



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

TO: Interested Parties / Applicant  
DATE: May 2, 2007  
RE: Madison Cabinets, Inc. / 003-19169-00333  
FROM: Nisha Sizemore  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval - Registration

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 IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

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 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of 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 Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FN-REGIS.dot 03/23/06



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

May 2, 2007

Mr. Craig A. Guenin  
Madison Cabinets, Inc.  
14727 Bruick Drive  
Hoagland, Indiana 46745

Re: Registered Construction and Operation Status  
R 003-19169-00333

Dear Mr. Guenin:

The application from Madison Cabinets, Inc., received on May 26, 2004, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following wood cabinet manufacturing source, located at 14727 Bruick Drive, Hoagland, Indiana, is classified as registered:

- (a) One (1) woodworking operation, identified as Wood 1, constructed in 1971, equipped with a cyclone and baghouse for particulate control, exhausting to Stack S2, with a capacity of 50 pounds of wood per hour, consisting of the following:
  - (1) Area A, equipped with one (1) table saw, one (1) radial arm saw, one (1) edge sander, and one (1) wide belt sander.
  - (2) Area B, equipped with one (1) table saw, and two (2) radial arm saws.
- (b) One (1) spray booth, identified as PB1, constructed in 1971, equipped with dry filters for particulate control, exhausting to Stack S1, capacity: 6.0 wood cabinet parts per hour.

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, unless otherwise stated in this permit:
  - (a) Opacity shall not exceed an average of forty percent (40%) 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 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.

2. Pursuant to 326 IAC 6-3-2(e)(2), the particulate emissions from the one (1) woodworking operation, identified as Wood 1, shall be limited to 0.551 pounds per hour when operating at a process weight rate of 50 pounds per hour. The cyclone and baghouse shall be in operation and control emissions from the one (1) woodworking operation (Wood 1) at all times that Wood 1 is in operation, in order to comply with this limitation.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section  
Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,  
Original signed by

Nisha Sizemore, Chief  
Permits Branch  
Office of Air Quality

EAL/MES

cc: File - Allen County  
Allen County Health Department  
Air Compliance - Jennifer Schick  
Permit Tracking  
Compliance Data Section  
Office of Enforcement  
Administrative & Development Section  
Air Toxics Program Development Section  
Billing, Licensing and Training - Dan Stamatkin

<b>Registration Annual Notification</b>
---

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	<b>Madison Cabinets, Inc.</b>
<b>Address:</b>	<b>14727 Bruick Drive</b>
<b>City:</b>	<b>Hoagland</b>
<b>Authorized individual:</b>	<b>Mr. Craig A. Guenin</b>
<b>Phone #:</b>	<b>(260) 639-3915</b>
<b>Registration #:</b>	<b>R 003-19169-00333</b>

I hereby certify that Madison Cabinets, Inc. is still in operation and is in compliance with the requirements of Registration 003-19169-00333.

<b>Name (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

**Indiana Department of Environmental Management**  
Office of Air Quality

Technical Support Document (TSD) for a Registration

**Source Background and Description**

**Source Name:** Madison Cabinets, Inc.  
**Source Location:** 14727 Bruick Drive, Hoagland, Indiana 46745  
**County:** Allen  
**SIC Code:** 2434  
**Operation Permit No.:** R 003-19169-00333  
**Permit Reviewer:** Edward A. Longenberger

The Office of Air Quality (OAQ) has reviewed the operating permit application from Madison Cabinets, Inc. relating to the operation of a wood cabinet manufacturing source.

**Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit**

The source also consists of the following emission units that were constructed and/or are operating without a permit:

- (a) One (1) woodworking operation, identified as Wood 1, constructed in 1971, equipped with a cyclone and baghouse for particulate control, exhausting to Stack S2, with a capacity of 50 pounds of wood per hour, consisting of the following:
  - (1) Area A, equipped with one (1) table saw, one (1) radial arm saw, one (1) edge sander, and one (1) wide belt sander.
  - (2) Area B, equipped with one (1) table saw, and two (2) radial arm saws.
- (b) One (1) spray booth, identified as PB1, constructed in 1971, equipped with dry filters for particulate control, exhausting to Stack S1, capacity: 6.0 wood cabinet parts per hour.

**Existing Approvals**

There have been no previous IDEM, OAQ approvals issued to this source.

**Enforcement Issue**

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled "Emission Units and Pollution Control Equipment Constructed and/or Operated without a Permit". IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

**Emission Calculations**

See pages 1 through 3 of Appendix A of this document for detailed emission calculations.

### County Attainment Status

The source is located in Allen County

Pollutant	Status
PM <sub>10</sub>	Attainment
PM <sub>2.5</sub>	Attainment
SO <sub>2</sub>	Attainment
NO <sub>x</sub>	Attainment
8-hour Ozone	Basic nonattainment
CO	Attainment
Lead	Attainment

- (a) Allen County has been classified as attainment for PM<sub>2.5</sub>. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM<sub>2.5</sub> emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM<sub>2.5</sub> emissions, it has directed states to regulate PM<sub>10</sub> emissions as a surrogate for PM<sub>2.5</sub> emissions. See the State Rule Applicability – Entire Source section.
- (b) Volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>) 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 emissions and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone standards. Allen County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability – Entire Source section.
- (c) Allen County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (d) 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.
- (e) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD or Emission Offset applicability.

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	24.63
PM <sub>10</sub>	24.63
SO <sub>2</sub>	-
VOC	19.33
CO	-
NO <sub>x</sub>	-

HAPs	tons/year
Xylene	0.305
Cumene	0.305
Total	0.610

The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM<sub>10</sub> are each less than twenty-five (25) tons per year and greater than five (5) tons per year. The potential to emit of VOC is less than twenty-five (25) tons per year and greater than ten (10) tons per year. The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of the combination of all HAPs is less than twenty-five (25) tons per year. Therefore, the source subject to the provisions of 326 IAC 2-5.1-2.

**Actual Emissions**

No previous emission data has been received from the source.

**Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this registration and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Wood 1	0.116	0.116	-	-	-	-	-
PB1	0.021	0.021	-	19.33	-	-	0.605
Total Emissions	0.137	0.137	-	19.33	-	-	0.605

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) This existing stationary source is not major for Emission Offset because the emissions of the nonattainment pollutants, VOC and NO<sub>x</sub>, are each less than one hundred (<100) tons per year.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

**Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations, Subpart JJ, are not included in the permit for this source because this source is not a major source of HAPs as defined in 40 CFR 63.2.

### **State Rule Applicability - Entire Source**

#### 326 IAC 2-6 (Emission Reporting)

This source is not located in Lake, Porter or LaPorte County and is not required to have an operating permit under 326 IAC 2-7 (Part 70). Therefore, 326 IAC 2-6 does not apply.

#### 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this wood cabinet manufacturing source will emit less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

#### 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 Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) 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 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.

### **State Rule Applicability – Individual Facilities**

#### 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) Pursuant to 326 IAC 6-3-2(e)(2), the particulate emissions from the one (1) woodworking operation, identified as Wood 1, shall be limited to 0.551 pounds per hour when operating at a process weight rate of 50 pounds per hour. The cyclone and baghouse shall be in operation and control emissions from the one (1) woodworking operation (Wood 1) at all times that Wood 1 is in operation, in order to comply with this limitation.
- (b) The spray booth (PB1) has potential particulate emissions less than 0.551 pounds per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), the spray booth (PB1) is exempt from the requirements of 326 IAC 6-3.

#### 326 IAC 8-2-12 (Wood furniture and cabinet coating)

The source was constructed prior to January 1, 1980, and is not located in Clark, Floyd, Lake, Porter, Elkhart, Marion or St. Joseph County. Therefore, the requirements of 326 IAC 8-2-12 do not apply.

### **Recommendation**

The staff recommends to the Commissioner that the Registration be approved. This recommendation is based on the following facts and conditions:

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 May 26, 2004. Additional information was received on April 10, 2007.

### **Conclusion**

The operation of this wood cabinet manufacturing source shall be subject to the conditions of the attached Registration No. 003-19169-00333.

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

**Company Name: Madison Cabinets, Inc.  
Address City IN Zip: 14727 Bruick Drive, Hoagland, Indiana 46745  
Permit Number: R 003-19169-00333  
Reviewer: Edward A. Longenberger  
Date: April 12, 2007**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & 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
<b>PB1</b>																
Magnamax HAPs Free	7.85	66.500%	0.0%	66.5%	0.0%	25.00%	0.18750	2.000	5.22	5.22	1.96	46.98	8.57	1.08	20.88	75%
Cherry 9001	7.73	76.120%	0.0%	76.1%	0.0%	23.88%	0.12500	6.000	5.88	5.88	4.41	105.91	19.33	1.52	24.64	75%
Cherry Low HAPs	6.80	86.540%	0.0%	86.5%	0.0%	13.46%	0.12500	6.000	5.88	5.88	4.41	105.92	19.33	0.75	43.72	75%

PM Control Efficiency: 98.60%

**Total Potential Emissions**

**Worst case coating**

<b>Uncontrolled</b>	<b>4.41</b>	<b>105.92</b>	<b>19.33</b>	<b>1.52</b>
<b>Controlled</b>	<b>4.41</b>	<b>105.92</b>	<b>19.33</b>	<b>0.021</b>

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)
- Particulate 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)

**Appendix A: Emission Calculations  
HAPs Emission Calculations**

**Company Name: Madison Cabinets, Inc.  
Address City IN Zip: 14727 Bruick Drive, Hoagland, Indiana 46745  
Permit Number: R 003-19169-00333  
Reviewer: Edward A. Longenberger  
Date: April 12, 2007**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Cumene	Xylene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAPs Emissions (ton/yr)
<b>PB-1</b>								
Cherry 9001	7.73	0.12500	6.000	1.20%	1.20%	0.305	0.305	0.61

Total Potential Emissions

**0.305                      0.305                      0.609**

**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

**Appendix A: Emissions Calculations  
Particulate from Woodworking Operations**

**Company Name: Madison Cabinets, Inc.  
Address City IN Zip: 14727 Bruick Drive, Hoagland, Indiana 46745  
Permit Number: R 003-19169-00333  
Reviewer: Edward A. Longenberger  
Date: April 12, 2007**

Process	Total PM Collected (lbs/hour)	Process Weight Rate (lbs/hr)	Control Efficiency (%)	Potential Emissions (lbs/hour)	Potential Emissions (tons/year)	Potential Emissions after Control (lbs/hour)	Potential Emissions after Control (tons/year)
Woodworking	5.25	50	99.5%	5.28	23.11	0.026	0.116

**METHODOLOGY**

Emissions data from sawdust collected. Assume all PM = PM-10.

Potential Emissions (lbs/hr) = PM Collected (lbs/hr) / Control Efficiency (%)

Potential Emissions (tons/year) = Potential Emissions (lbs/hr) x (8760 hours/year) x (1 ton/2000 lbs)

Potential Emissions after Control (lbs/hr) = Potential Emissions (lbs/hr) \* (1 - Control Efficiency (%))

Potential Emissions after Control (tons/year) = Potential Emissions after Control (lbs/hr) x (8760 hours/year) x (1 ton/2000 lbs)