**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: August 19, 2008

RE: Mission Woodworking, Inc. / 039-26438-00674

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
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Indianapolis, Indiana 46204
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Toll Free (800) 451-6027
**www.idem.IN.gov**

# New Source Construction and Minor Source Operating Permit
# OFFICE OF AIR QUALITY

## Mission Woodworking, Inc.
## 502 Kesco Drive
## Bristol, Indiana 46507

(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.

| Operation Permit No.: 039-26438-00674 | |
|---|---|
| Issued by:<br><br>*Original document signed by*<br><br>Alfred C. Dumaual, Ph. D., Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: August 19, 2008<br><br>Expiration Date: August 19, 2013 |

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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 cabinet manufacturing.

| | |
|---|---|
| Source Address: | 502 Kesco Drive, Bristol, Indiana 46507 |
| Mailing Address: | 502 Kesco Drive, Bristol, Indiana 46507 |
| General Source Phone Number: | (877) 848-5697 |
| SIC Code: | 2434 |
| County Location: | Elkhart |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Minor Source Operating Permit Program<br>Minor Source, under PSD<br>Minor Source, Section 112 of the Clean Air Act<br>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) automated surface coating flat line machine, identified as EU-01, equipped with high-volume, low-pressure (HVLP) spray applicators, approved for construction in 2008, with a maximum capacity of 1 unit per hour, using dry filters as control, and exhausting to stack SV-01.

(b) One (1) manual surface coating booth, identified as EU-02, equipped with high-volume, low-pressure (HVLP) spray applicators, approved for construction in 2008, with a maximum capacity of 1 unit per hour, using dry filters as control, and exhausting to stacks SV-02 and SV-03.

(c) Clean-up operations utilizing non halogenated organic solvent and venting to the indoors.

(d) Two (2) woodworking operations, identified as EU-03 and EU-04, approved for construction in 2008, with a maximum capacity of 6,000 and 4,000 actual cubic feet per minute (acfm), respectively, using baghouses that are integral to the process, identified as BH-01 and BH-02, for particulate matter control and venting indoors.

(e) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour, consisting of four (4) natural gas-fired boilers, approved for construction in 2008, identified as B-1 with a heat input capacity of 0.30 MMBtu/hr and boilers B-2 through B-4 with heat input capacities of 0.15 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, 039-26438-00674, is issued for a fixed term of five (5) 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 prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 039-26438-00674 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 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.8 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.9 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.10 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.11 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.12 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.13 Response to Excursions or Exceedances

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

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) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. 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) automated surface coating flat line machine, identified as EU-01, equipped with high-volume, low-pressure (HVLP) spray applicators, approved for construction in 2008, with a maximum capacity of 1 unit per hour, using dry filters as control, and exhausting to stack SV-01.

(b) One (1) manual surface coating booth, identified as EU-02, equipped with high-volume, low-pressure (HVLP) spray applicators, approved for construction in 2008, with a maximum capacity of 1 unit per hour, using dry filters as control, and exhausting to stacks SV-02 and SV-03.

(c) Clean-up operations utilizing non halogenated organic solvent and venting to the indoors.

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

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating, the surface coating applied to wood furniture and cabinets at the one (1) automated surface coating flat line machine (EU-01) and the one (1) manual surface coating booth (EU-02), with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, shall utilize one (1) or more of the following application methods.

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

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

D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) automated surface coating flat line machine (EU-01) and the one (1) manual surface coating booth (EU-02) shall be controlled by dry filters and the Permittee shall operate the control devices in accordance with manufacturer's specifications.

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

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground; and

Operates equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

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

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) automated surface coating flat line machine (EU-01) and the one (1) manual surface coating booth (EU-02) and their control devices.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

**Emissions Unit Description:**

(a) Two (2) woodworking operations, identified as EU-03 and EU-04, approved for construction in 2008, with a maximum capacity of 6,000 and 4,000 actual cubic feet per minute (acfm), respectively, using baghouses that are integral to the process, identified as BH-01 and BH-02, for particulate matter control and venting indoors.

(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 Control

The baghouse for particulate control shall be in operation and control emissions from the woodworking areas, identified as EU-03 and EU-04, at all times that the woodworking area is in operation.

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.3 EMISSIONS UNIT OPERATION CONDITIONS

**Emissions Unit Description:**

(a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour, consisting of four (4) natural gas-fired boilers, approved for construction in 2008, identified as B-1 with a heat input capacity of 0.30 MMBtu/hr and boilers B-2 through B-4 with heat input capacities of 0.15 MMBtu/hr each.

(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.3.1 Particulate Matter (PM) Limitation [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the PM emission shall not exceed 0.6 pounds per million British thermal unit. Therefore, the PM from the four (4) boilers (B-1 through B-4) shall not exceed 0.6 pound per million British thermal units heat input.

**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:** | Mission Woodworking, Inc. |
| **Address:** | 502 Kesco Drive |
| **City:** | Bristol, Indiana 46507 |
| **Phone #:** | (877) 848-5697 |
| **MSOP #:** | 039-26438-00674 |

I hereby certify that Mission Woodworking, Inc. is :
☐ still in operation.
☐ no longer in operation.

I hereby certify that Mission Woodworking, Inc. is :
☐ in compliance with the requirements of MSOP 039-26438-00674.
☐ not in compliance with the requirements of MSOP 039-26438-00674.

| |
|---|
| **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

Mission Woodworking, Inc.
502 Kesco Drive
Bristol, Indiana 46507

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 Mission Woodworking, Inc. 502 Kesco Drive, Bristol, Indiana 46507, completed construction of the wood cabinet manufacturing on _____in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on April 21, 2008 and as permitted pursuant to New Source Construction Permit and Minor Source Operating Permit No. 039-26438-00674, Plant ID No. 039-00674 issued on _____.

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 New Source Construction and Minor Source Operating Permit (MSOP)

### Source Description and Location

| | |
|---|---|
| **Source Name:** | **Mission Woodworking, Inc.** |
| **Source Location:** | **502 Kesco Drive, Bristol, Indiana, 46507** |
| **County:** | **Elkhart** |
| **SIC Code:** | **2434** |
| **Operation Permit No.:** | **M039-26438-00674** |
| **Permit Reviewer:** | **Marcia Earl** |

On April 21, 2008, the Office of Air Quality (OAQ) has received an application from Mission Woodworking, Inc. related to the construction and operation of a new stationary custom wood cabinet manufacturing source. The potential to emit emissions from this source are at a Registration permit level, however, the source has opted for an MSOP permit level due to the possibility of future increases in production.

### Existing Approvals

There have been no previous approvals issued to this source.

### 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. |
| O3 | 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 Standard (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 $PM_{2.5}$.

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for

the 8-hour ozone standard.

(4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. 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) Elkhart County has been classified as attainment for $PM_{2.5}$. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for $PM_{2.5}$ emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for $PM_{2.5}$ emissions, it has directed states to regulate $PM_{10}$ emissions as a surrogate for $PM_{2.5}$ emissions.

(c) Other Criteria Pollutants
Elkhart County has been classified as attainment or unclassifiable in Indiana for $PM_{10}$, $SO_2$, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

## Fugitive Emissions

(a) 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.

(b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

## Background and Description of New Source Construction

The Office of Air Quality (OAQ) has reviewed an application, submitted by Mission Woodworking, Inc. on April 21, 2008, relating to the construction and operation of a custom wood cabinet manufacturing source.

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

(a) One (1) automated surface coating flat line machine, identified as EU-01, equipped with high-volume, low-pressure (HVLP) spray applicators, approved for construction in 2008, with a maximum capacity of 1 unit per hour, using dry filters as control, and exhausting to stack SV-01.

(b) One (1) manual surface coating booth, identified as EU-02, equipped with high-volume, low-pressure (HVLP) spray applicators, approved for construction in 2008, with a maximum capacity of 1 unit per hour, using dry filters as control, and exhausting to stacks SV-02 and SV-03.

(c) Clean-up operations utilizing non-halogenated organic solvent and venting to the indoors.

(d) Two (2) woodworking operations, identified as EU-03 and EU-04, approved for construction in 2008, with a maximum capacity of 6,000 and 4,000 actual cubic feet per minute (acfm), respectively, using baghouses that are integral to the process, identified as BH-01 and BH-02, for particulate matter control and venting indoors.

(e) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units per hour, consisting of four (4) natural gas-fired boilers, approved for construction in 2008, identified as B-1 with a heat input capacity of 0.30 MMBtu/hr and boilers B-2 through B-4 with heat input capacities of 0.15 MMBtu/hr, each.

## "Integral Part of the Process" Determination

The Mission Woodworking Inc. has submitted the following information to justify why the baghouses (B-01 and B-02) should be considered an integral part of the woodworking operation:

> The material used in these operations is "clean wood" and all of the collected dust is sent to be recycled for animal bedding. The baghouses are not capable of being vented to the outdoors and are in operation at all times during woodworking activities.

IDEM, OAQ has evaluated the justification and agreed that the baghouses (BH-01 and BH-02) will be considered as an integral part of the woodworking operations (EU-03 and EU-04). Therefore, the permitting level will be determined using the potential to emit after the baghouses. Particulate from the woodworking operations shall be controlled by the baghouses (BH-01 and BH-02) at all times that the woodworking operations are in operation and the Permittee shall operate the baghouses (BH-01 and BH-02) in accordance with manufacturer's specifications.

## Enforcement Issues

There are no pending enforcement actions related to this source.

## Emission Calculations

See Appendix A. pages 1 through 6 of this TSD for detailed emission calculations.

## Permit Level Determination – MSOP

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.

| Pollutant | Potential To Emit (tons/year) |
|---|---|
| PM | 3.07 |
| $PM_{10}$(1) | 3.07 |
| $SO_2$ | 0.00 |
| $NO_x$ | 0.30 |
| VOC | 17.37 |
| CO | 0.30 |

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers ($PM_{10}$), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate $PM_{10}$ emissions as surrogate for $PM_{2.5}$ emissions.

| HAPs | Potential To Emit (tons/year) |
|---|---|
| Toluene | 1.9 |
| Ethylbenzen | 0.51 |
| Benzene | negligible |
| Dichlorobenzene | negligible |
| Formaldehyde | negligible |
| Hexane | negligible |
| Lead | negligible |

| | |
|---|---|
| Cadmium | negligible |
| Chromium | negligible |
| Manganese | negligible |
| Nickel | negligible |
| **TOTAL HAPs** | **2.42** |

(a) The PTE of all regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) 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.

## PTE of the Entire Source After Issuance of the MSOP

The table below summarizes the potential to emit of the entire source after issuance of this MSOP, reflecting all limits, of the emission units.

| Process/Emission Unit | **Potential To Emit of the Entire Source After Issuance of MSOP (tons/year)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PM | $PM_{10}$* | $SO_2$ | NOx | VOC | CO | Total HAPs | Worst Single HAP |
| Surface Coating (EU-01 and EU-02) | 0.07 | 0.07 | 0.00 | 0.00 | 17.37 | 0.00 | 2.41 | 1.90 Toluene |
| Woodworking (Baghouse intregal) | | | | | | | | |
| EU-03 | 1.21 | 1.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EU-04 | 0.45 | 0.45 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Boilers (B-1 through B-4) | 0.00 | 0.00 | 0.00 | 0.30 | 0.00 | 0.30 | 0.01 | 0.01 |
| **Total PTE of the Entire Source** | **1.73** | **1.73** | **0.00** | **0.30** | **17.37** | **0.30** | **2.41** | N/A |
| Title V Major Source Threshold | - | 100 | 100 | 100 | 100 | 100 | 25 | 10 |

N/A = Not Applicable
* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers ($PM_{10}$), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate $PM_{10}$ emissions as surrogate for $PM_{2.5}$ emissions.

## Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

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

(b) The requirements of 40 CFR 60, Subpart D (Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units), are not included in this permit, because the four (4) boilers (B-1 through B-4) have input rates less than 250 million British thermal units per

hour (MMBtu/hr).

(c) The requirement of 40 CFR 60, Subpart Db (Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units), are not included in this permit, because the four (4) boilers (B-1 through B-4) have input rates less than 100 MMBtu/hr.

(d) The requirements of 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units), are not included in the permit, because the four (4) boilers (B-1 through B-4) have input rates less than 10 MMBtu/hr.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(e) 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.

(f) The requirements of 40 CFR Subpart T (63.460 through 63.470), NESHAP for Halogenated Solvent Cleaning, are not included in the permit, because the surface coating operation does not use a degreasing solvent that contains any of the halogenated compounds listed in 40 CFR 63.460(a).

(g) The requirements of NESHAPs for Wood Furniture Manufacturing Operations, 40 CFR 63.800, Subpart JJ (326 IAC 20-14), are not included in the permit, since this source is not a major source of Hazardous Air Pollutants (HAPs) as defined in 40 CFR 63.2.

(h) The requirement of 40 CFR 63, Subpart QQQQ (National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products), are not included in this permit, because this source produces wood cabinets not wood building products and is not a major source of Hazardous Air Pollutants (HAPs) as defined in 40 CFR 63.2.

Compliance Assurance Monitoring (CAM)

(i) 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 2-6.1 (Minor Source Operating Permits (MSOP)
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(c) 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.

(d) 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.

(e) 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.

(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.

<u>Surface Coating Operation</u>

(g) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2(d), particulate from the one (1) automated surface coating flat line machine (EU-01) and the one (1) manual surface coating booth (EU-02) shall be controlled by dry particulate filters, and the Permittee shall operate the control devices in accordance with manufacturer's specification.

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

Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground; and

Operates equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

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

(h) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
The one (1) automated surface coating flat line machine (EU-01) and the one (1) manual surface coating booth (EU-02) are used for coating wood cabinets and are regulated by 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating). Therefore, the requirements of 326 IAC 8-1-6 are not applicable to this source.

(i) 326 IAC 8-11 (Wood Furniture Coating)
326 IAC 8-11 (Wood Furniture Coating) are not appplicable to this source, because this rule pertaints to wood furniture coating in Lake, Porter, Clark and Floyd Counties. This source is in Elkhart County.

(j) 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)
This rule applies to surface coating of wood furnishings, including cabinets (kitchen, bath and vanity), tables, beds, chairs, sofas (nonupholstered), art objects, and any other coating furnishings made of solid wood, wood composition, or simulated wood material.

(a) The one (1) automated surface coating flat line machine (EU-01) and the one (1) manual surface coating booth (EU-02) are facilities of the type described in 326 IAC 8-2-12. The source was constructed after July 1, 1990 and the one (1) automated surface coating flat line machine (EU-01) and the one (1) manual surface coating booth (EU-02) could potentially have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls. Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the Permittee shall perform surface coating of wood furniture and cabinets, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) or more of the following applications systems:

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

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

<u>Clean-up Solvent</u>

(k) 326 IAC 20-6-1 (Halogenated Solvent Cleaning)
This source is not subject to the requirements of 326 IAC 20-6-1, since the clean up operation do not use a solvent that contains any of the halogenated compounds listed in 326 IAC 20-6-1(a).

<u>Woodworking Operation</u>

(l) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), each woodworking operation (EU-03 and EU-04) is exempt from the requirements of 326 IAC 6-3, because each has potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour. IDEM, OAQ has agreed that each of the baghouses (BH-01 and BH-02) associated with the woodworking operations will be considered as an integral part of the woodworking operations and the potential to emit particulate ($PM/PM_{10}$) will be determined after the baghouses.

Since each of the baghouses (BH-01 and BH-02) is considered an integral part of the woodworking operations and is necessary to comply with the requirements of 326 IAC 6-3-2, particulate from the woodworking operations (EU-03 and EU-04) shall be controlled by the baghouses at all times that the woodworking operations are in operation, and the Permittee shall operate the baghouses in accordance with manufacturer's specifications.

Boilers

(m) 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)
The four (4) natural gas-fired boilers (B-1 through B-4), constructed after September 21, 1983, must comply with the requirements of 326 IAC 6-2-4.

Pursuant to 326 IAC 6-2-4(a), for a total source operating capacity of less than ten (10) MMBtu/hr, the particulate matter emission rate shall not exceed 0.6 pounds per MMBtu. Therefore, the particulate matter emission from the natural gas-fired heaters (B-1 through B-4) is limited to 0.6 pound per MMBtu heat input total.

(n) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(o) 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 21, 2008.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and MSOP No. 039-26438-00674. The staff recommends to the Commissioner that this New Source Construction and MSOP be approved.

## IDEM Contact

(a) Questions regarding this proposed permit can be directed to Marcia Earl at the Indiana Department of Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0863 or toll free at 1-800-451-6027 extension 3-0863.

(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**

**Company Name:** Mission Woodworking, Inc.
**Address City Zip:** 502 Kesco Drive, Bristol, Indiana 46507
**Permit No:** M039-26438-00674
**Reviewer:** Marcia Earl
**Date:** May 2008

**Uncontrolled Emissions**

| Emission Units | PM | $PM_{10}$ | $SO_2$ | VOC | CO | NOx | HAPs |
|---|---|---|---|---|---|---|---|
| Surface Coating (EU-01 and EU-02) | 1.41 | 1.41 | 0.00 | 17.37 | 0.00 | 0.00 | 2.41 |
| Woodworking (Baghouse intregal part) | | | | | | | |
| EU-03 | 1.21 | 122.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EU-04 | 0.45 | 44.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Boilers B-1 through B-4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.01 |
| **Total** | 3.07 | 3.07 | 0.00 | 17.37 | 0.30 | 0.30 | 2.42 |

**Controlled Emissions**

| Emission Units | PM | $PM_{10}$ | $SO_2$ | VOC | CO | NOx | HAPs |
|---|---|---|---|---|---|---|---|
| Surface Coating (EU-01 and EU-02) | 0.07 | 0.07 | 0.00 | 17.37 | 0.00 | 0.00 | 2.41 |
| Woodworking (Baghouse intregal part)* | | | | | | | |
| EU-03 | 1.21 | 1.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EU-04 | 0.45 | 0.45 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Boilers B-1 through B-4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.01 |
| **Total** | 1.73 | 1.73 | 0.00 | 17.37 | 0.30 | 0.30 | 2.42 |

Baghouse BH-01 and BH-02 are considered intregal to the woodworking process so potential to emit (PTE) emissions will be taken after controls.

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

**Company Name:** Mission Woodworking Inc.
**Address City IN Zip:** 502 Kesco Drive, Bristol, Indiana 46507
**Permit Number:** M039-26438-00674
**Reviewer:** Marcia Earl
**Date:** May 2008

| Material* | Density (Lb/Gal) | Weight % Volatile (H20 & Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Volatiles (solids) | Gal of Mat. (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential (ton/yr) | lb VOC/gal solids | Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L5 HC Vinyl Sealer | 7.34 | 81.00% | 0.0% | 81.0% | 0.0% | 13.60% | 0.072 | 1.000 | 5.94 | 5.94 | 0.43 | 10.26 | 1.87 | 0.09 | 43.72 | 80% |
| HC White Vinyl Primer | 8.89 | 60.00% | 0.0% | 60.0% | 0.0% | 20.94% | 0.223 | 1.000 | 5.33 | 5.33 | 1.19 | 28.53 | 5.21 | 0.70 | 25.47 | 80% |
| L5 HC WW 40 SH Predat lacquer | 7.59 | 71.00% | 0.0% | 71.0% | 0.0% | 19.56% | 0.057 | 1.000 | 5.39 | 5.39 | 0.31 | 7.37 | 1.35 | 0.11 | 27.55 | 80% |
| White MIR-A-Var | 9.51 | 46.00% | 0.0% | 46.0% | 0.0% | 0.00% | 0.009 | 1.000 | 4.37 | 4.37 | 0.04 | 0.94 | 0.17 | 0.04 | 0.00 | 80% |
| L5 HC 40 SH White Precat T/C | 7.95 | 76.00% | 0.0% | 76.0% | 0.0% | 15.17% | 0.239 | 1.000 | 6.04 | 6.04 | 1.44 | 34.65 | 6.32 | 0.40 | 39.83 | 80% |
| Ohaw HC Clear D Stain Base | 6.40 | 89.00% | 0.0% | 89.0% | 0.0% | 7.98% | 0.091 | 1.000 | 5.71 | 5.71 | 0.52 | 12.47 | 2.28 | 0.06 | 71.38 | 80% |
| L5 HC Classic Coat White 40 SH | 9.74 | 32.00% | 0.0% | 32.0% | 0.0% | 57.07% | 0.002 | 1.000 | 3.12 | 3.12 | 0.01 | 0.15 | 0.03 | 0.01 | 5.46 | 80% |
| VM&P Naphtha | 6.24 | 100.00% | 0.0% | 100.0% | 0.0% | 0.00% | 0.001 | 1.000 | 6.24 | 6.24 | 0.01 | 0.15 | 0.03 | 0.00 | 0.00 | 80% |
| L5 HC V HAPS Free Black NGR | 6.82 | 98.00% | 0.0% | 98.0% | 0.0% | 1.43% | 0.003 | 1.000 | 6.68 | 6.68 | 0.02 | 0.48 | 0.09 | 0.00 | 467.38 | 80% |
| Global Resistorvar Catalyst | 8.95 | 43.00% | 0.0% | 43.0% | 0.0% | 45.69% | 0.001 | 1.000 | 3.85 | 3.85 | 0.00 | 0.09 | 0.02 | 0.00 | 8.42 | 80% |
| | | | | | | | | | | | | | | | | |

PM efficiency rate is 99.00%

**State Potential Emissions** **Add worst case coating to all solvents** **Before Controls** **3.97** **95.09** **17.37** **1.41**

***The same material is used for both surface coating lines.**

**After Controls** **0.07**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

**Appendix A: Emission Calculations**
**HAP Emission Calculations**

**Company Name:** Mission Woodworking, Inc
**Address City IN Zip:** 502 Kesco Drive, Bristol, Indiana 46507
**Permit Number:** M039-26438-00674
**Permit Reviewer:** Marcia Earl
**Date:** May 2008

| Material* | Density (Lb/Gal) | Gallons of Material (gal/unit) | Maximum (unit/hour) | Weight % Toluene | Weight % Ethylbenzene | Tolueme Emisions (tons/yr) | Ethylbenzen Emissions (tons/yr) | Total Emissions (tons/yr) |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| L5 HC Vinyl Sealer | 7.34 | 0.072000 | 1.00 | 10.76% | 0.80% | 0.25 | 0.07 | 0.32 |
| HC White Vinyl Primer | 8.89 | 0.223000 | 1.00 | 7.68% | 0.38% | 0.67 | 0.18 | 0.85 |
| L5 HC WW 40 SH Predat lacqu | 7.59 | 0.057000 | 1.00 | 6.58% | 0.68% | 0.13 | 0.03 | 0.16 |
| White MIR-A-Var | 9.51 | 0.009000 | 1.00 | 5.00% | 0.00% | 0.02 | 0.01 | 0.03 |
| L5 HC 40 SH White Precat T/C | 7.95 | 0.239000 | 1.00 | 10.00% | 1.00% | 0.83 | 0.22 | 1.05 |
| Ohaw HC Clear D Stain Base | 6.40 | 0.091000 | 1.00 | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 |
| L5 HC Classic Coat White 40 S | 9.74 | 0.002000 | 1.00 | 0.00% | 1.00% | 0.00 | 0.00 | 0.00 |
| VM&P Naphtha | 6.24 | 0.001000 | 1.00 | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 |
| L5 HC V HAPS Free Black NGF | 6.82 | 0.003000 | 1.00 | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 |
| Global Resistorvar Catalyst | 8.95 | 0.001000 | 1.00 | 0.00% | 0.00% | 0.00 | 0.00 | 0.00 |
| Total State Potential Emissions | | | | | | **1.90** | **0.51** | **2.41** |

***The same material is used for both surface coating lines.**

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2(

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

**Company Name:** Mission Woodworking, Inc.
**Address City IN Zip:** 502 Kesco Drive, Bristol, Indiana 46507
**Permit Number:** M039-26438-00674
**Reviewer:** Marcia Earl
**Date:** May 2008

| UNIT | CAPACITY |
|---|---|
| B-01 | 0.30 |
| B-02 | 0.15 |
| B-03 | 0.15 |
| B-04 | 0.15 |
| TOTAL | 0.75 |

| Heat Input Capacity MMBtu/hr | Potential Throughput MMCF/yr |
|---|---|
| 0.75 | 6.6 |

| | Pollutant | | | | | |
|---|---|---|---|---|---|---|
| | PM* | PM10* | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.9 | 7.6 | 0.6 | 100.0 **see below | 5.5 | 84.0 |
| Potential Emission in tons/yr | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 |

*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

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

**Company Name:** Mission Woodworking, Inc.
**Address City IN Zip:** 502 Kesco Drive, Bristol, Indiana 46507
**Permit Number:** M039-26438-00674
**Reviewer:** Marcia Earl
**Date:** May 2008

| | HAPs - Organics | | | | |
|---|---|---|---|---|---|
| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
| Emission Factor in lb/MMcf | 2.1E-03 | 1.2E-03 | 7.5E-02 | 1.8E+00 | 3.4E-03 |
| Potential Emission in tons/yr | 6.899E-06 | 3.942E-06 | 2.464E-04 | 5.913E-03 | 1.117E-05 |

| | HAPs - Metals | | | | |
|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel |
| Emission Factor in lb/MMcf | 5.0E-04 | 1.1E-03 | 1.4E-03 | 3.8E-04 | 2.1E-03 |
| Potential Emission in tons/yr | 1.643E-06 | 3.614E-06 | 4.599E-06 | 1.248E-06 | 6.899E-06 |

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**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

**Appendix A: Emission Calculations**
**Woodworking Operations**

**Company Name:** **Mission Woodworking, Inc.**
**Address City IN Zip:** **502 Kesco Drive, Briston, Indiana 46507**
**Permit Number:** **M039-26438-00674**
**Permit Reviewer:** **Marcia Earl**
**Date:** **May 2008**

| | Air Flow Rate (acfm) | Outlet Grain Loating (gr/acf) | Control Efficiency (%) | $PM/PM_{10}$* After Integral Baghouse Emissions (lbs/hr) | $PM/PM_{10}$* After Integral Baghouse Emissions (tons/yr) |
|---|---|---|---|---|---|
| EU-03 (BH-01) | 6,000 | 0.005367 | 99.00% | 0.28 | 1.21 |
| EU-04 (BH-02) | 4,000 | 0.00298 | 99.00% | 0.10 | 0.45 |

**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)

* Baghouse(BH-01 and BH-02) intregal to the woodworking process - potential to emit (PTE) emissions will be after control.