



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

December 28, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Custom Wood Finishings / 039-19507-00609

FROM: Paul Dubenetzky
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 9/16/03



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

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Mr. Glen Graber
Custom Wood Finishing
10870 County Road 44
Millersburg, Indiana 46543

Re: Registered Construction and Operation Status,
039-19507-00609

Dear Mr. Graber:

The application from Custom Wood Finishing, received on August 16, 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 surface coating operation, to be located at 10870 County Road 44, Millersburg, Indiana, is classified as a Registration. This Registration shall include the following equipment:

- (a) Three (3) surface coating booths identified as SG1, SG2 and SG3 and exhausting thru stacks S1, S2 and S3 respectively.
- (b) One (1) scuff sanding table identified as ST.
- (c) One (1) propane fired air makeup unit rated at 1.0 MMBtu/hr and identified as F1.

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 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 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 continuous opacity monitor in a six (6) hour period.
- 2) Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes, particulate matter (PM) from the scuff sanding table operation shall be limited by the following equation:

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

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

- 3) Pursuant to IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes, surface coating operations with the potential to emit particulate matter shall be controlled by a dry particulate filter or an equivalent control device, subject to the following:
- (a) The source shall operate the particulate control device in accordance with manufacturer's specifications.
 - (b) Overspray shall not be visibly detectable at the exhaust or accumulated on the ground.
 - (c) A particulate matter control device is not required for operations that use less than ten (10) gallons of coating per day. At any time the coating application rate increases to greater than ten (10) gallons per day, particulate matter control devices must be in place. An operation that is subject to this subsection shall remain subject to it notwithstanding any subsequent decrease in gallons of coating used.
- 4) 326 IAC 8-2-12 (Surface Coating Emission Limitations: Wood Furniture and Cabinet Coating) 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.

This registration is the first registration 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
P.O. Box 6015
Indianapolis, IN 46206-6015**

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
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

WVH

cc: File - Elkhart County
Air Compliance – Paul Karkiewicz
Northern Regional Office
Kevin Parks- TecServ Environmental, Inc.
516 E. Marion Street, Mishawaka, IN 46545

Registration Annual Notification

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

Company Name:	Custom Wood Finishing
Address:	10561 County Road 44
City:	Millersburg, Indiana 46543
Authorized individual:	Glen Graber
Phone #:	574-642-1213
Registration #:	039-19507-00609

I hereby certify that Custom Wood Finishing is still in operation and is in compliance with the requirements of Registration 039-19507-00609.

Name (typed):
Title:
Signature:
Date:

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

Technical Support Document (TSD) for a New Source Construction and Registration

Source Background and Description

Source Name: Custom Wood Finishing
Source Location: 10870 County Road 44, Millersburg, Indiana 46543
County: Elkhart
SIC Code: 2511
Registration Permit No.: 039-19507-00609
Permit Reviewer: Walter Habeeb

The Office of Air Quality (OAQ) has reviewed an application from Custom Wood Finishing relating to the construction and operation of a wood surface coating operation.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Three (3) surface coating booths identified as SG1, SG2 and SG3 and exhausting thru stacks S1, S2 and S3 respectively.
- (b) One (1) scuff sanding table identified as ST.
- (c) One (1) propane fired air makeup unit rated at 1.0 MMBtu/hr and identified as F1.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (in)	Flow Rate (acfm)	Temperature (°F)
S1	SG1	18.0	16.0	2,475	Ambient
S2	SG2	18.0	16.0	2,475	Ambient
S3	SG3	18.0	16.0	2,475	Ambient

Recommendation

The staff recommends to the Commissioner that the construction and operation 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.

A complete application for the purposes of this review was received on August 16, 2004.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 and 2).

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	4.84
PM-10	4.84
SO ₂	0.48
VOC	16.62
CO	0.09
NO _x	0.67

HAPs	Potential to Emit (tons/yr)
Toluene	3.28
All Others	1.70
Total	4.98

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all pollutants are less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5. A registration will be issued.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM	Attainment
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
1 Hour Ozone	Attainment
8 Hour Ozone	Non-attainment
CO	Attainment
Lead	Attainment

- (a) 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 emissions and NOx are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for the ozone standards. Therefore, VOC emissions and NOx and were reviewed pursuant to the requirements for nonattainment new source review.
- (b) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	4.84
PM-10	4.84
SO ₂	0.48
VOC	16.62
CO	0.90
NO _x	0.67
Single HAP	3.28
Combination HAPs	4.98

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, the PSD and Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

State Rule Applicability – Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Elkhart County and the potential to emit of VOC is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 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 Alternative Opacity Limitations), 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 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this wood surface coating finishing operation will emit less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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

The particulate matter (PM) from the scuff sanding table operation, identified as ST, shall be limited by the following:

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:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Under the rule revision, particulate from the scuff sanding table shall not exceed “E” the rate of emission in pounds per hour from the above equation.

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

Surface coating, reinforced plastics composites fabricating operations, or graphic arts operations with a potential to emit particulate matter shall be controlled by a dry particulate filter or an equivalent control device, subject to the following:

- (1) The source shall operate the particulate control device in accordance with manufacturer’s specifications.
- (2) Overspray shall not be visibly detectable at the exhaust or accumulated on the ground.
- (3) A particulate matter control device is not required for operations that use less than ten (10) gallons of coating per day. At any time the coating application rate increases to greater than ten (10) gallons per day, particulate matter control devices must be in place. An operation that is subject to this subsection shall remain subject to it notwithstanding any subsequent decrease in gallons of coating used.

326 IAC 8-2-12 (Surface Coating Emission Limitations)

Pursuant to 326 IAC 8-2-12 (Surface Coating Emission Limitations: 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
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Conclusion

The construction and operation of this wood surface coating operation shall be subject to the conditions of the Registration Permit 039-19507-00609.

Appendix A

Emissions Calculations

Company: Custom Wood Finishing
 Address: 10807 CR 44, Millersburg, Indiana 46543
 Permit No.: 039-19507
 Plant No.: 039-00609
 Permit Reviewer: Walter Habeeb
 Date: September 28, 2004

Potential To Emit (tons/yr)

Emission Unit	PM	PM ₁₀	SO ₂	NO _x	VOC	CO	Highest Single HAP**	All HAP
3 Surface Coating Booths*	3.69	3.69	0.0	0.0	16.6	0.0	3.28	4.98
Scuff Sanding Table	1.13	1.13	0.0	0.0	0.0	0.0	0.0	0.0
Propane Heater	0.02	0.02	0.48	0.67	0.02	0.09	0.0	0.0
Total	4.84	4.84	0.48	0.67	16.62	0.09	3.28	4.98

* Surface Coating Emissions supplied by source.

** = Toluene

PM Emissions from Scuff Sanding Table

Process Throughput Weight: 0.25 tons/hr
 Design Maximum Air Flow Rate: 500 acf/min
 Overall Control Efficiency Rating: 95.00%
 Design Outlet Grain Loading: 0.003 grains/acf

Emission Rate – After Control

Hourly Emission Rate = (0.003 grains/acf) x (500 acf/min) x (60 min/hr) x (1/7,000 grains/lb)
 = 0.0129 lb/hr or 0.06 tons/yr

Emission Rate – Before Control

Potential Emission Rate = (after control rate) / (1-control efficiency) = tons/yr
 = (0.06 tons/yr) / (1-0.05) = 1.13 tons/yr

Allowable Process Emission Rate

Allowable Process Emission Rate = Process Rate (tons/hr) ^ 0.67 (4.1) = lbs/hr
 = (0.25 tons/hr) ^ 0.67 (4.1) = 1.62 lbs/hr

Emissions Calculations

Company: Custom Wood Finishing
 Address: 10807 CR 44, Millersburg, Indiana 46543
 Permit No.: 039-19507
 Plant No.: 039-00609
 Permit Reviewer: Walter Habeeb
 Date: September 28, 2004

One (1) Propane Fired Air Makeup Unit Heat Input Capacity (MMBtu/hr) = 1.00

	Pollutant					
	PM	PM10	SO ₂	NO _x	VOC	CO
Emission Factor (lb/MMBtu)	0.0044	0.0044	0.1093	0.15	0.01	0.02
Potential to Emit (tons/yr)	0.02	0.02	0.479	0.67	0.02	0.09

Emission factors are from AP-42 chapter 1.5 (Liquified Petroleum Gas Combustion), Table 1.5-1 (Oct. 1996).