INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: July 10, 2008

RE: Furniture By Miller / 003-26572-00362

FROM: Matthew Stuckey, Branch 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, Suite N 501E, 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 1/2/08

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REGISTRATION
OFFICE OF AIR QUALITY

Furniture By Miller
16016 Trammel Road
Grabill, Indiana 46741

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 003-26572-00362	
Issued by: Original signed by Alfred C. Dumaual, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: July 10, 2008

SECTION A SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary wood cabinet manufacturing and surface coating operation.

Source Address:	16016 Trammel Road, Grabill, IN 46741
Mailing Address:	16016 Trammel Road, Grabill, IN 46741
General Source Phone Number:	260-657-5052
SIC Code:	2431
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

(a) Three (3) propane fired heaters, identified as H01, H02, and H03, constructed in 1994, with maximum capacities of 0.016 MMBtu/hr, 0.03 MMBtu/hr, and 0.08 MMBtu/hr respectively, and exhausting to stacks SVH01, SVH02, and SVH03 respectively.

(b) One (1) propane fired air make-up unit, identified as AM01, constructed in 1994, with a maximum capacity of 0.8 MMBtu/hr, and exhausting to stack SVAM01.

(c) One (1) surface coating booth, identified as SB01, constructed in 1994, with a maximum capacity of 0.5 units/hr, utilizing High Volume Low Pressure (HVLP) Spray Application for surface coating of wood cabinets, controlled with dry filters, and exhausting to stack SVSB01.

(d) Woodworking equipment, identified as WW, constructed in 1994, with a maximum capacity of 0.5 tons/hr, and controlled with an internal high efficiency return air bag filter system.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

B.3 Registration Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation), this registration to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this registration.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this registration shall not require revocation of this registration.

(d) For any cause which establishes in the judgment of IDEM, the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to Registration No. 003-26572-00362 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this registration.

B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

(c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), 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.

B.7 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 Opacity [326 IAC 5-1]

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 registration:

(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.

C.2 Fugitive Dust Emissions [326 IAC 6-4]

The Registrant 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 (Fugitive Dust Emissions).

SECTION D.1 OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

(c) One (1) surface coating booth, identified as SB01, constructed in 1994, with a maximum capacity of 0.5 units/hr, utilizing High Volume Low Pressure (HVLP) Spray Application for surface coating of wood cabinets, controlled with dry filters, and exhausting to stack SVSB01.

(d) Woodworking equipment, identified as WW, constructed in 1994, with a maximum capacity of 0.5 tons/hr, and controlled with an internal high efficiency return air bag filter system.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

D.1.1 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes):

(a) Particulate from the surface coating booth (SB01) shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

(b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.2 Wood Furniture and Cabinet Coating [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air-Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically

at the center of the air cap and at the air horns of the spray system. The surface coating booth, SB01, uses High Volume Low Pressure (HVLP) Spray Application. Therefore, SB01 is in compliance with 326 IAC 8-2-12.

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking equipment (WW) shall not exceed 2.58 pounds per hour when operating at a process weight rate of 1,000 pounds (0.5 tons) per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

Where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for surface coating booth (SB01) and any control devices.

Compliance Determination Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

D.1.5 Particulate Control

(a) In order to comply with Condition D.1.3, the air bag filter system for particulate control shall be in operation and control emissions from the woodworking equipment (WW) at all times the woodworking equipment (WW) is in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

REGISTRATION
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

Company Name:	Furniture By Miller
Address:	16016 Trammel Road
City:	Grabill, IN 46741
Phone Number:	260-657-5052
Registration No.:	003-26572-00362

I hereby certify that Furniture By Miller is :
- ☐ still in operation.
- ☐ no longer in operation.

I hereby certify that Furniture By Miller is :
- ☐ in compliance with the requirements of Registration No. 003-26572-00362.
- ☐ not in compliance with the requirements of Registration No. 003-26572-00362.

Authorized Individual (typed):
Title:
Signature:
Phone Number:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Description and Location

Source Name:	**Furniture By Miller**
Source Location:	**16016 Trammel Road, Grabill, Indiana 46741**
County:	**Allen**
SIC Code:	**2431**
Registration No.:	**003-26572-00362**
Permit Reviewer:	**Christine L. Filutze**

On May 20, 2008, the Office of Air Quality (OAQ) received an application from Furniture By Miller related to a wood cabinet manufacturing and surface coating operation.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Allen County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective February 12, 2007, for the Fort Wayne area, including Allen County, 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	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment 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 (NOx) 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 NOx emissions are considered when evaluating the rule applicability relating to ozone. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5
Allen County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(c) Other Criteria Pollutants
Allen County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. 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 2-5.1-2 (Registrations) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) reviewed an application, submitted by Furniture By Miller on May 20, 2008, relating to their stationary wood cabinet manufacturing and surface coating operation.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

(a) Three (3) propane fired heaters, identified as H01, H02, and H03, constructed in 1994, with maximum capacities of 0.016 MMBtu/hr, 0.03 MMBtu/hr, and 0.08 MMBtu/hr respectively, and exhausting to stacks SVH01, SVH02, and SVH03 respectively.

(b) One (1) propane fired air make-up unit, identified as AM01, constructed in 1994, with a maximum capacity of 0.8 MMBtu/hr, and exhausting to stack SVAM01.

(c) One (1) surface coating booth, identified as SB01, constructed in 1994, with a maximum capacity of 0.5 units/hr, utilizing High Volume Low Pressure (HVLP) Spray Application for surface coating of wood cabinets, controlled with dry filters, and exhausting to stack SVSB01.

(d) Woodworking equipment, identified as WW, constructed in 1994, with a maximum capacity of 0.5 tons/hr, and controlled with an internal high efficiency return air bag filter system.

Enforcement Issues

IDEM is aware that three (3) propane fired heaters (identified as H01, H02, and H03), one (1) propane fired air make-up unit (identified as AM01), one (1) surface coating booth (identified as SB01), and woodworking equipment (identified as WW) have been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Registration

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	NOx	VOC	CO	Total HAPs	Worst Single HAP
Surface Coating (SB01)	2.17	2.17	0.00	0.00	11.41	0.00	3.03	1.04 (Xylene)
Woodworking (WW)	19.34	19.34	0.00	0.00	0.00	0.00	0.00	-
Propane Combustion (H01, H02, H03, AM01)	0.02	0.02	4.43E-03	0.62	0.02	0.08	0.00	-
Total PTE of Entire Source	**21.53**	**21.53**	**4.43E-03**	**0.62**	**11.43**	**0.08**	**3.03**	**-**
Exemptions Levels	5	5	10	10	5 or 10	25	2.5	1.0
Registration Levels	25	25	25	25	25	100	-	-

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 surrogate for PM2.5 emissions.

(a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM, PM_{10}, VOC, and HAPs are within the ranges listed in 326 IAC 2-5.1-2(a)(1). The PTE of all other regulated criteria pollutants are less than the ranges listed in 326 IAC 2-5.1-2(a)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2 (Registrations). A Registration will be issued.

(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 permit.

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

(c) The requirements of 40 CFR 63, Subpart JJ, NESHAP for Wood Furniture Manufacturing (40 CFR 63.800 - 63.808) (326 IAC 20-14), are not included in this permit, since this source is not a major source of HAPs as defined in 40 CFR 63.2.

(d) The requirements of 40 CFR 63, Subpart QQQQ, NESHAP for Surface Coating of Wood Building Products (40 CFR Part 63.4680 - 63.4781) (326 IAC 20-79), are not included in this permit, since this source is not a major source of HAPs, as defined in 40 CFR 63.2, and does include surface coating of wood building products. This source performs surface coating of wood cabinets.

(e) The requirements of 40 CFR 63, Subpart HHHHHH, NESHAP for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources (40 CFR Part 63.11169 - 63.11180), are not included in this permit, since this area source does not perform paint stripping using chemical strippers that contain methylene chloride for the removal of dried paint, does not perform spray application of coatings to motor vehicles or mobile equipment, and does not perform spray application of coatings that contain chromium, lead manganese, nickel or cadmium to a plastic and/or metal substrates.

(f) 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 2-5.1-2 (Registrations)
Registration applicability is discussed under the Permit Level Determination – Registration section above.

(b) 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 not subject to the provisions of 326 IAC 2-4.1.

(c) 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.

(d) 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 forty percent (40%) 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.

(e) 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.

(f) 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 25 tons per year. Therefore, 326 IAC 6-5 does not apply.

Surface Coating Operations

(g) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes), surface coating processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

(h) 326 IAC 8-2-12 (Wood Furniture Coating)
The surface coating booth (SB01) was constructed after July 1, 1990 and the potential to emit VOC from the booth is greater than 15 pounds per day. Pursuant to 326 IAC 8-2-12, the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air-Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system. The surface coating booth, SB01, uses High Volume Low Pressure (HVLP) Spray Application. Therefore, SB01 is in compliance with 326 IAC 8-2-12.

Woodworking Operation

(i) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking equipment (WW) shall not exceed 2.58

pounds per hour when operating at a process weight rate of 1,000 pounds (0.5 tons) per hour. The process weight is greater than 100 pounds per hour but less than 30 tons per hour. Therefore, this woodworking process is subject to 326 IAC 6-3-2(e)(1), which requires the process to comply with the limit calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

Where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

At the maximum process weight, the particulate emission limitation for the woodworking process is calculated as follows:

$$E = 4.10\ (0.5)^{0.67} = 2.58 \text{ pounds per hour}$$

The particulate emissions before the internal high efficiency return air bag filter system are 19.34 pounds per hour. The particulate emissions after internal high efficiency return air bag filter system are 0.02 pounds per hour. This is less than the limit of 2.58 pounds per hour. Therefore, with the use of the internal high efficiency return air bag filter system, the process can comply with the limit. Consequently, the permit will require that the internal high efficiency return air bag filter system be used at all times in order for this process to comply with 326 IAC 6-3-2(e)(1).

Note: Pursuant to 326 IAC 6-3-2(e)(2), when the process weight rate is less than one hundred (100) pounds per hour, the allowable rate of emissions is 0.551 pounds per hour.

Natural Gas Combustion Sources

(j) 326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)
The propane-fired heaters and air make-up unit are not subject to 326 IAC 6-2 as they are not sources of indirect heating.

(k) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the propane-fired heaters and air make-up unit are each exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight. In addition, each heater and air make-up unit has potential emissions less than five hundred fifty one thousandths (0.551) pound per hour.

(l) 326 IAC 7-1 (Sulfur Dioxide Emission Limitations)
The propane-fired heaters and air make-up unit are each not subject to the requirements of 326 IAC 7-1, because the potential and the actual emissions are less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

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 May 20, 2008.

The operation of this source shall be subject to the conditions of the attached proposed Registration No. 003-26572-00362. The staff recommends to the Commissioner that this Registration be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Christine L. Filutze at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-3897 or toll free at 1-800-451-6027 extension (8397).

(b) A copy of the findings is available on the Internet at: http://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
Emissions Summary

Company Name: Furniture by Miller
Address City IN Zip: 16016 Trammel Road, Grabill, Indiana 46741
Permit Number: 003-26572-00362
Prepared by: D&B Environmental Services, Inc.
Date: July 2, 2008
Permit Reviewer: Christine L. Filutze

Process	tons/year						
	PM	PM_{10}	VOC	NOx	CO	SO_2	HAPs
Surface Coating (SB01) Uncontrolled	**2.17**	**2.17**	**11.41**	**0.00**	**0.00**	**0.00**	**3.03**
Woodworking (WW) Uncontrolled	**19.34**	**19.34**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Propane Combustion (H01, H02, H03, AM01) Uncontrolled	**0.02**	**0.02**	**0.02**	**0.62**	**0.08**	**4.43E-03**	**0.00**
Total Uncontrolled Emissions	**21.53**	**21.53**	**11.43**	**0.62**	**0.08**	**4.43E-03**	**3.03**
Woodworking (WW) Controlled	0.02	0.02	0.00	0.00	0.00	0.00	0.00
Total Controlled Emissions	2.20	2.20	11.43	0.62	0.08	4.43E-03	3.03

Individual HAP Emissions

tons/year					
Xylene	Toluene	Formaldehyde	Ethyl Benzene	Methanol	Total
1.04	1.50	0.00	0.48	0.00	3.03

"Worst Case" Individual HAP is Xylene

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

Company Name: **Furniture by Miller**
Address City IN Zip: **16016 Trammel Road, Grabill, Indiana 46741**
Permit Number: **003-26572-00362**
Prepared by: **D&B Environmental Services, Inc.**
Date: **July 2, 2008**
Permit Reviewer: **Christine L. Filutze**

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	**VOC PTE (ton/yr)**	**PM PTE (ton/yr)**	lb VOC/gal solids	Transfer Efficiency
Spray Booth																
FC-3032 Stain	6.48	89.49%	0.0%	89.5%	0.0%	10.51%	0.22500	0.500	5.80	5.80	0.65	15.66	2.86	0.08	55.18	75%
Aristocoat Paint	9.45	32.48%	0.0%	32.5%	0.0%	58.25%	0.36900	0.500	3.07	3.07	0.57	13.59	2.48	1.29	5.27	75%
HC Aristovar Ultrasand	8.11	65.84%	0.0%	65.8%	0.0%	33.96%	0.24900	0.500	5.34	5.34	0.66	15.95	2.91	0.38	15.72	75%
HC R66 Aristovar	7.82	56.69%	0.0%	56.7%	0.0%	31.54%	0.22500	0.500	4.43	4.43	0.50	11.97	2.18	0.42	14.06	75%
1501 SS Solvent	7.11	100.00%	0.0%	100.0%	0.0%	0.00%	0.06250	0.500	7.11	7.11	0.22	5.33	0.97	0.00	0.00	100%
										Totals	2.60	62.51	**11.41**	**2.17**		

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)
Total = Worst Coating + Sum of all solvents used
*HAP Free Cleaner = solvent

Appendix A: Emission Calculations
HAP Emission Calculations
From Surface Coating Operations

Company Name: Furniture by Miller
Address City IN Zip: 16016 Trammel Road, Grabill, Indiana 46741
Permit Number: 003-26572-00362
Prepared by: D&B Environmental Services, Inc.
Date: July 2, 2008
Permit Reviewer: Christine L. Filutze

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethyl Benzene	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Methanol Emissions (ton/yr)	Totals for One Booth (ton/yr)
Spray Booth														
FC-3032 Stain	6.48	0.22500	0.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Aristocoat Paint	9.45	0.36900	0.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
HC Aristovar Ultrasand	8.11	0.24900	0.500	21.00%	10.00%	0.00%	10.00%	0.00%	0.93	0.44	0.00	0.44	0.00	1.81
HC R66 Aristovar	7.82	0.22500	0.500	3.00%	20.00%	0.00%	1.00%	0.00%	0.12	0.77	0.00	0.04	0.00	0.92
1501 SS Solvent	7.11	0.06250	0.500	0.00%	30.00%	0.00%	0.00%	0.00%	0.00	0.29	0.00	0.00	0.00	0.29
							HAPs "Worst Case" Individual		**1.04**	**1.50**	**0.00**	**0.48**	**0.00**	

HAPs "Worst Case" Total 3.03

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: Emission Calculations
Woodworking

Company Name: Furniture by Miller
Address City IN Zip: 16016 Trammel Road, Grabill, Indiana 46741
Permit Number: 003-26572-00362
Prepared by: D&B Environmental Services, Inc.
Date: July 2, 2008
Permit Reviewer: Christine L. Filutze

Process Throughput Weight (tons/hr)	Design Maximum Air Flow Rate (acfm)	Overall Control Efficiency Rating	Design Outlet Grain Loading (gr/acf)
2.90E-03	1600	99.90%	3.22E-04

Potential to Emit Particulate

After Controls (lb/hr)	After Controls (tons/year)	Before Controls (lb/hour)	**Before Controls (tons/year)**
4.42E-03	0.02	4.42	**19.34**

Methodology

Potential Particulate After Controls (lb/hr) = Air Flow Rate (acfm) x Grain Loading (gr/acf) x 60 (minutes/hour) x (1 lb/7000 grains)
Potential Particulate After Controls (tons/year) = Potential Particulate After Controls (lb/hr) x 8760 (hr/year) x (1 ton/2000 lbs)
Potential Particulate Before Controls (lb/hr) = Potential Particulate After Controls (lb/hr) x (1 - control efficiency)
Potential Particulate Before Controls (tons/year) = Potential Particulate Before Controls (lb/hr) x 8760 (hr/year) x (1 ton/2000 lbs)

Appendix A: Emission Calculations
LPG-Propane - Industrial Boilers
(Heat input capacity: <10 MMBtu/hr)

Company Name: Furniture by Miller
Address City IN Zip: 16016 Trammel Road, Grabill, Indiana 46741
Permit Number: 003-26572-00362
Prepared by: D&B Environmental Services, Inc.
Date: July 2, 2008
Permit Reviewer: Christine L. Filutze

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	SO2 Emission factor = 0.10 x S S = Sulfur Content =	100.00	grains/100ft^3
0.926	88.65			

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.4	0.4	0.1	14.0	0.5 **TOC value	1.9
Potential Emission in tons/yr	0.02	0.02	4.43E-03	0.62	0.02	0.08

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM based on a footnote in Table 1.5-1, therefore PM10 is filterable only as well.

**The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu
1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)
(Source - AP-42 (Supplement B 10/96) page 1.5-1)
Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (Supplement B 10/96), Table 1.5-1 (SCC #1-02-010-02)

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton