Avenue, Indianapolis, Indiana 46218**
County:	**Marion**
SIC Code:	**7389**
Exemption No.:	**E097-26429-00640**
Permit Reviewer:	**M. Caraher**

On April 15, 2008, the Indiana Department of Environmental Management, Office of Air Quality (IDEM, OAQ) and the City of Indianapolis, Office of Environmental Services (OES) received an application from Job Management, Incorporated dba Exhibit House related to the operation of an existing exhibit display manufacturing operation.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Marion County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
O_3	Attainment effective November 8, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Attainment effective July 10, 2000, for the part of Franklin Township bounded by Thompson Road on the south; Emerson Avenue on the west; Five Points Road on the east; and Troy Avenue on the north. Attainment effective July 10, 2000, for the part of Wayne Township bounded by Rockville Road on the north; Girls School Road on the east; Washington Street on the south; and Bridgeport Road on the west. The remainder of the county is not designated.
[1]Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour designation was revoked effective June 15, 2005. Basic Nonattainment effective April 5, 2005 for PM2.5.	

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

(4) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_X) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to ozone. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5
Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5.

(c) Other Criteria Pollutants
Marion County has been classified as attainment or unclassifiable in Indiana for SO_2, CO, PM10, NO_X and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-1.1-3 (Exemptions) applicability.

Background and Description of Emission Units and Pollution Control Equipment

IDEM, OAQ and OES have reviewed an application, submitted by Job Management, Incorporated dba Exhibit House (hereafter referred to as Exhibit House), on April 15, 2008 related to the operation of an existing exhibit display manufacturing operation. Materials surface coated or laminated include wood, metal, plastics and paper products.

The source consists of the following existing emission units:

(a) One (1) paint spray booth, identified as CF-1000 Cross Flow Paint Spray booth, constructed in 2002, using HVLP coating application method, with a maximum capacity of 0.25 gallons of coating per unit and 0.125 units per hour, using dry filters as control, and exhausting to stack/vent ID CF-1.

(b) One (1) lamination process, identified as Lamination, constructed in 2002, utilizing VOC containing glue, with a maximum capacity of 0.16 gallons of glue per unit and 1.0 units per hour, using no control and exhausting indoors.

(c) Activities performed using hand-held equipment including the following: buffing, carving, cutting (excluding cutting torches), drilling, grinding, machining wood, metal, or plastic, polishing, routing, sanding, sawing, turning wood, metal, or plastic. Each of these activities is not controlled by dust control equipment and is not directly exhausted outdoors.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Exemption

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/Emission Unit	Potential To Emit of the Entire Source (tons/year)							
	PM	PM10*	SO_2	NO_X	VOC	CO	Total HAPs	Worst Single HAP
CF-1000 Cross Flow Paint Spray booth	0.14	0.14	negl.	negl.	0.76	negl.	negl.	negl.
Lamination	negl.	negl.	negl.	negl.	3.59	negl.	2.08	1.39
Hand Held Equipment	0.18	0.18	negl.	negl.	negl.	negl.	negl.	negl.
Fugitive Emissions	negl.	negl.	negl.	negl.	negl.	negl.	negl.	negl.
Total PTE of Entire Source	0.32	0.32	negl.	negl.	4.35	negl.	2.08	1.39

negl. = negligible
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).

(b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

(a) There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included in the Exemption.

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH (326 IAC 12), are not included in the Exemption because Exhibit House does not have a paint stripping operation utilizing methylene chloride, does not spray apply coatings

containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) to metal or plastic, and does not have a spray application coating process to motor vehicles or mobile equipment.

(c) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the Exemption.

(d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

(a) 326 IAC 2-1.1-3 (Exemptions)
Exemption applicability is discussed under the Permit Level Determination – Exemption section above.

(b) 326 IAC 2-1.1-5 (Non-attainment New Source Review)
Marion County has been designated as nonattainment for PM2.5. According to an EPA guidance memo dated April 5, 2005, PM10 is to be utilized as a surrogate for PM2.5 until the EPA can promulgate the PM2.5 implementation rule. PM10 emissions, and therefore PM2.5 emissions, from this source are less than one hundred (100) tons per twelve consecutive month period. There have been no modifications to this source such that it is a major source of PM10 emissions. Therefore, this source is not subject to nonattainment new source review requirements for PM2.5 emissions.

(c) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements)
This source is not a major stationary source because no attainment regulated pollutant emissions are equal to or greater than two hundred fifty (250) tons per year and this source is not one of the 28 listed source categories under 326 IAC 2-2. There have been no modifications or revisions to this source that were major modifications pursuant to 326 IAC 2-2. Therefore, 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) Requirements) is not applicable to the source.

(d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and is not subject to the provisions of 326 IAC 2-4.1.

(e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

(f) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(g) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
This source does not have the potential to emit particulate matter of one hundred (100) tons per year or more and since potential PM emissions are less than ten (10) tons, then actual PM emission will be less than ten (10) tons (see Appendix A page 3). Therefore, 326 IAC 6.5-1 does not apply.

(h) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

(i) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than twenty five (25) tons per year. Therefore, 326 IAC 6-5 does not apply.

(j) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
None of the emission units at this source is subject to the requirements of 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) because the unlimited potential to emit of VOC from each emission unit is less than twenty-five (25) tons per year (see Appendix A page 3).

(k) 326 IAC 11 (Emission Limitations for Specific Types of Operations)
This exhibit display manufacturing operation does not perform any specific type of operation identified in 326 IAC 11 (Emission Limitations for Specific Types of Operations). Therefore, this source is not subject to 326 IAC 11.

(l) 326 IAC 12 (New Source Performance Standards)
See the Federal Rule Applicability Determination Exemption section above.

(m) 326 IAC 14 (Emission Standards for Hazardous Air Pollutants)
See the Federal Rule Applicability Determination Exemption section above.

(n) 326 IAC 20 (Hazardous Air Pollutants)
See the Federal Rule Applicability Determination Exemption section above.

<u>CF-1000 Cross Flow Paint Spray booth</u>

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Emission unit CF-1000 Cross Flow Paint Spray booth uses less than five (5) gallons per day (see Appendix A page 1). Therefore, pursuant to 326 IAC 6-3-1(b)(15), emission unit CF-1000 Cross Flow Paint Spray booth is exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

(b) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations),
Emission unit CF-1000 Cross Flow Paint Spray booth does not have actual VOC emissions of greater than fifteen (15) pounds per day (see Appendix A page 1) from surface coating miscellaneous metal parts. Therefore, 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) does not apply to this source.

(c) 326 IAC 8-2-12 (Surface Coating Emission Limitations: Wood Furniture and Cabinet Coating)
Emission unit CF-1000 Cross Flow Paint Spray booth does not have actual VOC emissions of greater than fifteen (15) pounds per day (see Appendix A page 1) from surface coating of art objects or any other coated furnishings made of solid wood, wood composition or simulated wood

material. Therefore, 326 IAC 8-2-12 (Surface Coating Emission Limitations: Wood Furniture and Cabinet Coating) does not apply to this source.

Lamination

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Emission unit Lamination has the potential to emit particulate matter of less than 0.551 pounds per hour (see Appendix A page 2). Therefore, pursuant to 326 IAC 6-3-1(b)(14), emission unit Lamination is exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

(b) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations),
Emission unit Lamination does not have actual VOC emissions of greater than fifteen (15) pounds per day (see Appendix A page 2) from the application of adhesives to miscellaneous metal parts. Therefore, 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) does not apply to this source.

(c) 326 IAC 8-2-12 (Surface Coating Emission Limitations: Wood Furniture and Cabinet Coating)
Emission unit Lamination does not have actual VOC emissions of greater than fifteen (15) pounds per day (see Appendix A page 2) from the brush or wipe application of adhesives to art objects or any other coated furnishings made of solid wood, wood composition or simulated wood material. Therefore, 326 IAC 8-2-12 (Surface Coating Emission Limitations: Wood Furniture and Cabinet Coating) does not apply to this source.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on April 15, 2008. Additional information was received from the applicant on April 23, 2008.

The construction and operation of this source shall be subject to the conditions of the attached proposed Exemption No. E097-26429-00640. The staff recommends to the Administrator that this Exemption be approved.

OES Contact

(a) Questions regarding this proposed permit can be directed to Mark Caraher at the City of Indianapolis Office of Environmental Services, 2700 South Belmont Avenue, Indianapolis, Indiana 46221 or by telephone at (317) 327-2272.

(b) A copy of the findings is available on the Internet at: www.in.gov/ai/appfiles/idem-caats/.

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations in Cross Flow Paint Booth

Company Name: **Job Management, Inc. dba Exhibit House**
Address City IN Zip: **3500 North Arlington Avenue, Indianapolis, Indiana 46218**
Permit Number: **E097-26429-00640**
Plt ID: **097-00640**
Reviewer: **M. Caraher**
Date: **April 23, 2008**

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (pounds/hr)	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Magnalac Precatalyzed Lacquer - White Base	8.8	54.67%	0.0%	54.7%	0.0%	32.00%	0.25	0.125	4.81	4.81	0.15	3.61	0.66	0.03	0.14	15.03	75%
Magnalac Precatalyzed Lacquer - Clear Base	7.8	71.28%	0.0%	71.3%	0.0%	18.00%	0.25	0.125	5.56	5.56	0.17	4.17	0.76	0.02	0.08	30.89	75%
										Worst case coating			**0.76**	**0.03**	**0.14**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

PM10 emissions is assumed equal to PM

PM/PM10 Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

State Potential Emissions = Worst Coating; Based on source using 0.25 gal to coat 1 unit in 8 hour day = 3 units/24 hours or 0.125 units/hr.

Transfer efficiency is based on Air & Waste Mangament Association Engineering manual, Second Edition, 2000.

MSDS states coatings do not contain HAP

Appendix A: Emissions Calculations
VOC, Particulate & HAPs
From Use of Glue in Laminating Operations

Company Name: Job Management, Inc. dba Exhibit House
Address City IN Zip: 3500 North Arlington Avenue, Indianapolis, Indiana 4621
Permit Number: E097-26429-00640
Plt ID: 097-00640
Reviewer: M. Caraher
Date: April 23, 2008

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Hybond 12 - Glue	6.6	77.58%	0.0%	77.6%	0.0%	12.00%	0.16	1.000	5.12	5.12	0.82	19.66	3.59	0.00	42.67	100%
										Worst case coating			**3.59**	**0.00**		

Actual VOC Emissions (pounds per day)	**6.50**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

PM10 emissions is assumed equal to PM

PM/PM10 Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

State Potential Emissions = Worst Coating; Based on source using 330 gal in 2080 operating hours = 330/2080 = 0.16 gallons/unit.

Transfer efficiency is based on Air & Waste Mangament Association Engineering manual, Second Edition, 2000.

Actual VOC emissions = 330 gallons used in 260 annual operating days x 5.12 pounds VOC/ gallon x ton/2000 pounds

HAPs

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Hexane	Weight % Toluene	Hexane Emissions (ton/yr)	Toluene Emissions (ton/yr)	Combined HAPs (ton/yr)
Hybond 12 - Glue	6.6	0.16	1.00	30.00%	15.00%	1.39	0.69	2.08

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

gal/unit & unit/hour derived on source using 330 gal/2080 annual operating hours = 0.16 gal/hr

Appendix A: Emissions Calculations
Plant Wide Summary

Company Name: Job Management, Inc. dba Exhibit House
Address City IN Zip: 3500 North Arlington Avenue, Indianapolis, Indiana
Permit Number: E097-26429-00640
Plt ID: 097-00640
Reviewer: M. Caraher
Date: April 23, 2008

Plant Wide Emissions Summary (tons per year)

	PM	PM10	NO_X	SO_2	VOC	CO	Highest Single HAP	Combination HAP
Cross Flow Paint Booth	0.14	0.14	0.00	0.00	0.76	0.00	0.00	0.00
Laminating using Glue	0.00	0.00	0.00	0.00	3.59	0.00	1.39	2.08
Hand Held Equipment	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Potential to Emit	**0.32**	**0.32**	**0.00**	**0.00**	**4.35**	**0.00**	**1.39**	**2.08**

Highest single HAP = Hexane (see App A page 2 of 3)

Hand held equipment are activities that are defined in 326 IAC 2-7-1(40) as having emissions < 1 pound of PM per day or 0.18 tons of PM per year.

PM10 emissions are equivalent to PM emissions.