



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: October 23, 2008

RE: Nu-Wood Company, LLC / 039-26567-00586

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07



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(317) 232-8603
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Minor Source Operating Permit OFFICE OF AIR QUALITY

Nu-Wood Company, LLC
1722 Eisenhower Drive North
Goshen, Indiana 46526

(herein known as the Permittee) is hereby authorized to 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 2-6.1 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.: M039-26567-00586	
Issued by:	Issuance Date: October 23, 2008
Original Signed By:	Expiration Date: October 23, 2013
Iryn Calilung, Section Chief Permits Branch Office of Air Quality	

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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 urethane decorative moldings and millwork manufacturing operation.

Source Address:	1722 Eisenhower Drive North, Goshen, Indiana 46526
Mailing Address:	1722 Eisenhower Drive North, Goshen, 46526
General Source Phone Number:	574-534-1192
SIC Code:	3086
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) Spray Booth # 1, constructed in 2004 and exhausting to stack identified as 001, with a maximum hourly capacity of coating 30 silicone rubber molds per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (b) Spray Booth # 2, constructed in 2004 and exhausting to stack identified as 002, with a maximum hourly capacity of coating 20 silicone rubber molds per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (c) Spray Booth # 3, constructed in 2004 and exhausting to stack identified as 003, with a maximum hourly capacity of coating 50 polyurethane millwork parts per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (d) Spray Booth # 4, constructed in 2004 and exhausting to stack identified as 006, with a maximum hourly capacity of coating 35 polyurethane millwork parts per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (e) Aerosol Spray Can Painting #019, constructed in 2004, with a maximum gallon per hour (gph) application rate of 0.09; the twelve (12) ounce aerosol spray cans are used for surface coating touch up.

- (f) Urethane Machine # 1, constructed in 2004 and exhausting to stack identified as stack 002, with a maximum hourly capacity of filling urethane at 20 silicone rubber molds per hour; makes polyurethane millwork parts by applying two-part mixture of urethane and isocyanate to a rubber mold.
- (g) Urethane Machine #2, constructed in 2004 and exhausting to stack identified as stack 005, with a maximum hourly capacity of filling urethane at 20 silicone rubber molds per hour; makes polyurethane millwork parts by applying two-part mixture of urethane and isocyanate to a rubber mold.
- (h) Sanding and Finishing operations, exhausting to stack identified as stack 004, consisting of, a table saw, miter saws, a band saw and table routers constructed in 2004 and sander # 2 constructed in 2004, with a maximum hourly capacity of processing 50 polyurethane millwork parts per hour; and baghouse as a control device for particulate matter.
- (i) Equipment Cleaning and Maintenance #020; consisting of SP741 solvent, mineral spirits and acetone; SP741 solvent is used to flush out the urethane line and contains Naphthalene as a HAP, mineral spirits are used to clean silicone-covered parts, and acetone is not defined as a VOC.

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 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, M039-26567-00586, 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.3 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.4 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.5 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.6 Property Rights or Exclusive Privilege

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

B.7 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.8 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.9 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.10 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.11 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M039-26567-00586 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.12 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.13 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.14 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.15 Source Modification Requirement

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

**B.16 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.17 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.18 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.19 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 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) 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) Spray Booth # 1, constructed in 2004 and exhausting to stack identified as 001, with a maximum hourly capacity of coating 30 silicone rubber molds per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (b) Spray Booth # 2, constructed in 2004 and exhausting to stack identified as 002, with a maximum hourly capacity of coating 20 silicone rubber molds per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (c) Spray Booth # 3, constructed in 2004 and exhausting to stack identified as 003, with a maximum hourly capacity of coating 50 polyurethane millwork parts per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (d) Spray Booth # 4, constructed in 2004 and exhausting to stack identified as 006, with a maximum hourly capacity of coating 35 polyurethane millwork parts per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (e) Aerosol Spray Can Painting #019, constructed in 2004, with a maximum gallon per hour (gph) application rate of 0.09; the twelve (12) ounce aerosol spray cans are used for surface coating touch up.

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

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

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d), Spray Booths 1, 2, 3 and 4, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

- (a) The source 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 source 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 source 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.1.2 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 this facility and any control devices.

Compliance Determination Requirements

There are no compliance determination requirements for these facilities.

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

There are no compliance monitoring requirements for these facilities.

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

There are no record keeping and reporting requirements for these facilities.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (f) Urethane Machine # 1, constructed in 2004 and exhausting to stack identified as stack 002, with a maximum hourly capacity of filling urethane at 20 silicone rubber molds per hour; makes polyurethane millwork parts by applying two-part mixture of urethane and isocyanate to a rubber mold.
- (g) Urethane Machine #2, constructed in 2004 and exhausting to stack identified as stack 005, with a maximum hourly capacity of filling urethane at 20 silicone rubber molds per hour; makes polyurethane millwork parts by applying two-part mixture of urethane and isocyanate to a rubber mold.

(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 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 this facility and any control devices.

Compliance Determination Requirements

There are no compliance determination requirements for these facilities.

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

There are no compliance monitoring requirements for these facilities.

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

There are no record keeping and reporting requirements for these facilities.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (h) Sanding and Finishing operations, exhausting to stack identified as stack 004, consisting of, a table saw, miter saws, a band saw and table routers constructed in 2004 and sander # 2 constructed in 2004, with a maximum hourly capacity of processing 50 polyurethane millwork parts per hour; and baghouse as a control device for particulate matter.
- (i) Equipment Cleaning and Maintenance #020; consisting of SP741 solvent, mineral spirits and acetone; SP741 solvent is used to flush out the urethane line and contains Naphthalene as a HAP, mineral spirits are used to clean silicone-covered parts, and acetone is not defined as a VOC.

(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 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sanding and finishing operations shall not exceed 1.342 pounds per hour when operating at a process weight rate of 378 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

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

D.3.2 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 this facility and any control devices.

Compliance Determination Requirements

D.3.3 Particulate Control

- (a) In order to comply with Condition D.3.1, the baghouse for particulate control shall be in operation and control emissions from the sanding and finishing operations at all times that the sanding and finishing operations are in operation.
- (b) 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.

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

D.3.4 Visible Emissions Notations

- (a) Visible emission notations of Stack 004 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.3.5 Baghouse Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the sanding and finishing operation at least once per day when the sanding and finishing is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of three (3.0) and six (6.0) inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) The instruments used for determining the pressure and temperature shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.6 Broken or Failed Bag Detection

- (a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.
- (b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit.

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, or dust traces.

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

D.3.7 Record Keeping Requirements

- (a) To document compliance with Condition D.3.4, the Permittee shall maintain daily records of the visible emission notations from Stack 004. The Permittee shall include, in its daily record, when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the plant did not operate that day).
- (b) To document compliance with Condition D.3.5, the Permittee shall maintain daily records of the pressure drop across the baghouse controlling the sanding and finishing operations. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (e.g., sanding and finishing of product was not conducted that day).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

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

Company Name:	Nu-Wood Company, LLC
Address:	1722 Eisenhower Drive North
City:	Goshen, Indiana 46526
Phone #:	574-534-1192
MSOP #:	M039-26567-00586

I hereby certify that Nu-Wood Company, LLC is :

still in operation.

no longer in operation.

I hereby certify that Nu-Wood Company, LLC is :

in compliance with the requirements of MSOP M039-26567-00586.

not in compliance with the requirements of MSOP M039-26567-00586.

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

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) transitioning to a Minor Source Operating Permit (MSOP)

Source Description and Location

Source Name:	Nu-Wood Company, LLC
Source Location:	1722 Eisenhower Drive North, Goshen, Indiana, 46526
County:	Elkhart County
SIC Code:	3086
Operation Permit No.:	039-26567-00586
Permit Reviewer:	Christina Lowry

On May 20, 2008, the Office of Air Quality (OAQ) received an application from Nu-Wood Company, LLC related to the transition of a FESOP to a MSOP.

Existing Approvals

The source has been operating under FESOP No. 039-18016-00586, issued on February 17, 2004. In response to this application, the source is transitioning from a FESOP to a MSOP of an existing stationary urethane decorative moldings and millwork manufacturer.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM_{2.5}.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

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

(c) Other Criteria Pollutants

Elkhart County has been classified as attainment or unclassifiable in Indiana for Sulfur dioxide (SO₂), Carbon monoxide (CO), Nitrogen dioxide (NO₂), Particulate matter 10 (PM₁₀) and lead (Pb). 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 Permitted Emission Units

Nu-Wood Company LLC operates a plant that manufactures urethane decorative moldings and millwork. Since the issuance of the previous permit, Nu-Wood has eliminated urethane machine #3, 2 sanders, the parts cleaner associated with its urethane machines and the halogenated and VOC containing cleaners. Alternatively, Nu-Wood has added Miter Saw #016, Miter Saw #017, Table Router #018, Aerosol Can Spray Painting #019, and Maintenance #20 - acetone and mineral spirit cleaning. Due to these changes, the source has significantly reduced its potential to emit criteria pollutants. Therefore, Nu-Wood has requested a transition from a FESOP to a MSOP.

The source consists of the following permitted emission units:

(a) Spray Booth # 1, constructed in 2004 and exhausting to stack identified as 001, with a maximum hourly capacity of coating 30 silicone rubber molds per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.

(b) Spray Booth # 2, constructed in 2004 and exhausting to stack identified as 002, with a maximum hourly capacity of coating 20 silicone rubber molds per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.

- (c) Spray Booth # 3, constructed in 2004 and exhausting to stack identified as 003, with a maximum hourly capacity of coating 50 polyurethane millwork parts per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (d) Spray Booth # 4, constructed in 2004 and exhausting to stack identified as 006, with a maximum hourly capacity of coating 35 polyurethane millwork parts per hour; dry filters as control devices for overspray; and one (1) 15 pound per square inch (psi) spray coating gun and using high volume low pressure application.
- (e) Aerosol Spray Can Painting #019, constructed in 2004, with a maximum gallon per hour (gph) application rate of 0.09; the twelve (12) ounce aerosol spray cans are used for surface coating touch up.
- (f) Urethane Machine # 1, constructed in 2004 and exhausting to stack identified as stack 002, with a maximum hourly capacity of filling urethane at 20 silicone rubber molds per hour; makes polyurethane millwork parts by applying two-part mixture of urethane and isocyanate to a rubber mold.
- (g) Urethane Machine #2, constructed in 2004 and exhausting to stack identified as stack 005, with a maximum hourly capacity of filling urethane at 20 silicone rubber molds per hour; makes polyurethane millwork parts by applying two-part mixture of urethane and isocyanate to a rubber mold.
- (h) Sanding and Finishing operations, exhausting to stack identified as stack 004, consisting of, a table saw, miter saws, a band saw and table routers constructed in 2004 and sander # 2 constructed in 2004, with a maximum hourly capacity of processing 50 polyurethane millwork parts per hour; and baghouse as a control device for particulate matter.
- (i) Equipment Cleaning and Maintenance #020; consisting of SP741 solvent, mineral spirits and acetone; SP741 solvent is used to flush out the urethane line and contains Naphthalene (a HAP), mineral spirits are used to clean silicone-covered parts, and acetone is not defined as a VOC.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

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

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	99.2
PM10 ⁽¹⁾	99.2
PM2.5	99.2
SO ₂	negligible
NO _x	negligible
VOC	9.5
CO	negligible

(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 (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Ethylene Glycol	1.1
MDI	0.04
Naphthalene	0.05
TOTAL HAPs	1.2

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM, PM10, and PM2.5, are each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other 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	PM10	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Spray Booth 1	4.6	4.6	4.6	-	-	2.4	-	-	-
Spray Booth 2	3.0	3.0	3.0	-	-	1.6	-	-	-
Spray Booth 3	11.7	11.7	11.7	-	-	1.4	-	-	-
Spray Booth 4	5.7	5.7	5.7	-	-	2.0	-	1.1	1.1
Aerosol Paint Cans	0.114	0.114	0.114	-	-	0.2	-	-	-
Urethane Molding	-	-	-	-	-	0.04	-	0.04	-
Sanding and Finishing Operation	74.04	74.04	74.04	-	-	-	-	-	-
Solvent Cleaning	-	-	-	-	-	1.7	-	0.05	-
Total PTE of Entire Source	99.2	99.2	99.2	-	-	9.4	-	1.2	1.1
PSD Major Source Thresholds	NA	100	-	100	100	100	100	25	10
Emission Offset/ Nonattainment NSR Major Source Thresholds	250	250	250	250	250	250	250	NA	NA

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning, 40 CFR 63.460, Subpart T (326 IAC 20-6-1), are not included in the permit, since the sources has discontinued its use of halogenated solvent cleaning products.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.
- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and

- (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Nu-Wood Company does not have the PTE equal to or greater than the major source threshold for any pollutant. Also, the Company is not subject to an emission limitation or standard. Therefore, CAM does not apply to Nu-Wood Company.

State Rule Applicability Determination

The following state rules are applicable to the source:

326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))

The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM, PM₁₀, and PM_{2.5}, are each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other 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.

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.

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.

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.

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.

Elkhart County is not one of the counties listed in 326 IAC 5-1-1(b); therefore, 326 IAC 5-1 does not apply to Nu-Wood Company, LLC.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2(d), Spray Booths 1, 2, 3 and 4, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

- (a) The source 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 source 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 source 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 6-3-2 (Particulate Emissions Limitations for Manufacturing Process)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the sanding and finishing operations shall not exceed 1.342 pounds per hour when operating at a process weight rate of 378 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

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

The source will comply with this limit by using a baghouse, for sanding and finishing operations, with 99.9 % control efficiency.

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.

326 IAC 8-1-6 (Volatile Organic Compound)

326 IAC 8-1-6 applies to a new unit (as of January 1, 1980) that emits twenty-five (25) tons per year or more of VOC; is located anywhere in the state; and is not otherwise regulated by other provisions of 326 IAC 8, 326 IAC 20-48, or 326 IAC 20-56.

Since Nu-Wood does not have a new unit (spray booth, urethane machine, or cleaning/maintenance process) that emits twenty-five (25) tons per year or more of VOC, 326 IAC 8-1-6 does not apply.

Compliance Determination, Monitoring and Testing Requirements

- (a) The compliance determination and monitoring requirements applicable to this source are as follows:

Emission Unit/Control	Operating Parameters	Frequency
Baghouse	Pressure Drop	Once per day
Baghouse	Visible Emissions	Once per day
Baghouse	Broken or Failed Bag Detection	As needed

- (b) A test to determine the particulate emissions emitted from the Sanding and Finishing Operations stack, was conducted on 6/8/2004. The results of the stack test demonstrated that Nu-Wood Company was in compliance with particulate emissions. No stack testing will be required by this permit, due to the elimination of limits to render 326 IAC 2-7 not applicable.

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 May 20, 2008.

The operation of this source shall be subject to the conditions of the attached proposed MSOP No. 039-26567-00586. The staff recommends to the Commissioner that this MSOP be approved.

Summary of Potential Emissions

Company Name: Nu-Wood Company, LLC
Address City IN Zip: 1722 Eisenhower Drive North, Goshen, Indiana
MSOP M039-26567-00586
Reviewer: Christina Lowry
Date: August 15, 2008

Summary of Maximum Uncontrolled Emissions, in tons per year (tpy)

Source	VOC	HAPs	PM10	PM
Spray booth 1	2.4	0.0	4.6	4.6
Spray booth 2	1.6	0.0	3.0	3.0
Spray booth 3	1.4	0.0	11.7	11.7
Spray booth 4	2.0	1.1	5.7	5.7
Aerosol cans	0.2	0.0	0.114	0.114
Urethane molding	0.04	0.04	0	0
Solvent cleaning	1.7	0.05	0	0
Sanding/grinding	0	0	74.04	74.04
TOTAL	9.4	1.1	99.2	99.2

Note: The five (5) spreadsheets contained in Appendix A of the Technical Support Document (TSD) were developed and submitted by the permittee. The spreadsheets have been reviewed by the Office of Air Quality (OAQ). When necessary, OAQ staff has made changes to the spreadsheets to be consistent with State regulation and Office policy.

Potential Emissions from Spray Booths - VOC and HAPs

Company Name: Nu-Wood Company, LLC
 Address City IN Zip: 1722 Eisenhower Drive North, Goshen, Indiana
 MSOP M039-26567-00586
 Reviewer: Christina Lowry
 Date: August 15, 2008

Spray Booths; Calculation of Potential Emissions

Method: Start with maximum hourly paint usage rate and apply the appropriate % of VOCs, HAPs, and PM.
 Use transfer efficiency with PM calculations.

VOCs and HAPs:**Spray booth 1**

Berkley Barrier Coat:
 Density: 10.7 lb/gal
 Percent Volatile by volume: 69.4%, including water
 VOC: 6.2 wt. %
 5% Ethylene Glycol n-butyl Ether (Removed as a HAP on
 November 29, 2004 (69FR69320))
 Maximum paint = 9 lb/hr
 Max. emissions = (9 lb/hr paint) x 6.2% VOCs = 0.558 lb/hr
 13.4 lb/24-hour day
 4,888 lb/yr
 2.4 tpy

Spray Booth 2: (may be used as a back-up booth).

Berkley Barrier Coat:
 Density: 10.7 lb/gal
 Percent Volatile by volume: 69.4%, including water
 VOC: 6.2 wt. %
 5% Ethylene Glycol n-butyl Ether (Removed as a HAP on
 November 29, 2004 (69FR69320))
 Maximum paint = 6 lb/hr
 Max. emissions = (6 lb/hr paint) x 6.2% VOCs = 0.372 lb/hr
 8.9 lb/24-hour day
 3,259 lb/yr
 1.6 tpy

Spray Booth 3:

Sherwin Williams Sher-Wood Millwork Primer, Pure White
 Density: 12.82 lb/gal
 Volatile volume: 57.7%
 Emitted VOC: 0.24 lb/gal
 2% 2-Butoxyethanol (Removed as a HAP on November 29, 2004 (69FR69320))
 Maximum paint = 17 lb/hr
 Max. emissions = 17 lb/hr paint / (12.82 lb/gal) * 0.24 lb/gal = 0.31825 lb/hr
 7.6 lb/24-hour day
 2,788 lb/yr
 1.4 tpy

Spray Booth 4:

Custom colors are used in this booth. The worst-case coating is:
 Sherwin-Williams A-100 Exterior Satin Latex Paint, Deep Base
 Density: 9.41 lb/gal
 Volatile Volume: 63.9%, including water
 Emitted VOC: 0.36 lb/gal
 Maximum paint = 12 lb/hr
 Max. emissions = 12 lb/hr paint / (9.41 lb/gal) * 0.36 lb/gal = 0.46 lb/hr
 11.0 lb/24-hour day
 4,022 lb/yr
 2.0 tpy
 HAP content (ethylene glycol) = 2%
 Maximum HAP emissions = 12 lb/hr * 0.02 = 0.24 lb/hr
 5.8 lb/24-hour day
 2,102 lb/yr
 1.1 tpy

Aerosol cans:

Nu-Wood uses aerosol cans [PrepRite Problock] for touch-up.
 The characteristics of the paint are:

Volatility:	46	wt % less water and exempt solvents
Density	7.46	lb/gal
2007 usage	60	cans
Wt of can	12	oz
Components:		
Acetone	13	wt %
Propane	14	wt %
Butane	13	wt %
Volatility	82	volume % (total)
VOCs	46.2	wt % (total volatility less water and exempt solvents) - from MSDS

To determine PTE, assume that the cans are used in proportion to the Barrier Coat and Final Finish paints:

Cans used in 2007	lb aerosols, 2007	Paint, 2007 gallons	Ratio, lb aerosols / gal paint	Max. paint, gph	Max. aerosols, lb/hr	VOC, wt %	PTE of VOCs, lb/hr	PTE of VOCs, tpy
60	45	1,370	0.033	2.74	0.090	46.2	0.04	0.18

Potential Emissions from Sanding and Grinding Operations

Company Name: Nu-Wood Company, LLC
 Address City IN Zip: 1722 Eisenhower Drive North, Goshen, Indiana
 MSOP M039-26567-00586
 Reviewer: Christina Lowry
 Date: August 15, 2008

Particulate Matter Calculations - Sanding and Grinding Operations

According to data from Nu-Wood, 10.22 tons of baghouse dust were generated between 10/20/2006 and 8/3/2007. During this time, two sanders were in operation between October 2006 and April 2007, when the smaller sander was discontinued. In addition, one of the in-mold paint spray booths (No. 2) was disconnected in October 2007. It is assumed that the use and emissions of the larger sander is proportional to the use of Spray Booth 1 (avg. 23 molds/hr; max. 30 molds/hr), and that the smaller sander is proportional to the use and emissions of Spray Booth 2 (avg. 12 molds/hr, max. 20 molds/hr).

The total dust produced from 10/20/2006 to 8/3/2007 consists of dust from 9.5 months of the larger sander and 6 months of the smaller sander.

The baghouse is 99.9% efficient, according to data supplied by the plant, then the amount entering the baghouse is:

$$10.22 \text{ tons} / (0.999) = 10.23 \text{ tons} = 20,460 \text{ lb}$$

$$\text{This corresponds to an annual rate of: } 20,460 / 9.5 \text{ months} \times 12 \text{ months} = 25,844.79 \text{ lb} \\ 12.92 \text{ tpy}$$

To calculate the amount attributable to each sander:

(1) Total dust generated = lb #1 / mo * 9.5 months + lb #2 / mo * 6 months

(2) The relative amounts generated are: lb #2 / mo = lb #1 / mo * (12 / 23)

(3) Therefore, equation 1 becomes:

$$\text{Total dust generated} = \text{lb \#1} / \text{mo} * 9.5 \text{ mo} + (12/23) * 6 * \text{lb \#1} / \text{mo}$$

$$20,460 \text{ lb} = 9.5 (\text{lb \#1}) + (72/23) (\text{lb \#1}) = 12.63 (\text{lb \#1})$$

(4) lb #1 = 1,620 lb/month

This represents the amount of dust generated by sander #1 per month from 10/20/2006 to 8/3/2007, based on actual usage.

$$\text{Operating hours} = 6 \text{ hours/day, } 5 \text{ days/week, } 50 \text{ weeks/year} = 1500 \text{ hours}$$

To calculate the potential emissions:

$$\text{PTE} = 1,620 \text{ lb/month} * 12 \text{ months} * (8,760 \text{ hours/year} / 1500 \text{ hours/yr}) * (30 \text{ molds/hr max} / 23 \text{ molds/hr avg}) \\ 148,082 \text{ lb/yr} = 74.04 \text{ tpy total PM}$$

Mechanical processes such as grinding, polishing, cutting, etc., typically emit particulates that are LARGER than PM10. Smaller particulates are typically emitted by combustion devices. For example, EPA's AP-42 emission factors, Section 10.5, lists emissions from a belt sander at a woodworking waste collection operation. In tests conducted after a cyclone, 52.9% of total PM was PM10; tests conducted after a cyclone and fabric filter showed that 32.1% of the total PM was PM10. Because the control devices have a higher removal efficiency for larger particles, PM10 in the air stream going to the control device is likely to be much lower in PM10 than the above fractions. As a conservative estimate, assume that 50% of all PM is PM10.

$$\text{Potential emissions of PM10} = \text{potential emissions of PM} \times 50\% =$$

$$74.04 \text{ tpy} \times 50\% = 37.02 \text{ tpy}$$

NOTE: The Office of Air Quality's policy is to assume worst case scenario when determining potential to emit (PTE). OAQ assumes that PM emissions = PM10 emissions. Therefore, PTE for PM and PM10 is 74.04 tpy.

Note that in the Technical Support Document for the FESOP issued in 2004, the PM10 emissions were documented as 83.22 tpy.

Since that time, two sanders have been removed. If an average of 20 molds/hr of capacity have been removed overall (i.e., the capacity of the spray booth that has been removed) out of a combined maximum of 50 molds/hr, then this would equate to potential emissions of:

$$83.22 \text{ tpy} (30 / 50) = 49.93 \text{ tpy}$$

This amount of reduction in PTE is thus roughly consistent with the 37.02 tpy already calculated. Because TWO sanders have actually been removed, and because the 37.02 tpy is based on the most recent data, we are using it as the listed PTE. Use of the 49.93 tpy, however, would not change any of the conclusions in the calculations.

Note that it is not appropriate to use the design baghouse loading factor to calculate potential emissions, because the loading factor is a statement of the maximum concentration at the baghouse outlet. This factor by itself, however, does not contain any information pertinent to the process that supplies the air and PM to the baghouse.

Emissions Unit #13 (hand router) is defined as a "trivial activity" under 326 IAC 2-7-1(40)(F).

All sanding/grinding operations are controlled by the same baghouse; therefore, it is not possible to separate out emissions for each individual unit. We believe that the main sander now emits the majority of PM10, and that other units are insignificant activities; however, we do not have individual data to indicate this. EPA's AP-42 does not contain any emission factors for these processes.

Potential Emissions from Spray Booths - PM

Company Name: Nu-Wood Company, LLC
Address City IN Zip: 1722 Eisenhower Drive North, Goshen, Indiana
MSOP M039-26567-00586
Reviewer: Christina Lowry
Date: August 15, 2008

PM from spray painting

<u>Booth #</u>	<u>Material</u>	<u>Spray rate, lb/hr</u>	<u>Wt % volatiles + water</u>	<u>wt % solids</u>
1	Barrier Coat	9	53.6	46.4
2	Barrier Coat	6	53.6	46.4
3	Millwork primer	17	37.3	62.7
4	Custom coating	12	56.6	43.4

Wt % volatiles + water is from specification sheets.
 The wt% solids = 100% - (wt % volatiles + water)

According to the spray gun manufacturer, the paint application efficiency is 65 to 80%, depending on material sprayed, operator technique, etc. The IDEM Technical Support document for the initial FESOP used 75%, which will be repeated here.

Therefore, conservatively assuming that all PM is PM10, the maximum uncontrolled PM emissions are calculated as follows:

Max. uncontrolled PM emissions =
 spray rate (lb/hr) * wt % solids * (1 - transfer efficiency (0.75)) * 8760 hours/yr * 1 ton/2000 lb

<u>Booth #</u>	<u>Spray Rate, lb/hr</u>	<u>wt % solids</u>	<u>Transfer Efficiency</u>	<u>Maximum Uncontrolled Emissions, tpy</u>
1	9	46.4	75%	4.6
2	6	46.4	75%	3.0
3	17	62.7	75%	11.7
4	12	43.4	75%	5.7

TOTAL, Maximum uncontrolled PM emissions = **25.0 tpy**

Aerosol painting

For aerosol painting, solids = 18 wt% talc + 11% titanium dioxide = 29%
 Max PTE = 0.090 lb/hr * 29% PM * 8760 hours/yr / 2000 lb/ton = **0.114 tpy**

Potential Emissions from Solvent Cleaning

Company Name: Nu-Wood Company, LLC
Address City IN Zip: 1722 Eisenhower Drive North, Goshen, Indiana
MSOP: M039-26567-00586
Reviewer: Christina Lowry
Date: August 15, 2008

MDI emissions from urethane operations.:

According to the document "MDI/Polymeric MDI Emissions Reporting Guidelines for the Polyurethane Industry," by the Alliance for the Polyurethanes Industry, MDI emissions from these type of operations are extremely low due to the low vapor pressure of MDI.

Emissions should be <0.01 lb/hr, making this an exempt process (except for the solvent usage).
 0.01 lb/hr = 0.0438 tpy

Solvent emissions:

SP741 solvent is used to flush out the urethane line.

Solvent density:	10.1 lb/gal	
Amt solvent used in 2002:	6,070 gal	61,307 lb/yr solvent
Amt shipped for recycling:	5,995 gal	60,550 lb/yr solvent

Emissions (assume that what was not recovered for recycling was emitted)		
	75 gal	758 lb/yr solvent

The solvent includes the following HAPs:

Naphthalene:	0 - 3%	Use 3% for the max.:	23 lb/yr naphthalene
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Assume these emissions occurred during 8 hours/day, 5 days/wk, 50 weeks per year (2000 hours)
 Hourly emissions = 0.0375 gal/hr 0.379 lb/hr solvent

Therefore, PTE = hourly emissions * 8,760 hours/year =	3,318 lb/yr solvent	1.66 tpy	VOCs
		0.05 tpy	HAPs

Acetone

Acetone is not a regulated pollutant under Federal or IDEM regulations because it is not defined as a Volatile Organic Compound (VOC). Therefore, it is not subject to air pollution regulations or permitting.

Use of mineral spirits

Mineral spirits are used to clean silicone-covered parts.
 A total of 1080 gallons were used in 2007 (at 6.58 lb/gal, this equals 164 gallons).
 Indiana rule 326 IAC 2-1.1-3(e)(10)(D) contains an exemption for cleaners and solvents with a vapor pressure <15 mmHg at 100 F; or a vapor pressure <5 mm Hg at 68 F; if the use for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
 The definition of "insignificant activity" for Title V purposes includes this same definition.

Mineral spirits have a vapor pressure of 0.38 mm Hg @ 20 C, which meets the IDEM exemption.
 Approximately 164 gallons were used in 2007.
 Therefore, the use of mineral spirits may not meet the exemption of cleaners used less than 145 gallons/year.

IDEM also allows exemptions for emission units with potential emissions of VOCs less than 10 tpy, 3 lb/hr, and 15 lb/day.

Assume that 10% of the mineral spirits evaporate (low vapor pressure).
 Density = 6.58 lb/gal
 Assume that the 164 gallons of use represents 2000 hours.

PTE, VOCs = 164 gal * 6.58 lb/gal * 10% / 2000 hours * (8,760 hours) =	473 lb/yr
	1.3 lb/day
	0.05 lb/hr

Because these are well below the various threshold levels (10 tpy, 3 lb/hr, and 15 lb/day), this operation is exempt from IDEM regulations, and is an insignificant activity under Title V regulations.