



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: June 19, 2008

RE: Eckhart Woodworking, Inc. / 001-26442-00065

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

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

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

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FN-REGIS.dot 1/2/08



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REGISTRATION OFFICE OF AIR QUALITY

Eckhart Woodworking, Inc.
424 South Van Buren Street
Monroe, Indiana 46772

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

| | |
|--|------------------------------|
| Registration No. 001-26442-00065 | |
| Issued by: Original signed by | Issuance Date: June 19, 2008 |
| Alfred C. Dumauual, Ph. D., Section Chief Permits Branch Office of Air Quality | |

SECTION A

SOURCE SUMMARY

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

A.1 General Information

The Registrant owns and operates a stationary wooden doors, fascia, and turnings manufacturing facility.

| | |
|------------------------------|---|
| Source Address: | Eckhart Woodworking, Inc. |
| Mailing Address: | 424 South Van Buren Street, Monroe, Indiana 46772 |
| General Source Phone Number: | 001-26442-00065 |
| SIC Code: | 2452 |
| County Location: | Adams County |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Registration |

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) woodworking operation, identified as EU-1, approved for construction in 2008, with a maximum capacity of 250 board feet per hour, using a baghouse identified as BH-1 for particulate control, and exhausting to stack BH-1.
- (b) One (1) surface coating booth, identified as PB-1, approved for construction in 2008, with a maximum throughput of ten parts per hour, using a dry filter identified as PBF-1 for particulate control, and exhausting to stacks S-1 and S-2.
- (c) One (1) surface coating booth, identified as PB-2, approved for construction in 2008, with a maximum throughput of ten parts per hour, using a dry filter identified as PBF-2 for particulate control, and exhausting to stacks S-3 and S-4.
- (d) Nine (9) space heaters, identified as SH-1 through SH-9, each with a maximum heat input capacity of 0.24 MMBtu per hour.
- (e) Equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, and welding equipment.

SECTION B

GENERAL CONDITIONS

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

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

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

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

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

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

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM, the fact that continuance of this registration is not consistent with purposes of this article.

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

- (a) All terms and conditions of permits established prior to Registration No. 001-26442-00065 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this registration.

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

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

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

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

Indianapolis, IN 46204-2251

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

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

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

SECTION D.1

OPERATION CONDITIONS

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

- (a) One (1) woodworking operation, identified as EU-1, approved for construction in 2008, with a maximum capacity of 250 board feet per hour, using a baghouse identified as BH-1 for particulate control, and exhausting to stack BH-1.

(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

D.1.1 Particulate Matter (PM)

The baghouse identified as BH-1, which is considered integral to the woodworking operation, shall be in operation and control particulate emissions from the woodworking equipment at all times the woodworking equipment is in operation.

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

**REGISTRATION
ANNUAL NOTIFICATION**

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

| | |
|--------------------------|----------------------------|
| Company Name: | Eckhart Woodworking, Inc. |
| Address: | 424 South Van Buren Street |
| City: | Monroe, Indiana 46772 |
| Phone Number: | (260) 692 -6218 |
| Registration No.: | 001-26442-00065 |

I hereby certify that Eckhart Woodworking, Inc. is :

still in operation.

I hereby certify that Eckhart Woodworking, Inc. is :

no longer in operation.

in compliance with the requirements of Registration No. 001-26442-00065.

not in compliance with the requirements of Registration No. 001-26442-00065.

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

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

| |
|-----------------------|
| Noncompliance: |
| |
| |
| |
| |

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for Registration

Source Description and Location

Source Name: Eckhart Woodworking, Inc.
Source Location: 424 South Van Buren Street, Monroe, Indiana 46772
County: Adams
SIC Code: 2452
Registration No.: 001-26442-00065
Permit Reviewer: Timothy R. Pettifor

On April 22, 2008, the Office of Air Quality (OAQ) has received an application from Eckhart Woodworking, Inc. related to the construction and operation of a new wooden doors, fascia, and turnings manufacturing facility.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Adams County.

| Pollutant | Designation |
|--|---|
| SO ₂ | Better than national standards. |
| CO | Unclassifiable or attainment effective November 15, 1990. |
| O ₃ | Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹ |
| PM ₁₀ | Unclassifiable effective November 15, 1990. |
| NO ₂ | Cannot be classified or better than national standards. |
| Pb | Not designated. |
| ¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5. | |

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the

Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Adams 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

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

(c) Other Criteria Pollutants

Adams 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.

| |
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| Fugitive Emissions |
|---------------------------|

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.1-2 (Registrations) applicability.

| |
|---|
| Background and Description of Emission Units and Pollution Control Equipment |
|---|

The Office of Air Quality (OAQ) has reviewed an application, submitted by Eckhart Woodworking, Inc. on April 28, 2008, relating to the construction and operation of new emission units and the continued operation of an existing wooden doors, fascia, and turnings manufacturing facility.

The following is a list of the new emission units and pollution control devices:

- (a) One (1) woodworking operation, identified as EU-1, approved for construction in 2008, with a maximum capacity of 250 board feet per hour, using a baghouse identified as BH-1 for particulate control, and exhausting to stack BH-1.
- (b) One (1) surface coating booth, identified as PB-1, approved for construction in 2008, with a maximum throughput of ten parts per hour, using a dry filter identified as PBF-1 for particulate control, and exhausting to stacks S-1 and S-2.
- (c) One (1) surface coating booth, identified as PB-2, approved for construction in 2008, with a maximum throughput of ten parts per hour, using a dry filter identified as PBF-2 for particulate control, and exhausting to stacks S-3 and S-4.
- (d) Nine (9) space heaters, identified as SH-1 through SH-9, each with a maximum heat input capacity of 0.24 MMBtu per hour.
- (e) Equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, and welding equipment.

| |
|---|
| “Integral Part of the Process” Determination (if applicable) |
|---|

The applicant has submitted the following information to justify why the baghouse should be considered an

integral part of the woodworking operation:

- (a) The primary purpose of the dust collectors is to allow continuous operation of the woodworking equipment. Specifically, the dust collectors keep the cutting surface clear of wood chips that would clog the equipment and would require that the production line be shut down in order to clear the equipment. Eckhart Woodworking would have no other choice but to cease operations if the baghouse were to cease operating.

IDEM, OAQ has evaluated the information submitted and agrees that the baghouse should be considered an integral part of the woodworking operation. Therefore, the permitting level will be determined using the potential to emit after the baghouse. Operating conditions in the proposed permit will specify that this baghouse identified as BH-1 shall operate at all times when the woodworking operation identified as EU-1 is in operation.

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| Enforcement Issues |
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There are no pending enforcement actions related to this source.

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| Emission Calculations |
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See Appendix A of this TSD for detailed emission calculations (pages 1-6).

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

| Process/Emission Unit | Potential To Emit of the Entire Source (tons/year) | | | | | | | |
|-----------------------------------|--|-------------|-----------------|-----------------|-------------|------------|-------------|-----------------------|
| | PM | PM10* | SO ₂ | NO _x | VOC | CO | Total HAPs | Worst Single HAP |
| Woodworking Operations (EU-1)** | 1.64 | 1.64 | - | - | - | - | - | - |
| Surface Coating (PB-1, PB-2) | 2.37 | 2.37 | - | - | 19.5 | - | - | - |
| Space Heaters | 0 | 0.1 | 0 | 0.9 | 0.1 | 0.8 | 0.02 | 0.017 (Hexane) |
| Welding and Cutting | 0.28 | 0.28 | - | - | - | - | 0.02 | 0 |
| Total PTE of Entire Source | 4.29 | 4.39 | 0 | 0.9 | 19.5 | 0.8 | 0.04 | 0.017 (Hexane) |
| Exemptions Levels | 5 | 5 | 10 | 10 | 5 or 10 | 25 | 2.5 | 1 |
| Registration Levels | 25 | 25 | 25 | 25 | 25 | 100 | - | - |

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

**The baghouse identified as BH-1 is considered integral to the process.

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of and VOC is within the ranges listed in 326 IAC 2-5.1-2(a)(1). The PTE of all other regulated criteria pollutants is less than the ranges listed in 326 IAC 2-5.1-2(a)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2 (Registrations). A Registration will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.
- (c) The requirements of 40 CFR 63, Subpart JJ, NESHAP for Wood Furniture Manufacturing (40 CFR 63.800 - 63.808) (326 IAC 20-14), are not included in this permit, since this source is not a major source of HAPs as defined in 40 CFR 63.2.
- (d) The requirements of 40 CFR 63, Subpart QQQQ, NESHAP for Surface Coating of Wood Building Products (40 CFR Part 63.4680 - 63.4781) (326 IAC 20-79), are not included in this permit, since this source is not a major source of HAPs as defined in 40 CFR 63.2.

Compliance Assurance Monitoring (CAM)

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

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-5.5 (Registrations)
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

- (d) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (e) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
- (1) Pursuant to 326 IAC 6-3-1(b)(14), the woodworking operation is exempt from the requirements of 326 IAC 6-3, because the potential particulate emissions after the integral baghouse BH-1 are less than 0.551 pounds per hour.
 - (2) Pursuant to 326 IAC 6-3-1(b)(15), the surface coating operations are exempt from the requirements of 326 IAC 6-3, since they use less than five (5) gallons per day of coatings.
 - (3) Pursuant to 326 IAC 6-3-1(b)(14), the space heaters and welding and cutting operations are exempt from the requirements of 326 IAC 6-3, because they each have potential particulate emissions less than 0.551 pounds per hour.
- (f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (g) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (h) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.
- (i) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (j) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on April 22, 2008.

The construction and operation of this source shall be subject to the conditions of the attached proposed Registration No. 001-26442-00065. The staff recommends to the Commissioner that this Registration be approved.

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| IDEM Contact |
|---------------------|

- (a) Questions regarding this proposed permit can be directed to Timothy R. Pettifor at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5300 or toll free at 1-800-451-6027 extension 4-5300.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Summary
Potential to Emit (tons/yr)

Company Name Eckhart Woodworking, Inc.

Address 424 South Van Buren Street, Monroe, Indiana 46772

Registration #: 001-26442-00065

Reviewer: Timothy R. Pettifor

Date 4-Jun-2008

| Potential to Emit (tons/year) | | | | | | | | | | | | | | | | |
|-------------------------------------|-------------|-------------|----------|-------------|------------|------------|-----------------|-----------------|----------------------|-------------------|-----------------|-----------------|-----------------------|--------------|----------------------|--------------|
| Process/ Emission Unit | PM | PM10 | SO2 | VOC | CO | NOx | Pb | Ben- zene | Dichloro- Benzene | Form- aldehyde | Hexane | Toluene | Cd | Cr | Mn | Ni |
| Woodworking Operations (EU-1) | 1.64 | 1.64 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Surface Coating (PB-1 & PB-2) | 2.37 | 2.37 | - | 19.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| Space Heaters | 0 | 0.1 | 0 | 0.1 | 0.8 | 0.9 | 4.73E-06 | 1.99E-05 | 1.14E-05 | 7.10E-04 | 1.70E-02 | 3.22E-05 | 1.04 E-051 | 1.33 E-05 | 3.60 E-06 | 1.99 E-05 |
| Welding & Cutting | 0.28 | 0.28 | - | - | - | - | - | - | - | - | - | - | - | 0.01 | 0.00 | 0.01 |
| Total | 4.29 | 4.39 | 0 | 19.5 | 0.8 | 0.9 | 4.73E-06 | 1.99E-05 | 1.14E-05 | 7.10E-04 | 1.70E-02 | 3.22E-05 | 1.04 E-051 | 0.01 | 3.60 E-06 | 0.01 |

PM/PM10 Emissions are calculated after control since BH-1 is considered integral to the process.

Appendix A: Emission Calculations

Company Name: Eckhart Woodworking, Inc.
Address: 424 South Van Buren Street, Monroe, Indiana 46772
Registration #: 001-26442-00065
Reviewer: Timothy R. Pettifor
Date: 4-Jun-2008
Woodworking Operations

| | | |
|---------------------------------------|--|----------------|
| Amount of Sawdust Collected | | |
| when processing 120 bf/hr: | | 180 lbs/hour |
| Maximum Capacity : | | 250 bf/hour |
| Maximum Sawdust Generated (lbs/hr) : | $250/120 * 180 \text{ lbs/hour} =$ | 375 lbs/hour |
| Maximum Sawdust Generated (tons/yr) : | $375 \text{ lbs/hr} * 8760 \text{ hr/yr} * 1 \text{ ton}/2000 \text{ lbs} =$ | 1642.5 tons/yr |
| Control Efficiency of BH-1: | | 99.9 % |
| PTE of PM/PM10 after integral control | | |
| (tons/yr): | $1642.5 \text{ tons/yr} * (1 - .999) =$ | 1.6425 tons/yr |

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

Company Name: Eckhart Woodworking, Inc.
Address City IN Zip: 424 South Van Buren Street, Monroe, Indiana 46772
Registration Number: 001-26442-00065
Reviewer: Timothy R. Pettifor
Date: 4-Jun-2008

| Material | Density (Lb/Gal) | Weight % Volatile (H2O & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | lb VOC/gal solids | Transfer Efficiency |
|---------------------------------------|------------------|------------------------------------|----------------|-------------------|----------------|---------------------------------|------------------------|---------------------|---|----------------------------------|-------------------------------|------------------------------|-----------------------------|--------------------------------|-------------------|---------------------|
| Soft Maple Micro 7888 (PB-1) | 6.7 | 99.50% | 0.0% | 99.5% | 0.0% | 0.49% | 0.02500 | 10.000 | 6.62 | 6.62 | 1.66 | 39.72 | 7.25 | 0.01 | 1347.61 | 65% |
| Plantation Cherry (PB-1) | 6.9 | 98.80% | 0.0% | 98.8% | 0.0% | 1.20% | 0.02500 | 10.000 | 6.82 | 6.82 | 1.70 | 40.90 | 7.46 | 0.03 | 568.10 | 65% |
| Plantation Cherry , Soft Maple (PB-1) | 8.3 | 84.92% | 0.0% | 84.9% | 0.0% | 15.08% | 0.02500 | 10.000 | 7.06 | 7.06 | 1.76 | 42.35 | 7.73 | 0.48 | 46.81 | 65% |
| 82 Brown (PB-1) | 8.3 | 84.00% | 0.0% | 84.0% | 0.0% | 15.99% | 0.02500 | 10.000 | 6.97 | 6.97 | 1.74 | 41.83 | 7.63 | 0.51 | 43.60 | 65% |
| NM5212-0040F (PB-2) | 7.8 | 68.90% | 0.0% | 68.9% | 0.0% | 31.31% | 0.05000 | 10.000 | 5.37 | 5.37 | 2.69 | 64.49 | 11.77 | 1.86 | 17.16 | 65% |

State Potential Emissions

Controlled Emissions

4.45 106.84 19.50 2.37

4.45 106.84 19.50 0.02

METHODOLOGY

Parts are first coated in PB-1 , and then a Topcoat is added in PB-2. Only one type of Topcoat is used. Source has stated Plantation Cherry, Soft Maple is the worst case of VOC emissions for PB-1. The source has also decided to use HAP free coatings.

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

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

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

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

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

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

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

Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations
 Nine Space Heaters Natural Gas Combustion Only
 MM BTU/HR <100**

Company Name: Eckhart Woodworking, Inc.
Address City IN Zip: 424 South Van Buren Street, Monroe, Indiana 46772
Registration Number: 001-26442-00065
Reviewer: Timothy R. Pettifor
Date: 4-Jun-2008

Heat Input Capacity
 MMBtu/hr

Potential Throughput
 MMCF/yr

2.2

18.9

| Emission Factor in lb/MMCF | Pollutant | | | | | |
|-------------------------------|-----------|-------|-----|-------------|-----|------|
| | PM* | PM10* | SO2 | NOx | VOC | CO |
| | 1.9 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 0.0 | 0.1 | 0.0 | 0.9 | 0.1 | 0.8 |

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

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

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

See page 5 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

Company Name: Eckhart Woodworking, Inc.
Address City IN Zip: 424 South Van Buren Street, Monroe, Indiana 46772
Registration Number: 001-26442-00065
Reviewer: Timothy R. Pettifor
Date: 4-Jun-2008

| HAPs - Organics | | | | | |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf | Benzene 2.1E-03 | Dichlorobenzene 1.2E-03 | Formaldehyde 7.5E-02 | Hexane 1.8E+00 | Toluene 3.4E-03 |
| Potential Emission in tons/yr | 1.987E-05 | 1.135E-05 | 7.096E-04 | 1.703E-02 | 3.217E-05 |

| HAPs - Metals | | | | | |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Emission Factor in lb/MMcf | Lead 5.0E-04 | Cadmium 1.1E-03 | Chromium 1.4E-03 | Manganese 3.8E-04 | Nickel 2.1E-03 |
| Potential Emission in tons/yr | 4.730E-06 | 1.041E-05 | 1.325E-05 | 3.595E-06 | 1.987E-05 |

Methodology is the same as page 4.

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: Emissions Calculations
Welding and Thermal Cutting**

Company Name: Eckhart Woodworking, Inc.
Address City IN Zip: 424 South Van Buren Street, Monroe, Indiana 46772
Registration Number: 001-26442-00065
Reviewer: Timothy R. Pettifor
Date: 4-Jun-2008

| PROCESS | Number of Stations | Max. electrode consumption per station (lbs/hr) | | EMISSION FACTORS* (lb pollutant/lb electrode) | | | | EMISSIONS (lbs/hr) | | | | HAPS (lbs/hr) |
|-------------------------------|--------------------|---|--------------------------------------|---|---------|--------|---------|-----------------------|----------|----------|----------|------------------|
| | | | | PM = PM10 | Mn | Ni | Cr | PM = PM10 | Mn | Ni | Cr | |
| WELDING | | | | | | | | | | | | |
| Metal Inert Gas (MIG) | 1 | 2.50E-01 | | 0.0241 | 0.00346 | 0.0125 | 0.00528 | 6.03E-03 | 8.65E-04 | 3.13E-03 | 1.32E-03 | 0.005 |
| | | | | | | | | | | | | |
| FLAME CUTTING | Number of Stations | Max. Metal Thickness Cut (in.) | Max. Metal Cutting Rate (in./minute) | EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)** | | | | EMISSIONS (lbs/hr) | | | | HAPS (lbs/hr) |
| | | | | PM = PM10 | Mn | Ni | Cr | PM = PM10 | Mn | Ni | Cr | |
| Oxyacetylene | 1 | 0.5 | 12 | 0.1622 | 0.0005 | 0.0001 | 0.0003 | 5.84E-02 | 2.92E-05 | 5.84E-09 | 1.46E-13 | 2.92E-05 |
| | | | | | | | | | | | | |
| EMISSION TOTALS | | | | | | | | | | | | |
| Potential Emissions lbs/hr | | | | | | | | 0.06 | | | | 5.34E-03 |
| Potential Emissions lbs/day | | | | | | | | 1.55 | | | | 1.28E-01 |
| Potential Emissions tons/year | | | | | | | | 0.28 | | | | 2.34E-02 |

METHODOLOGY

*Emission Factors are from AP-42 Tables 12.19-1 and 12.19-2, SCC 3-09-052, worst case.
Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.