



# 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](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: March 4, 2009

RE: M & V Finishing LLC / 087-27117-00027

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

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER.dot12/03/07



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## Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

**M & V Finishing, LLC**  
**1185 US 20 West**  
**La Grange, Indiana 46761**

(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.: M087-27117-00027	
Issued by:  Alfred C. Dumauval, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: March 4, 2009  Expiration Date: March 4, 2019

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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)]

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The Permittee owns and operates a stationary wood furniture surface coating source.

Source Address:	1185 US 20 West, La Grange, Indiana 46761
Mailing Address:	1185 US 20 West, La Grange, IN 46761
General Source Phone Number:	(260) 463-5253
SIC Code:	2511
County Location:	La Grange
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) spray booth, and its associated cleanup operations, consisting of one (1) stain HVLP spray gun, identified as SG1, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S1, capacity: 8.82 furniture parts per hour.
- (b) One (1) spray booth, and its associated cleanup operations, consisting of one (1) sealer HVLP spray gun, identified as SG2, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S2, capacity: 8.82 furniture parts per hour.
- (c) One (1) spray booth, and its associated cleanup operations, consisting of one (1) topcoat HVLP spray gun, identified as SG3, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S3, capacity: 8.82 furniture parts per hour.
- (d) One (1) spray booth, and its associated cleanup operations, consisting of one (1) topcoat HVLP spray gun, identified as SG4, to be constructed in 2009, equipped with dry filters for overspray control, exhausting to Stack S4, capacity: 8.82 furniture parts per hour.
- (e) One backup HVLP spray gun, identified as SG4, constructed in 1996 and modified in 2003, capacity: 8.82 furniture parts per hour.
- (f) Two (2) stationary sanding tables, identified as SST1 and SST2, constructed in 1996, each equipped with dry filters for PM control, capacity: 4.41 furniture parts per hour, each.
- (g) One (1) natural gas-fired boiler, identified as B-1, constructed in 1996, exhausting to stack B1, rated at 0.15 million British thermal units per hour.
- (h) One (1) natural gas-fired boiler, identified as B-2, constructed in 2000, exhausting to stack B2, rated at 0.15 million British thermal units per hour.
- (i) One (1) natural gas-fired boiler, identified as B-3, to be constructed in 2009, exhausting to stack B3, rated at 0.15 million British thermal units per hour.

## SECTION B GENERAL CONDITIONS

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

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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)]

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

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- (a) This permit, M087-27117-00027, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

### B.4 Term of Conditions [326 IAC 2-1.1-9.5]

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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.5 Enforceability

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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.6 Severability

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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.7 Property Rights or Exclusive Privilege

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

### B.8 Duty to Provide Information

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- (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.9 Certification

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

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- (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 and Enforcement 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.11 Preventive Maintenance Plan [326 IAC 1-6-3]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.12 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of permits established prior to M087-27117-00027 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.13 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

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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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

**B.14 Permit Renewal [326 IAC 2-6.1-7]**

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- (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  
Permit Administration and Support Section, 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 one hundred twenty (120) 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.15 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]**

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- (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  
Permit Administration and Support Section, 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.16 Source Modification Requirement**

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

**B.17 Inspection and Entry**

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[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]

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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.18 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

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- (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  
Permit Administration and Support Section, 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.19 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due within thirty (30) calendar days of receipt of a bill from IDEM, OAQ.
- (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.20 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]

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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]

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- (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  
Compliance and Enforcement Branch, 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]**

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- (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 and Enforcement Branch, 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]**

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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]**

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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]**

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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]**

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- (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**

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- (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**

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- (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]**

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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]**

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- (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 or ninety (90) days of initial start-up, whichever is later.

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 and Enforcement Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS - Spray Booths

### Emissions Unit Description:

- (a) One (1) spray booth, and its associated cleanup operations, consisting of one (1) stain HVLP spray gun, identified as SG1, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S1, capacity: 8.82 furniture parts per hour.
- (b) One (1) spray booth, and its associated cleanup operations, consisting of one (1) sealer HVLP spray gun, identified as SG2, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S2, capacity: 8.82 furniture parts per hour.
- (c) One (1) spray booth, and its associated cleanup operations, consisting of one (1) topcoat HVLP spray gun, identified as SG3, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S3, capacity: 8.82 furniture parts per hour.
- (d) One (1) spray booth, and its associated cleanup operations, consisting of one (1) topcoat HVLP spray gun, identified as SG4, to be constructed in 2009, equipped with dry filters for overspray control, exhausting to Stack S4, capacity: 8.82 furniture parts per hour.

(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 shall utilize one of the following application methods:

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

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

#### D.1.2 Particulate [326 IAC 6-3-2(d)]

- (a) Particulate from the four (4) spray booths, identified as SG1, SG2, SG3, and SG4, shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
  - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

#### D.1.3 Preventative Maintenance Plan

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

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

#### D.1.4 Monitoring

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- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters.
- (b) To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the spray booth stacks (S1, S2, S3, and S4) while one or more of the booths are in operation.
- (c) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground.

Section C - Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

#### D.1.5 Record Keeping Requirements

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- (a) To document compliance with Condition D.1.4, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS - Sanding Tables

### Emissions Unit Description:

- (f) Two (2) stationary sanding tables, identified as SST1 and SST2, constructed in 1996, each equipped with dry filters for PM control, capacity: 4.41 furniture parts per hour, 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.2.1 Particulate [326 IAC 6-3-2]

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Pursuant to 326 IAC 6-3-2(e)(2), the particulate from the two (2) stationary sanding tables, identified as SST1 and SST2, shall be limited to 0.551 pounds of PM per hour, each, at a process weight rate of less than 100 pounds per hour, each.

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS - Boilers

**Emissions Unit Description:**

- (g) One (1) natural gas-fired boiler, identified as B-1, constructed in 1996, exhausting to stack B1, rated at 0.15 million British thermal units per hour.
- (h) One (1) natural gas-fired boiler, identified as B-2, constructed in 2000, exhausting to stack B2, rated at 0.15 million British thermal units per hour.
- (i) One (1) natural gas-fired boiler, identified as B-3, to be constructed in 2009, exhausting to stack B3, rated at 0.15 million British thermal units per hour.

(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 [326 IAC 6-2-4]**

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Pursuant to 326 IAC 6-2-4, particulate emissions from the three (3) natural gas fired boilers, identified as B-1, B-2 and B-3, shall not exceed 0.6 pounds of particulate matter per million Btu (lb/MMBtu) heat input.

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

**MINOR SOURCE OPERATING PERMIT (MSOP)  
CERTIFICATION**

Source Name: M & V Finishing, LLC  
Source Address: 1185 US 20 West, La Grange, Indiana 46761  
Mailing Address: 1185 US 20 West, La Grange, IN 46761  
MSOP No.: M087-27117-00027

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)\_\_\_\_\_
- Report (specify)\_\_\_\_\_
- Notification (specify)\_\_\_\_\_
- Affidavit (specify)\_\_\_\_\_
- Other (specify)\_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT 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).

<b>Company Name:</b>	M & V Finishing, LLC
<b>Address:</b>	1185 US 20 West
<b>City:</b>	La Grange, Indiana 46761
<b>Phone #:</b>	(260) 463-5253
<b>MSOP #:</b>	M087-27117-00027

I hereby certify that M & V Finishing, LLC is :

still in operation.

no longer in operation.

I hereby certify that M & V Finishing, LLC is :

in compliance with the requirements of MSOP M087-27117-00027.

not in compliance with the requirements of MSOP M087-27117-00027.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

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.

<b>Noncompliance:</b>

### 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:

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

Addendum to the Technical Support Document (ATSD) for a  
Minor Source Operating Permit (MSOP)

<b>Source Background and Description</b>
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<b>Source Name:</b>	<b>M &amp; V Finishing, LLC</b>
<b>Source Location:</b>	<b>1185 US 20 West, La Grange, Indiana 46761</b>
<b>County:</b>	<b>La Grange</b>
<b>SIC Code:</b>	<b>2511</b>
<b>Permit No.:</b>	<b>M087-27117-00027</b>
<b>Permit Reviewer:</b>	<b>Summer Keown</b>

On January 26, 2009, the Office of Air Quality (OAQ) had a notice published in the La Grange Standard, La Grange, Indiana, stating that M & V Finishing, LLC had applied for a MSOP Renewal to continue to operate their stationary wood furniture surface coating source. The notice also stated that the OAQ proposed to issue a MSOP Renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

<b>Revisions</b>
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IDEM, OAQ has decided to make revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

The following addresses have been revised in all incidences that occur in the permit.

- (a) Indiana Department of Environmental Management  
**Compliance and Enforcement Branch, Office of Air Quality**  
~~Compliance Branch, Office of Air Quality~~  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, IN 46204-2251
  
- (b) Indiana Department of Environmental Management  
**Permit Administration and Support Section, Office of Air Quality**  
~~Permits Branch, Office of Air Quality~~  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
  
- (c) Indiana Department of Environmental Management  
**Compliance and Enforcement Branch, Office of Air Quality**  
~~Asbestos Section, Office of Air Quality~~  
100 North Senate Avenue  
MC 61-52 IGCN 1003  
Indianapolis, Indiana 46204-2251

<b>IDEM Contact</b>
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- (a) Questions regarding this proposed MSOP can be directed to Summer Keown 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) 234-5175 or toll free at 1-800-451-6027 extension 4-5175.
  
- (b) A copy of the permit 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](http://www.idem.in.gov)

**Indiana Department of Environmental Management  
Office of Air Quality  
and IDEM Northern Regional Office**

Technical Support Document (TSD) for a Minor Source Operating Permit Renewal

**Source Background and Description**

<b>Source Name:</b>	<b>M &amp; V Finishing, LLC</b>
<b>Source Location:</b>	<b>1185 US 20 West, La Grange, IN 46761</b>
<b>County:</b>	<b>La Grange</b>
<b>SIC Code:</b>	<b>2511</b>
<b>Permit Renewal No.:</b>	<b>M087-27117-00027</b>
<b>Permit Reviewer:</b>	<b>Summer Keown</b>

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from M & V Finishing, LLC relating to the operation of a stationary wood furniture surface coating source.

**History**

On November 5, 2008, M & V Finishing, LLC submitted an application to the OAQ requesting to renew its operating permit and to construct new units. M & V Finishing, LLC was issued MSOP No. M087-16897-00027 on March 4, 2004.

**Permitted Emission Units and Pollution Control Equipment**

- (a) One (1) spray booth, and its associated cleanup operations, consisting of one (1) stain HVLP spray gun, identified as SG1, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S1, capacity: 8.82 furniture parts per hour.
- (b) One (1) spray booth, and its associated cleanup operations, consisting of one (1) sealer HVLP spray gun, identified as SG2, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S2, capacity: 8.82 furniture parts per hour.
- (c) One (1) spray booth, and its associated cleanup operations, consisting of one (1) topcoat HVLP spray gun, identified as SG3, constructed in 1996 and modified in 2003, equipped with dry filters for overspray control, exhausting to Stack S3, capacity: 8.82 furniture parts per hour.
- (d) One backup HVLP spray gun, identified as SG4, constructed in 1996 and modified in 2003, capacity: 8.82 furniture parts per hour.
- (e) Two (2) stationary sanding tables, identified as SST1 and SST2, constructed in 1996, each equipped with dry filters for PM control, capacity: 4.41 furniture parts per hour, each.
- (f) One (1) natural gas-fired boiler, identified as B-1, constructed in 1996, exhausting to stack B1, rated at 0.15 million British thermal units per hour.
- (g) One (1) natural gas-fired boiler, identified as B-2, constructed in 2000, exhausting to stack B2, rated at 0.15 million British thermal units per hour.
- (h) One (1) natural gas-fired air make-up unit, identified as A-1, constructed in 1996, rated at 1.32 million British thermal units per hour.
- (i) Particulate emissions associated with vehicular traffic on unpaved roads.

### New Emission Units

- (j) One (1) spray booth, and its associated cleanup operations, consisting of one (1) topcoat HVLP spray gun, identified as SG4, to be constructed in 2009, equipped with dry filters for overspray control, exhausting to Stack S4, capacity: 8.82 furniture parts per hour.
- (k) One (1) natural gas-fired boiler, identified as B-3, to be constructed in 2009, exhausting to stack B3, rated at 0.15 million British thermal units per hour.

These two new units are similar to existing units and are subject to the same requirements as the existing, similar units. Pursuant to 326 IAC 2-6.1-6(d)(13) such changes are designated as notice-only changes, thus the additional units are not subject to New Source Review.

### Existing Approvals

MSOP No. M087-16897-00027 was issued on March 4, 2004.

### Enforcement Issue

There are no enforcement actions pending.

### Emission Calculations

See Appendix A, pages 1 through 7, of this document for detailed emission calculations.

### County Attainment Status

The source is located in La Grange County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>1</sup>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, and St. Joseph as attainment for the 8-hour ozone standard.
  - (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
  - (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating

to ozone. La Grange 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

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

(c) Other Criteria Pollutants

La Grange County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

**Unrestricted Potential Emissions**

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants is less than 100 tons per year. The source is not subject to the provisions of 326 IAC 2-7. Therefore, the source will be issued an MSOP
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year.

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

**Potential to Emit After Issuance**

The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this MSOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit (tons/year)							
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Surface Coating	3.77	3.77	3.77	0.00	31.70	0.00	0.00	4.49
Woodworking	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00
Natural Gas Boilers/Heaters	0.01	0.06	0.06	0.22	0.04	0.65	0.78	0.01
Unpaved Roads	0.96	0.19	0.19	0.00	0.00	0.00	0.00	0.00
<b>Total Emissions</b>	<b>4.83</b>	<b>4.11</b>	<b>4.11</b>	<b>0.22</b>	<b>31.74</b>	<b>0.65</b>	<b>0.78</b>	<b>4.50</b>

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) **Fugitive Emissions**  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

### **Federal Rule Applicability**

- (a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, Subpart Dc, are not included in the permit for the three (3) boilers, identified as B-1, B-2 and B-3 because the heat input capacity for each boiler is less than ten (10) MMBtu/hr.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ are not included in the permit for the four (4), spray booths, identified as SG1, SG2, SG3 and SG4 because the source is not a major source as defined by 40 CFR Part 63.2, and this source does not manufacture wood furniture. Wood furniture is shipped to the source where it is painted or stained. There are no woodworking operations at the source.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NEHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH, are not included in the permit for the four (2) spray booths, identified as SG1, SG2, SG3 and SG4 because these facilities do not conduct paint stripping operations, autobody refinishing operations, or spray applications of coatings containing the target HAPs specified in this NESHAP: chromium, lead, manganese, nickel, or cadmium.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-2 (Prevention of Significant Deterioration (PSD))**

The potential to emit of all criteria pollutants from the entire source is less than two-hundred fifty (250) tons per year, and this source is not one of the twenty-eight (28) listed source categories. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable.

#### **326 IAC 2-6 (Emission Reporting)**

This source is located in La Grange County and the potential to emit of each criteria pollutant is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

#### **326 IAC 5-1 (Opacity Limitations)**

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

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

### **State Rule Applicability – Spray Booths**

#### **326 IAC 2-4.1-1 (New Source Toxics Control)**

The total potential to emit each individual hazardous air pollutant (HAP) from the four (4) spray booths is less than ten (10) tons per year and the potential to emit total HAPs is less than a total of twenty-five (25) tons per year, therefore, the requirements of 326 IAC 2-4.1-1 are not applicable.

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

- (a) Pursuant to 326 IAC 6-3(d), particulate from the four (4) spray booths shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
  - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
  - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

#### **326 IAC 8-1-6**

326 IAC 8-1-6 applies to new facilities that have potential emissions of twenty-five (25) tons per year and are not otherwise regulated by other 326 IAC 8 rules. The four (4) spray booths, identified as booths SG1 and SG4 are subject to 326 IAC 8-2-12. Therefore, they are not subject to 326 IAC 8-1-6.

#### **326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)**

The four (4) spray booths, identified as booths SG1 through SG4, were constructed after 1990 and the actual VOC emissions from each booth is greater than 15 pounds per day. Therefore, the four (4) spray booths, identified as booths SG1 through SG4, are subject to the requirements of 326 IAC 8-2-12.

This rule requires that the owner/ operator of a wood furniture or cabinet coating operation apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touchup and repairs, using one (1) or more of the following application systems:

- |                                  |  |
|----------------------------------|--|
| 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)  | Aerosol Spray Cans                     |

High-volume low-pressure spray is an acceptable alternative application of air-assisted airless spray. High-volume low-pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

The spray booths identified as SG1, SG2, SG3 and SG4 use HVLP spray guns. Therefore the four (4) spray booths will be in compliance with this rule.

### State Rule Applicability – Sanding Tables

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

Pursuant to 326 IAC 6-3-2(e)(2), the particulate from the two (2) stationary sanding tables, identified as SST1 and SST2, shall be limited to 0.551 pounds of PM per hour, each, at a process weight rate of less than 100 pounds per hour, each.

This particulate emission limitation is based on the following equation for process weight rates up to sixty thousand (60,000) pounds per hour:

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

The potential PM emissions from each of the stationary sanding tables are 0.0051 pounds of PM per hour, which is less than the allowable of 0.551 pounds of PM per hour. Therefore, the two (2) stationary sanding tables shall be in compliance with this rule.

### State Rule Applicability – Natural Gas-Fired Boilers

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-4, particulate emissions from the three (3) natural gas fired boilers, identified as B-1, B-2 and B-3, shall not exceed 0.6 pounds of particulate matter per million Btu (lb/MMBtu) heat input.

This particulate emission limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

where: Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input; and  
Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input

### Compliance Determination and Monitoring Requirements

The compliance monitoring requirements applicable to the four (4) spray booths, identified as booths SG1 through SG4, are as follows:

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters.
- (b) To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the spray booth stacks (S1, S2, S3, and S4) while one or more of the booths are in operation.
- (c) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground.

Section C - Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit

### **Recommendation**

The staff recommends to the Commissioner that the MSOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 5, 2008.

### **Conclusion**

The operation of this stationary wood furniture surface coating source shall be subject to the conditions of the attached MSOP Renewal No. M087-27117-00027.

**Appendix A: Emissions Calculations  
Emissions Summary**

**Company Name: M & V Finishing, LLC**  
**Address City IN Zip: 1185 US 20 West, La Grange, Indiana 46761**  
**Permit Number: M087-27117-00027**  
**Reviewer: Summer Keown**  
**Date: November 26, 2008**

**Uncontrolled Potential Emissions**

<b>Emission Units</b>	<b>PM</b>	<b>PM-10</b>	<b>PM2.5</b>	<b>SO2</b>	<b>NOx</b>	<b>VOC</b>	<b>CO</b>	<b>Single HAP</b>	<b>Total HAPs</b>
	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Surface Coating Booths	3.77	3.77	3.77	0.00	0.00	31.70	0.00	1.99 (xylene)	4.49
Woodworking Facilities	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Fired Boilers and Air Make-up Unit	0.01	0.06	0.06	0.22	0.78	0.04	0.65	negl.	0.01
Unpaved Roads - Fugitive Emissions	0.96	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>4.83</b>	<b>4.11</b>	<b>4.11</b>	<b>0.22</b>	<b>0.78</b>	<b>31.74</b>	<b>0.65</b>	<b>1.99</b>	<b>4.50</b>

**Controlled Potential Emissions**

<b>Emission Units</b>	<b>PM</b>	<b>PM-10</b>	<b>PM2.5</b>	<b>SO2</b>	<b>NOx</b>	<b>VOC</b>	<b>CO</b>	<b>Single HAP</b>	<b>Total HAPs</b>
	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Surface Coating Booths	0.75	0.75	0.75	0.00	0.00	31.70	0.00	1.99 (xylene)	4.49
Woodworking Facilities	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Fired Boilers and Air Make-up Unit	0.01	0.06	0.06	0.22	0.78	0.04	0.65	negl.	0.01
Unpaved Roads - Fugitive Emissions	0.96	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>1.77</b>	<b>1.05</b>	<b>1.05</b>	<b>0.22</b>	<b>0.78</b>	<b>31.74</b>	<b>0.65</b>	<b>1.99</b>	<b>4.50</b>

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

**Company Name: M & V Finishing, LLC  
Address City IN Zip: 1185 US 20 West, La Grange IN 46761  
Permit Number: M087-27117-00027  
Reviewer: Summer Keown  
Date: November 26, 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
<b>Spray Booth SG1</b>																
81LS28-239 Michaels Cherry Stain	7.70	59.35%	22.08%	37.27%	37.20%	39.07%	0.0407	8.82	4.57	2.87	1.03	24.72	4.51	1.23	7.35	75%
<b>Spray Booth SG2</b>																
1M.430X NF Sealer	7.98	62.06%	1.04%	61.02%	1.69%	30.69%	0.0055	8.82	4.95	4.87	0.24	5.67	1.03	0.16	15.87	75%
<b>Spray Booth SG3</b>																
1D.31X Topcoat	7.55	79.21%	5.80%	73.41%	6.62%	15.12%	0.0974	8.82	5.94	5.54	4.76	114.27	20.85	1.48	36.66	75%
<b>Spray Booth SG4</b>																
1C.800 White Paint	9.07	58.91%	2.60%	56.31%	3.57%	23.34%	0.0250	8.82	5.30	5.11	1.13	27.03	4.93	0.90	21.88	75%
<b>Cleanup All Booths</b>																
S-0170B Thinner	6.95	100.00%	8.56%	91.44%	9.00%	0.00%	0.0015	8.82	6.98	6.36	0.08	2.02	0.37	0.00	n/a	100%

Surface coating materials listed are worst case materials.  
PM is assumed to be equal to PM10 and PM2.5.

7.24                      173.71                      **31.70**                      **3.77**

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: M & V Finishing, LLC  
Address City IN Zip: 1185 US 20 West, La Grange IN 46761  
Permit Number: M087-27117-00027  
Permit Reviewer: Summer Keown  
Date: November 26, 2008**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Methyl Isobutyl Ketone	Weight % Napthalene	Weight % Ethylbenzene	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Methyl Isobutyl Ketone Emissions (ton/yr)	Napthalene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Methanol Emissions (ton/yr)
<b>Spray Booth SG1</b>															
81LS28-239 Michaels Cherry Stain	7.70	0.0407	8.82	0.00%	0.00%	0.00%	5.00%	0.00%	0.00%	0.00	0.00	0.00	0.61	0.00	0.00
<b>Spray Booth SG2</b>															
1M.430X NF Sealer	7.98	0.0055	8.82	0.00%	9.66%	0.00%	0.00%	0.22%	0.00%	0.00	0.16	0.00	0.00	0.00	0.00
<b>Spray Booth SG3</b>															
1D.31X Topcoat	7.55	0.0974	8.82	7.00%	1.50%	0.00%	0.00%	1.30%	0.00%	1.99	0.43	0.00	0.00	0.37	0.00
<b>Spray Booth SG4</b>															
1C.800 White Paint	9.07	0.0250	8.82	0.00%	7.38%	0.00%	0.00%	0.00%	0.00%	0.00	0.65	0.00	0.00	0.00	0.00
<b>Cleanup All Booths</b>															
S-0170B Thinner	6.95	0.0015	8.82	0.00%	50.00%	10.00%	0.00%	0.00%	10.00%	0.00	0.20	0.04	0.00	0.00	0.04

Surface coating materials listed are worst case materials.

**1.99      1.44      0.04      0.61      0.37      0.04**

**METHODOLOGY**

**Total HAPs: 4.49**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

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

**Company Name: M & V Finishing, LLC**  
**Address City IN Zip: 1185 US 20 West, La Grange IN 46761**  
**Permit Number: M087-27117-00027**  
**Reviewer: Summer Keown**  
**Date: November 26, 2008**

Emissions Units:  
 1.32 MMBtu/hr Air Makeup Unit  
 0.15 MMBtu/hr Boiler B-1  
 0.15 MMBtu/hr Boiler B-2  
0.15 MMBtu/hr Boiler B-3  
 1.77 MMBtu/hr total

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

1.8

15.5

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	28.5	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.01	0.06	0.06	0.22	0.78	0.04	0.65

\*PM emission factor is filterable PM only. PM10 and PM2.5 emission factors are 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

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

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

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: M & V Finishing, LLC**

**Address City IN Zip: 1185 US 20 West, La Grange IN 46761**

**Permit Number: M087-27117-00027**

**Reviewer: Summer Keown**

**Date: November 26, 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	1.628E-05	9.303E-06	5.814E-04	1.395E-02	2.636E-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	3.876E-06	8.528E-06	1.085E-05	2.946E-06	1.628E-05

Methodology is the same as page 1.

**Total HAPs: 0.01**

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**

**Particulate Emissions  
Woodworking Operations**

**Company Name:** M & V Finishing, LLC  
**Address City IN Zip:** 1185 US 20 West, La Grange IN 46761  
**Permit Number:** M087-27117-00027  
**Reviewer:** Summer Keown  
**Date:** November 26, 2008

**PTE from Woodworking Operations - Downdraft Sanding Tables SST1 and SST2**

Emission Unit ID	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	Control Efficiency (%)	PTE of PM/PM10/PM2.5* After Control (lbs/hr)	PTE of PM/PM10/PM2.5* After Control (tons/yr)	PTE of PM/PM10/PM2.5* Before Control (lbs/hr)	PTE of PM/PM10/PM2.5* Before Control (tons/yr)
SST1	0.003	200	50.0%	0.005	0.023	0.01	0.045
SST2	0.003	200	50.0%	0.005	0.023	0.01	0.045
<b>Total</b>							<b>0.090</b>

\*PM emissions are assumed to be equal to PM10 and PM2.5 emissions.

PTE was determined before control, instead of after control as permitted by the October 1993 Administrative Law Judge decision that determined that potential emissions for particulate matter could be calculated after consideration of controls, to provide the flexibility for the source to operate without the control if necessary.

**Methodology**

PTE of PM/PM10/PM2.5 After Control (lbs/hr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 (min/hr) x 1/7000 (lb/gr)

PTE of PM/PM10/PM2.5 Before Control (lbs/hr) = PTE of PM/PM10/PM2.5 After Control (lb/hr) / (1 - Control Efficiency (%))

PTE of PM/PM10/PM2.5 After Control (tons/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 (min/hr) x 1/7000 (lb/gr) x 8760 (hr/yr) x 1 ton/2000 lbs

PTE of PM/PM10/PM2.5 Before Control (tons/yr) = PTE of PM/PM10/PM2.5 After Control (tons/yr) / (1 - Control Efficiency (%))

**Compliance with 326 IAC 6-3-2 - Particulate Matter Emissions Limitations**

Maximum throughput for each downdraft sanding table is 4.41 chairs or 53.0 pounds of wood per hour.

Pursuant to 326 IAC 6-3-2(e)(2), the maximum allowable particulate emissions from SST1 and SST2 = 0.551 pounds per hour.

Emission Unit ID	Maximum Allowable Emissions (lb/hr)	Emissions Before Controls (lb/hr)	Measured Emissions After Controls (lb/hr)
SST1	0.551	0.01	0.005
SST2	0.551	0.01	0.005

The filters must be in operation at all times that the woodworking operations are in operation in order to ensure compliance with 326 IAC 6-3-2.

**Appendix A: Emissions Calculations  
Unpaved Roads**

**Company Name:** M & V Finishing, LLC  
**Address:** 1185 US 20 West, La Grange, Indiana 46761  
**Permit Number:** M087-27117-00027  
**Reviewer:** Summer Keown  
**Date:** November 26, 2008

<b>0.348</b>	trips/hr x
<b>0.056</b>	miles/roundtrip x

**170.71** miles per year

Constants			
where:	For PM	For PM-10	
k =	10	2.6	(particle size multiplier for PM-10) (k=10 for PM-30 or TSP)
s =	4.8	4.8	mean % silt content of unpaved roads
b =	0.5	0.4	Constant for PM-10 (b = 0.5 for PM-30 or TSP)
c =	0.4	0.3	Constant for PM-10 (c = 0.4 for PM-30 or TSP)
W =	38	38	tons average vehicle weight
Mdry =	0.2	0.2	surface material moisture content, % (default is 0.2 for dry conditions)
p =	125	125	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)
Particulate Emission Factor			
Ef =	11.24	2.27	$Ef = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(Mdry/0.2)^c] \} \cdot [(365-p)/365]$ (lb/mile)

$$\text{PM Emissions} = \frac{11.24 \text{ lb/mi} \times 170.71 \text{ mi/yr}}{2000 \text{ lb/ton}}$$

<b>0.96</b> tons/yr
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$$\text{PM-10 Emissions} = \frac{2.27 \text{ lb/mi} \times 170.71 \text{ mi/yr}}{2000 \text{ lb/ton}}$$

<b>0.19</b> tons/yr
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The following calculations determine the amount of emissions created by vehicle traffic on unpaved roads, based on 8760 hours of use and AP-42, Ch 11.2.1.