



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: September 11, 2008

RE: Custom Wood Products / 039-26586-00374

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

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 13-15-5-3, this permit 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.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require 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
FNPER.dot12/03/07



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(317) 232-8603
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New Source Construction and Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**Custom Wood Products, Inc.
21594 Beck Drive
Elkhart, Indiana 46516**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1 and New Source Review under 326 IAC 2-5.1.

Operation Permit No.: M 039-26586-00374	
Original signed by: Tripurari P. Sinha, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: September 11, 2008 Expiration Date: September 11, 2018

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SECTION A SOURCE SUMMARY

This permit 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 Permittee 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 Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary wood RV components and furniture manufacturing and coating plant.

Source Address:	21594 Beck Drive, Elkhart, Indiana 46516
Mailing Address:	P.O. Box 925, Wakarusa, 46573-0925
General Source Phone Number:	(574) 295-8818
SIC Code:	2499
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 22.3 pounds of plywood van seat frames per hour, with particulate matter emissions controlled by a cyclone and baghouse (identified as D2).
- (b) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 267 pounds per hour of hardwood van decorative interior trim, with particulate matter emissions controlled by a cyclone and baghouse (identified as D1).
- (c) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 145 pounds per hour of plywood van seat frames or hardwood van decorative interior trim, with uncontrolled particulate matter emissions and consisting of the following:
 - (1) One (1) drum sander identified as DS1,
 - (2) Two (2) bandsaws identified as BW1 and BW2,
 - (3) Four (4) chop saws identified as CS1 through CS4,
 - (4) Six (6) drill presses identified as DP1 through DP6, and
 - (5) Five (5) routers identified as RT1 through RT5.
- (d) One (1) board bonding process, constructed in 1996, utilizing 1.45 pounds per hour of adhesive, coating 414.55 pounds per hour of van decorative interior trim.
- (e) One (1) surface coating process, identified as B1, constructed in 1996, with a maximum

capacity of 138.41 pounds per hour of van decorative interior trim, with particulate matter emissions controlled by dry filters and exhausting to stack E1.

- (f) Two (2) surface coating booths, identified as B2 and B3, approved for construction in 2008, each with a maximum capacity of 138.41 pounds per hour of van decorative interior trim, with particulate matter emissions controlled by dry filters and exhausting to stacks E2 and E3 respectively.
- (g) Two (2) natural gas-fired enclosed space heaters, identified as H1 and H2, with a capacity of 0.4 MMBtu/hr and 0.075 MMBtu/hr, respectively. Units H1 and H2 were constructed in 1996.
- (h) Three (3) natural gas-fired enclosed space heaters, identified as H3, H4, and H5, with a combined maximum capacity of 0.2 MMBtu/hr. Units H3, H4, and H5 were constructed in 1999.
- (i) Four (4) natural gas-fired enclosed space heaters, identified as H6, H7, H8, and H9, approved for construction in 2008 with maximum capacity of 0.08 MMBTU/hr, each.

SECTION B GENERAL CONDITIONS

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

Terms in this permit 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 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 when prior to the start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.
- (c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, M 039-26586-00374, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.5 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.6 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.7 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.8 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.9 Duty to Provide Information

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.10 Certification

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (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 permit.
- (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.12 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.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M 039-26586-00374 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 permit.

B.14 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least ninety (90) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.15 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
- (1) Submitted at least ninety (90) days prior to the date of the expiration of this permit; and
 - (2) 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.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.16 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.17 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.18 Inspection and Entry

[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.19 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.20 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.21 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

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

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (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 permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 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 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.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

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

The Permittee 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).

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.9 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any

monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Instrument Specifications [326 IAC 2-1.1-11]

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations

or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit 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.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 22.3 pounds of plywood van seat frames per hour, with particulate matter emissions controlled by a cyclone and baghouse (identified as D2).
- (b) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 267 pounds per hour of hardwood van decorative interior trim, with particulate matter emissions controlled by a cyclone and baghouse (identified as D1).
- (c) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 145 pounds per hour of plywood van seat frames or hardwood van decorative interior trim, with uncontrolled particulate matter emissions and consisting of the following:
 - (1) One (1) drum sander identified as DS1,
 - (2) Two (2) bandsaws identified as BW1 and BW2,
 - (3) Four (4) chop saws identified as CS1 through CS4,
 - (4) Six (6) drill presses identified as DP1 through DP6, and
 - (5) Five (5) routers identified as RT1 through RT5.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the plywood woodworking process controlled by D2, which has a maximum process weight rate less than 100 pounds per hour, shall not exceed 0.551 pounds per hour.

- (b) The particulate from the hardwood woodworking operation controlled by D1, shall not exceed 1.06 pounds per hour when operating at a process weight rate of 0.13 tons per hour. The pounds per hour limitation was 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:

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

- (c) The particulate from the uncontrolled woodworking operations shall not exceed 0.71 pounds per hour when operating at a process weight rate of 0.073 tons per hour. The pounds per hour limitation was 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

Compliance Determination Requirements

D.1.2 Particulate Matter (PM)

- (a) The cyclone and baghouse (D2) shall be in operation at all times the plywood woodworking operations are in operation, in order to comply with Condition D.1.1(a).
- (b) The cyclone and baghouse (D1) shall be in operation at all times the hardwood woodworking operations are in operation, in order to comply with Condition D.1.1(b).
- (c) 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.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (d) One (1) surface coating process, identified as B1, constructed in 1996, with a maximum capacity of 138.41 pounds per hour of van decorative interior trim, with particulate matter emissions controlled by dry filters and exhausting to stack E1.
- (e) Two (2) surface coating booths, identified as B2 and B3, approved for construction in 2008, each with a maximum capacity of 138.41 pounds per hour of van decorative interior trim, with particulate matter emissions controlled by dry filters and exhausting to stacks E2 and E3 respectively.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.2.1 Particulate Emission Limitations, Work Practices, and Control Technologies [326 IAC 6-3-2 (d)]

Pursuant to 326 IAC 6-3-2 (d), particulate from the spray booths B1, B2 and B3 shall be controlled by dry particulate filters, and the dry particulate filters shall be operated in accordance with the manufacturer's specifications.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

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

- (a) Airless Spray Application
- (b) Air Assisted Airless Spray Application
- (c) Electrostatic Spray Application
- (d) Electrostatic Bell or Disc Application
- (e) Heated Airless Spray Application
- (f) Roller Coating
- (g) Brush or Wipe Application
- (h) 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.

Since Custom Wood Products, Inc. uses air assisted airless spray guns, hand wipe methods, and a flowcoater to apply the coatings and adhesives to wood surfaces, they are in compliance with this rule.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

D.2.3 Monitoring

- (a) Daily inspections shall be performed to determine the placement, integrity, and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (E1, E2, and E3) while one or more of the paint booths are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.2.4 Record Keeping Requirement

- (a) To document compliance with Condition D.2.2, the Permittee shall maintain a log of weekly overspray observations and daily and monthly inspections.

- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Custom Wood Products, Inc.
Address:	21594 Beck Drive
City:	Elkhart, Indiana 46516
Phone #:	(574) 295-8818
MSOP #:	M 039-26586-00374

I hereby certify that Custom Wood Products, Inc. is : still in operation.
 no longer in operation.
I hereby certify that Custom Wood Products, Inc. is : in compliance with the requirements of MSOP M 039-26586-00374.
 not in compliance with the requirements of MSOP M 039-26586-00374.

Authorized Individual (typed):
Title:
Signature:
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:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?____, 25 TONS/YEAR SULFUR DIOXIDE ?____, 25 TONS/YEAR NITROGEN OXIDES?____, 25 TONS/YEAR VOC ?____, 25 TONS/YEAR HYDROGEN SULFIDE ?____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?____, 25 TONS/YEAR FLUORIDES ?____, 100 TONS/YEAR CARBON MONOXIDE ?____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Mail to: Permit Administration & Development Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Custom Wood Products, Inc.
21594 Beck Drive
Elkhart, Indiana 46516

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)
4. I hereby certify that Custom Wood Products, Inc. 21594 Beck Drive, Elkhart, Indiana 46516, completed construction of the wood RV components and furniture manufacturing and coating plant on in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on May 23, 2008 and as permitted pursuant to New Source Construction Permit and Minor Source Operating Permit No. M 039-26586-00374, Plant ID No. 039-00374 issued on _____.
5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature _____

Date _____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana
on this _____ day of _____, 20 _____. My Commission expires: _____.

Signature _____

Name _____ (typed or printed)

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal with
New Source Review (NSR)

Source Background and Description

Source Name:	Custom Wood Products, Inc.
Source Location:	21594 Beck Drive, Elkhart, Indiana 46516
County:	Elkhart
SIC Code:	2499
Permit Renewal No.:	M 039-26586-00374
Permit Reviewer:	Timothy R. Pettifor

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Custom Wood Products, Inc. relating to the operation of wood RV components and furniture manufacturing and coating plant.

History

On May 23, 2008, Custom Wood Products, Inc. submitted an application to the OAQ requesting to renew its operating permit and requesting approval to construct new emission units. This source was previously known as J-Mar Designs (from 1996 until June 2006). Custom Wood Products was issued a MSOP on June 4, 2003.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 22.3 pounds of plywood van seat frames per hour, with particulate matter emissions controlled by a cyclone and baghouse (identified as D2).
- (b) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 267 pounds per hour of hardwood van decorative interior trim, with particulate matter emissions controlled by a cyclone and baghouse (identified as D1).
- (c) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 145 pounds per hour of plywood van seat frames or hardwood van decorative interior trim, with uncontrolled particulate matter emissions and consisting of the following:
 - (1) One (1) drum sander identified as DS1,
 - (2) Two (2) bandsaws identified as BW1 and BW2,
 - (3) Four (4) chop saws identified as CS1 through CS4,
 - (4) Six (6) drill presses identified as DP1 through DP6, and
 - (5) Five (5) routers identified as RT1 through RT5.
- (d) One (1) board bonding process, constructed in 1996, utilizing 1.45 pounds per hour of adhesive, coating 414.55 pounds per hour of van decorative interior trim.

- (e) One (1) surface coating process, identified as B1, constructed in 1996, with a maximum capacity of 138.41 pounds per hour of van decorative interior trim, with particulate matter emissions controlled by dry filters and exhausting to stack E1.
- (f) Two (2) surface coating booths, identified as B2 and B3, approved for construction in 2008, each with a maximum capacity of 138.41 pounds per hour of van decorative interior trim, with particulate matter emissions controlled by dry filters and exhausting to stacks E2 and E3 respectively.
- (g) Two (2) natural gas-fired enclosed space heaters, identified as H1 and H2, with a capacity of 0.4 MMBtu/hr and 0.075 MMBtu/hr, respectively. Units H1 and H2 were constructed in 1996.
- (h) Three (3) natural gas-fired enclosed space heaters, identified as H3, H4, and H5, with a combined maximum capacity of 0.2 MMBtu/hr. Units H3, H4, and H5 were constructed in 1999.
- (i) Four (4) natural gas-fired enclosed space heaters, identified as H6, H7, H8, and H9, approved for construction in 2008 with maximum capacity of 0.08 MMBTU/hr, each.

Existing Approvals

Since the issuance of the MSOP 039-13745-00374 on June 4, 2003, the source has constructed or has been operating under the following approvals as well:

- (a) Administrative Amendment No. 039-23062-00374 issued on June 14, 2006

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

IDEM is aware that the Permittee has not submitted a timely renewal application pursuant to 326 IAC 2-6.1-7.

- (a) 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

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (pages 1-11).

County Attainment Status

The source is located in Elkhart County

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 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	Not designated.
¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard 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, and 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. Elkhart 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

Elkhart County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

(c) Other Criteria Pollutants

Elkhart 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.

(d) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	91.66
PM ₁₀	91.70
SO ₂	0.004
NO _x	0.611
VOC	44.46
CO	0.513

HAPs	tons/year
Lead	0.000003
Toluene	5.150
Methanol	0.729
Xylene	1.325
Benzene	0.00001
Dichlorobenzene	0.00001
Formaldehyde	0.893
Hexane	0.011
Chromium	0.00001
Cadmium	0.00001
Manganese	0.0000002
Nickel	0.00001
Total	8.108

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. The emissions of PM, PM₁₀, and VOC are greater than twenty five (25) tons per year. Therefore, the source will be issued an MSOP
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (c) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability

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 MSOP 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 ₁₀	SO ₂	NO _x	VOC	CO	HAPs
Surface Coating	0.02	0.02	0	0	44.39	0	8.095
Board Bonding	0	0	0	0	0.03	0	0.001
Natural gas-fired combustion	0.012	0.046	0.004	0.611	0.034	0.513	0.012
Controlled Woodworking	7.06	7.06	0	0	0	0	0
Uncontrolled Woodworking	2.73	2.73	0	0	0	0	0
Total Emissions	9.82	9.86	0.004	0.611	44.46	0.513	8.108

- (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) Fugitive Emissions
 The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) 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) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ are not included in the permit because this source is not a major source of HAP emissions.

Compliance Assurance Monitoring (CAM)

- (d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the 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 - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is located in Elkhart County and the potential to emit of each criteria pollutant 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 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 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

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

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

- (a) Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the plywood woodworking process controlled by D2, which has a maximum process weight rate less than 100 pounds per hour, shall not exceed 0.551 pounds per hour.

The cyclone and baghouse (D2) shall be in operation at all times the plywood woodworking operations are in operation, in order to comply with this limit.

- (b) The particulate from the hardwood woodworking operation controlled by D1, shall not exceed 1.06 pounds per hour when operating at a process weight rate of 0.13 tons per hour. The pounds per hour limitation was 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:

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

The cyclone and baghouse (D1) shall be in operation at all times the hardwood woodworking operations are in operation, in order to comply with these limits.

- (c) The particulate from the uncontrolled woodworking operations shall not exceed 0.71 pounds per hour when operating at a process weight rate of 0.073 tons per hour. The pounds per hour limitation was 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:

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

Note: The uncontrolled woodworking operations can comply with the 326 IAC 6-3-2 limit without the use of a control device.

- (d) Pursuant to 326 IAC 6-3-2(d), the particulate matter (PM) from surface coating booths B1, B2, and B3 shall be controlled by dry filters, and the Permittee shall operate the filters in accordance with manufacturer's specifications.
- (e) Pursuant to 326 IAC 6-3-1(b)(15), the requirements of 326 IAC 6-3 are not applicable to the board bonding process because this process uses less than five (5) gallons per day of coatings.

326 IAC 8-1-6 (New Facilities-General Reduction Requirements)

This spray booths are not subject to the provisions of 326 IAC 8-1-6 because they are subject to 326 IAC 8-2-12. In addition, the spray booths each emit less than 25 tons of VOC per year.

326 IAC 8-2-12 (Volatile Organic Compounds (VOC))

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

- (a) Airless Spray Application
- (b) Air Assisted Airless Spray Application
- (c) Electrostatic Spray Application
- (d) Electrostatic Bell or Disc Application
- (e) Heated Airless Spray Application
- (f) Roller Coating
- (g) Brush or Wipe Application
- (h) 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.

Since Custom Wood Products, Inc. uses air assisted airless spray guns, hand wipe methods, and a flowcoater to apply the coatings and adhesives to wood surfaces, they are in compliance with this rule.

Compliance Determination and Monitoring Requirements

The compliance monitoring requirements applicable to this source are as follows:

Emission Unit	Frequency	Monitoring
Spray Booths B1, B2, and B3	Daily	Inspection shall be performed to verify the placement, integrity, and particle loading of the dry filters.
Spray Booths B1, B2, and B3	Weekly	Observation shall be made of the over spray from the spray booth stack to monitor the performance of the dry filters.
Spray Booths B1, B2, and B3	Monthly	Inspection shall be performed of the coating emissions from the stack and the presence of over spray on the rooftops and the nearby ground.

Visible emission and pressure drop notations are not warranted for D1 and D2 since the controlled emissions from the controlled woodworking operations are only 0.84 tons per year.

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal with New Source Review 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 23, 2008. Additional information was received on July 1, 2008.

Conclusion

The operation of this wood RV components and furniture manufacturing and coating plant shall be subject to the conditions of the attached MSOP Renewal with New Source Review No. M 039-26586-00374.

Appendix A: Emissions Calculation Summary

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: July 23, 2008

Uncontrolled Emission Rates

<i>Emission Unit Groups</i>	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Lead (tons/yr)	Toluene (tons/yr)	Methanol (tons/yr)	Xylene (tons/yr)	Benzene (tons/yr)	Dichloro- benzene (tons/yr)	Formal- dehyde (tons/yr)	Hexane (tons/yr)	Chromium (tons/yr)	Cadmium (tons/yr)	Manganese (tons/yr)	Nickel (tons/yr)	Total HAPs (tons/yr)
Surface Coating (B1, B2, B3)	5.12	5.12	0.00	0.00	44.39	0.00	0.00	5.150	0.729	1.325	0.00	0.00	0.891	0.00	0.00	0.00	0.00	0.00	8.095
Board Bonding	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.000	0.000	0.000	0.00	0.00	0.001	0.00	0.00	0.00	0.00	0.00	0.001
Natural gas-fired combustion	0.012	0.046	0.004	0.611	0.034	0.513	0.000003	0.00002	0.00000	0.00000	0.00001	0.00001	0.0005	0.011	0.00001	0.00001	0.000002	0.00001	0.012
Controlled	83.80	83.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
Uncontrolled Woodworking	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
Total	91.66	91.70	0.004	0.611	44.46	0.513	0.000003	5.150	0.729	1.325	0.00001	0.00001	0.893	0.011	0.00001	0.00001	0.000002	0.00001	8.108

Limited Emission Rates

<i>Emission Unit Groups</i>	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Lead (tons/yr)	Toluene (tons/yr)	Methanol (tons/yr)	Xylene (tons/yr)	Benzene (tons/yr)	Dichloro- benzene (tons/yr)	Formal- dehyde (tons/yr)	Hexane (tons/yr)	Chromium (tons/yr)	Cadmium (tons/yr)	Manganese (tons/yr)	Nickel (tons/yr)	Total HAPs (tons/yr)
*Surface Coating (B1, B2, B3)	0.02	0.02	0.00	0.00	44.39	0.00	0.00	5.150	0.729	1.325	0.00	0.00	0.891	0.00	0.00	0.00	0.00	0.00	8.095
Board Bonding	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.001	0.00	0.00	0.00	0.00	0.00	0.001
Natural gas-fired combustion	0.012	0.046	0.004	0.611	0.034	0.513	0.000003	0.00002	0.00000	0.00000	0.00001	0.00001	0.0005	0.011	0.00001	0.00001	0.000002	0.00001	0.012
*Controlled Woodworking	7.06	7.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
*Uncontrolled Woodworking	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000
Total	9.82	9.86	0.004	0.611	44.46	0.513	0.000003	5.150	0.729	1.325	0.00001	0.00001	0.893	0.011	0.00001	0.00001	0.000002	0.00001	8.108

* Particulate Emissions from wood working operations are limited by 326 IAC 6-3-2. The dry filters required by 326 IAC 6-3-2(d) control particulate emissions from the surface coating operations.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
Surface Coating Booth (B1)**

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: September 10, 2008

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water & Exempt	Weight % Organics	Volume % Water & Exempt	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Material Usage (lb/hr)	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	
Surface Coating Booth B1																		
214830.1.601 Provincial Toner	7.23	77.98%	39.50%	38.48%	43.20%	17.58%	0.0636	7.21	3.32	4.90	2.78	1.276	30.62	5.59	0.80	15.83	75%	
OR																		
741050.55.601 Precat Sealer/Topcoat	7.40	77.00%	35.90%	41.10%	40.19%	18.79%	0.1271	7.21	6.78	5.09	3.04	2.787	66.89	12.21	1.71	16.19	75%	
AND																		
Pure Grade Lacquer - Cleanup	7.07	100%	0.00%	100.0%	0.00%	0.00%	0.0116	7.21	0.59	7.07	7.07	0.591	14.19	2.590	0.00	n/a	100%	
Potential Emission Rates - Add Solvents to Worst Case Coating											Uncontrolled	3.38	81.08	14.80	1.71			
											PM Control Efficiency:		99.6%					
											Controlled		3.38	81.08	14.80	0.01		

METHODOLOGY

Any booth can apply either toner or sealer - coatings are mutually exclusive, coatings applied using high volume, low pressure (HVLP) application
 Coating Application = High Volume, Low Pressure Application, Cleaning Solvent Manually Applied
 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
HAP Emission Calculations from Surface Coating Operations
Surface Coating Booth (B1)

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: #####

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Formaldehyde	Weight % Methanol	Weight % Toluene	Weight % Xylene	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total Emissions (ton/yr)
Surface Coating Booth B1												
214830.1.601 Provincial Toner	7.23	0.0636	7.21	1.00%	0.00%	0.00%	1.00%	0.145	0.000	0.000	0.145	0.290
OR												
741050.55.601 Precat Sealer/Topcoat	7.40	0.1271	7.21	1.00%	0.00%	0.00%	1.00%	0.297	0.000	0.000	0.297	0.594
AND												
Pure Grade Lacquer - Cleanup	7.07	0.0116	7.21	0.00%	9.38%	66.28%	5.59%	0.000	0.243	1.717	0.145	2.104
Potential Emissions - Add Solvents to Worst Case Coatings								0.297	0.243	1.717	0.442	2.698

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
 Coatings and mutually exclusive

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
Surface Coating Booth (B2)**

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: September 10, 2008

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water & Exempt	Weight % Organics	Volume % Water & Exempt	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Material Usage (lb/hr)	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
Surface Coating Booth B2																	
214830.1.601 Provincial Toner	7.23	77.98%	39.50%	38.48%	43.20%	17.58%	0.0636	7.21	3.32	4.90	2.78	1.276	30.62	5.59	0.80	15.83	75%
OR																	
741050.55.601 Precat Sealer/Topcoat	7.40	77.00%	35.90%	41.10%	40.19%	18.79%	0.1271	7.21	6.78	5.09	3.04	2.787	66.89	12.21	1.71	16.19	75%
AND																	
Pure Grade Lacquer - Cleanup	7.07	100%	0.00%	100.0%	0.00%	0.00%	0.0116	7.21	0.59	7.07	7.07	0.591	14.19	2.590	0.00	n/a	100%
Potential Emission Rates - Add Solvents to Worst Case Coating											Uncontrolled	3.38	81.08	14.80	1.71		
											PM Control Efficiency:	99.6%					
											Controlled	3.38	81.08	14.80	0.01		

METHODOLOGY

Any booth can apply either toner or sealer - coatings are mutually exclusive, coatings applied using high volume, low pressure (HVLP) application
Coating Application = High Volume, Low Pressure Application, Cleaning Solvent Manually Applied
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
HAP Emission Calculations from Surface Coating Operations
Surface Coating Booth (B2)

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviwer: Timothy R. Pettifor
Date: #####

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Formaldehyde	Weight % Methanol	Weight % Toluene	Weight % Xylene	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total Emissions (ton/yr)
Surface Coating Booth B2												
214830.1.601 Provincial Toner	7.23	0.0636	7.21	1.00%	0.00%	0.00%	1.00%	0.145	0.000	0.000	0.145	0.290
OR												
741050.55.601 Precat Sealer/Topcoat	7.40	0.1271	7.21	1.00%	0.00%	0.00%	1.00%	0.297	0.000	0.000	0.297	0.594
AND												
Pure Grade Lacquer - Cleanup	7.07	0.0116	7.21	0.00%	9.38%	66.28%	5.59%	0.000	0.243	1.717	0.145	2.104
Potential Emissions - Add Solvents to Worst Case Coatings								0.297	0.243	1.717	0.442	2.698

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
 Coatings and mutually exclusive

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
Surface Coating Booth (B3)**

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: September 10, 2008

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water & Exempt	Weight % Organics	Volume % Water & Exempt	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Material Usage (lb/hr)	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	
Surface Coating Booth B3																		
214830.1.601 Provincial Toner	7.23	77.98%	39.50%	38.48%	43.20%	17.58%	0.0636	7.21	3.32	4.90	2.78	1.276	30.62	5.59	0.80	15.83	75%	
OR																		
741050.55.601 Precat Sealer/Topcoat	7.40	77.00%	35.90%	41.10%	40.19%	18.79%	0.1271	7.21	6.78	5.09	3.04	2.787	66.89	12.21	1.71	16.19	75%	
AND																		
Pure Grade Lacquer - Cleanup	7.07	100%	0.00%	100.0%	0.00%	0.00%	0.0116	7.21	0.59	7.07	7.07	0.591	14.19	2.590	0.00	n/a	100%	
Potential Emission Rates - Add Solvents to Worst Case Coating											Uncontrolled	3.38	81.08	14.80	1.71			
											PM Control Efficiency:		99.6%					
											Controlled		3.38	81.08	14.80	0.01		

METHODOLOGY

Any booth can apply either toner or sealer - coatings are mutually exclusive, coatings applied using high volume, low pressure (HVLP) application
Coating Application = High Volume, Low Pressure Application, Cleaning Solvent Manually Applied
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
HAP Emission Calculations from Surface Coating Operations
Surface Coating Booth (B3)

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: #####

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Formaldehyde	Weight % Methanol	Weight % Toluene	Weight % Xylene	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total Emissions (ton/yr)
Surface Coating Booth B3												
214830.1.601 Provincial Toner	7.23	0.0636	7.21	1.00%	0.00%	0.00%	1.00%	0.145	0.000	0.000	0.145	0.290
OR												
741050.55.601 Precat Sealer/Topcoat	7.40	0.1271	7.21	1.00%	0.00%	0.00%	1.00%	0.297	0.000	0.000	0.297	0.594
AND												
Pure Grade Lacquer - Cleanup	7.07	0.0116	7.21	0.00%	9.38%	66.28%	5.59%	0.000	0.243	1.717	0.145	2.104
Potential Emissions - Add Solvents to Worst Case Coatings								0.297	0.243	1.717	0.442	2.698

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
 Coatings and mutually exclusive

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
Board Bonding Process (BB1)**

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: September 10, 2008

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water & Exempt	Weight % Organics	Volume % Water & Exempt	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Material Usage (lb/hr)	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	
Board Bonding Process																		
Titebond II Wood Glue	9.17	52.00%	51.45%	0.55%	56.57%	42.82%	0.0073	21.63	1.45	0.12	0.05	0.01	0.19	0.03	0.00	0.12	100%	
Potential Emission Rates											Uncontrolled		0.01	0.19	0.03	0.00		
											PM Control Efficiency:		0.0%					
METHODOLOGY											Controlled		0.01	0.19	0.03	0.00		

Coating Application = Manual squeeze bottle flow coating
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 hrs/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)

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Formaldehyde	Weight % Methanol	Weight % Toluene	Weight % Xylene	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total Emissions (ton/yr)
Board Bonding Process												
Titebond II Wood Glue	9.17	0.0073	21.63	0.01%	0.00%	0.00%	0.00%	0.001	0.000	0.000	0.000	0.001
Potential Emissions								0.001	0.000	0.000	0.000	0.001

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
Natural Gas Combustion Only
MM BTU/HR <100**

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: #####

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100 **see below	5.50	84.0

*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM-10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Equipment	Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission in tons/yr					
			PM*	PM10*	SO2	NOx	VOC	CO
One (1) natural gas-fired forced air space heater, identified as H1, rated at 0.4 MMBTU/hr heat input capacity	0.400	3.50	0.003	0.013	0.001	0.175	0.010	0.147
One (1) natural gas-fired forced air space heater, identified as H2, rated at 0.075 MMBTU/hr heat input capacity	0.075	0.66	0.001	0.002	0.000	0.033	0.002	0.028
Three (3) natural gas-fired forced air space heaters, identified as H3 through H5, each rated at 0.2 MMBTU/hr heat input capacity	0.600	5.26	0.005	0.020	0.002	0.263	0.014	0.221
Four (4) natural gas-fired radiant tube heaters, identified as H6 through H9, each rated at 0.08 MMBTU/hr heat input capacity	0.320	2.803	0.0027	0.011	0.0008	0.140	0.008	0.118
Total	1.40	12.2	0.012	0.046	0.004	0.611	0.034	0.513

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	0.0021	0.0012	0.0750	1.8000	0.0034
Potential Emission in tons/yr	0.00001	0.00001	0.0005	0.011	0.00002

Emission Factor in lb/MMcf	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total HAPs
	0.0005	0.0011	0.0014	0.0004	0.0021	
Potential Emission in tons/yr	0.000003	0.00001	0.00001	0.000002	0.00001	0.012

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emission Calculations
Controlled Woodworking Operations - WW1 and WW2**

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: July 23, 2008

Emission Unit Description	Emission Unit ID	Control Device Description	Control Device ID	Control Device Filter Area (ft ²)	Air to Cloth Ratio	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	PM Emission Rate before Controls (lb/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
Miscellaneous Woodworking	WW1	Honeyville Cyclone/Bagfilter	D1	1250	12	99.0%	0.001328	15,000	17.07	74.79	0.171	0.748
Omega Mitre Saw	WW2	Jet DC-1200	D2	30	40	99.0%	0.002000	1,200	2.06	9.01	0.021	0.090
TOTALS									19.13	83.80	0.191	0.84

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (cub. ft./min.) (60 min/hr) (lb/7000 grains)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Allowable Rate of Emissions

Emission Unit ID	Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)
WW1	267.00	0.134	1.06
WW2	22.30	0.011	0.20

Methodology

Allowable Emissions = 4.10(Process Weight Rate)^{0.67}

**Appendix A: Emissions Calculations
Uncontrolled Woodworking Equipment - UWW**

Company Name: Custom Wood Products, Inc.
Address City IN Zip: 21594 Beck Drive, Elkhart, Indiana 46516
Prepared By: D&B Environmental Services, Inc.
Reviewer: Timothy R. Pettifor
Date: July 23, 2008

Shaping/Grinding/Sanding

Process/Operation	Description	ID	Surface Thickness Removed (in)	Surface Width Removed (in)	Surface Distance (in/hr)	Material Loss (in ³ /hr)	Material Density (lb/in ³)	Material Loss (lb/hr)
Sand Rite Drum Sander	Drum Sander	DS1	0.0625	1.500	10.0	0.938	0.023	0.022
Estimated Emissions (lb/hr)								0.022
Estimated Emissions (tons/yr)								0.095

METHODOLOGY

Material Loss (in³/hr) = Surface Thickness (in) X Surface Width (in) X Surface Distance (in/hr)
 Material Density (lbs/in³) = Southern Pine, 40 lb/ft³
 Estimated Emissions (lb/hr) = Material Loss (in³/hr) X Material Density (lb/in³)
 Estimated Emissions (tons/yr) = Material Loss (in³/hr) X 8,760 (hrs/yr) X 1/2,000 (lbs/ton)

Cutting

Process/Operation	Description	ID	Material Thickness (in)	Cutting Surface Thickness (in)	Process rate (in/hr)	Material Loss (in ³ /hr)	Material Density (lb/in ³)	Material Loss (lb/hr)
Jet Bandsaw	Vertical Bandsaw	BW1	2	0.0625	5.0	0.625	0.023	0.014
Black/Decker Chop Saw	Chop Saw	CS1	2	0.125	6.0	1.500	0.023	0.035
Dewalt Chop Saw	Chop Saw	CS2	2	0.125	6.0	1.500	0.023	0.035
Delta Bandsaw	Vertical Bandsaw	BW2	2	0.0625	5.0	0.625	0.023	0.014
Delta Chop Saw	Chop Saw	CS3	2	0.125	6.0	1.500	0.023	0.035
Dewalt Chop Saw	Chop Saw	CS4	2	0.125	6.0	1.500	0.023	0.035
Estimated Emissions (lb/hr)								0.168
Estimated Emissions (tons/yr)								0.735

METHODOLOGY

Same as Shaping/Grinding/Sanding Table

Drilling

Process/Operation	Description	ID	Material Thickness (in)	Drilling Area (in ²)	Drill rate (holes/hr)	Material Loss (in ³ /hr)	Material Density (lb/in ³)	Material Loss (lb/hr)
Delta Drill Press	Drill Press	DP1	2	0.050	5.00	0.5	0.023	0.012
Craftsman Drill Press	Drill Press	DP2	2	0.050	5.00	0.5	0.023	0.012
Jet Drill Press	Drill Press	DP3	2	0.050	5.00	0.5	0.023	0.012
Delta Drill Press	Drill Press	DP4	2	0.050	5.00	0.5	0.023	0.012
Duracraft Drill Press	Drill Press	DP5	2	0.050	5.00	0.5	0.023	0.012
Doucet Drill Press	Drill Press	DP6	2	0.050	5.00	0.5	0.023	0.012
Estimated Emissions (lb/hr)								0.069
Estimated Emissions (tons/yr)								0.304

METHODOLOGY

Material Loss (in³/hr) = Material Thickness (in) X Drilling Area (in²) X Process rate (holes/hr)
 Other equations the same as above.

Routing

Process/Operation	Description	ID	Routing Thickness (in)	Routing Bit Diameter (in)	Routing Length (in)	Material Loss (in ³ /hr)	Material Density (lb/in ³)	Material Loss (lb/hr)
Castle Router	Router	RT1	0.5	0.375	24.00	4.5	0.023	0.104
Rockwell Shaper/Router	Router	RT2	0.5	0.375	12.00	2.25	0.023	0.052
Craftsman Router	Router	RT3	0.5	0.375	12.00	2.25	0.023	0.052
SCM Router	Router	RT4	0.5	0.375	12.00	2.25	0.023	0.052
Castle Router	Router	RT5	0.5	0.375	24.00	4.5	0.023	0.104
Estimated Emissions (lb/hr)								0.365
Estimated Emissions (tons/yr)								1.597

METHODOLOGY

Material Loss (in³/hr) = Routing Thickness (in) X Routing Bit Diameter (in) X Routing Length (in)
 Other equations the same as above.

Total Emission Losses (PM/PM10) - Lb/Hr								0.624
Total Emission Losses (PM/PM10) - TPY								2.731

Allowable Rate of Emissions

Process Rate (lbs/hr)	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)
145.00	0.073	0.71

Methodology

Allowable Emissions = 4.10(Process Weight Rate)^{0.67}