



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53 IGCN 1003
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: November 16, 2007
RE: PW Products, LLC / 039-25038-00658
FROM: Nisha Sizemore
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, Room 1049, 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.dot 03/23/06



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

November 16, 2007

100 North Senate Avenue
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Indianapolis, Indiana 46204-2251
(317) 232-8603
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Bruce Korenstra
PW Products, LLC
1515 Leininger Ave.
Elkhart, Indiana 46517

Re: M039-25038-00658
Significant Permit Revision to
MSOP No. M039-23738-00658

Dear Bruce Korenstra:

PW Products was issued a Minor Source Operating Permit (MSOP) on January 26, 2007 for a stationary surface coating operation. On July 18, 2007, the Office of Air Quality (OAQ) received an application from the source relating to the construction and operation of three (3) stationary surface coating booths and miscellaneous woodworking operations used to produce wood furniture and a change in the operation of existing Spray Booth 1, identified as B1, to apply stain surface coating to a maximum capacity of 25 tables or 100 chairs per hour. The new surface coating booths and miscellaneous woodworking operations will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-7, since the entire source (including the surface coating booths and miscellaneous woodworking operations) will still have an unlimited potential to emit less than the Part 70 major source thresholds. These changes to the permit are being incorporated into the permit as a Significant Permit Revision pursuant to 326 IAC 2-6.1-6(i)(1)(E) as described in the attached Technical Support Document (TSD).

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval 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.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please find the enclosed copy of the revised entire permit for PW Products, LLC.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Hannah L. Desrosiers, of my staff, at 317-234-5374 or 1-800-451-6027, and ask for extension 4-5374.

Sincerely,

Original document signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit and Technical Support Document.
NS/hld

cc: File – Elkhart County
Elkhart County Health Department
Air Compliance Section – P. Karkiewicz
Permit Review Section 5 – Hannah L. Desrosiers
Permit Tracking
Compliance Data Section
Permits Administrative and Development
Billing, Licensing and Training Section – Dan Stamatkin
IDEM Northern Regional Office



Mitchell E. Daniels, Jr.
 Governor

Thomas W. Easterly
 Commissioner

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 Indianapolis, Indiana 46204-2251
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**New Source Construction and
 Minor Source Operating Permit
 OFFICE OF AIR QUALITY**

**PW Products, LLC
 1515 Leininger Ave
 Elkhart, Indiana 46517**

(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.: M039-23738-00658	
Original issued by: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: January 26, 2007 Expiration Date: January 26, 2012
Significant Permit Revision No.: M039-25038-00658	
Issued by: <i>Original document signed by</i> Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: November 16, 2007 Expiration Date: January 26, 2012

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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 surface coating booth.

Source Address:	1515 Leininger Ave, Elkhart, Indiana 46517
Mailing Address:	1515 Leininger Ave, Elkhart, Indiana 46517
General Source Phone Number:	574-831-3340
SIC Code:	2511
County Location:	Elkhart
Source Location Status:	Attainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) surface coating booth used to coat wood furniture components, identified as B1, constructed in 2007, with a maximum capacity of 25 tables or 100 chairs per hour, using a dry filter for particulate control, and exhausting to stack E1. The booth uses one (1) high volume low pressure (HVLP) spray applicator, and utilizing a non-halogenated organic solvent for cleanup activities.
- (b) Three (3) surface coating booths used to coat wood furniture components, identified as B2 through B4, approved for construction in 2007, each with a maximum capacity of 25 tables or 100 chairs per hour, each using a dry filter for particulate control, and exhausting to stacks E2 through E4, respectively. Each booth uses one (1) high volume low pressure (HVLP) spray applicator, and utilizing a non-halogenated organic solvent for cleanup activities.
- (c) One (1) woodworking operation, constructed in 2007, consisting of various woodworking equipment, with a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour) and particulate matter emissions controlled by individual portable dust collection systems, vented to the indoors, consisting of the following:
 - (1) one (1) Powermatic Panel Molder, PM1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (2) one (1) Powermatic Router, RT1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (3) one (1) Jet Router, RT2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;

- (4) one (1) Surface Router, RT3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (5) one (1) Onsrud Router, RT4, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (6) one (1) Northwood Table Router, RT5, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (7) one (1) Wood Tech Belt Sander, BS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (8) one (1) Jet Belt Sander, BS2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (9) one (1) Ritter Belt Sander, BS3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (10) one (1) Timesavers Panel Sander, PS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (11) one (1) Grizzly Spindle Sander, SS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (12) one (1) Multicam Table Saw, ST1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (13) one (1) Omgaoon Radial Arm Saw, RS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (14) one (1) Powermatic Table Saw, TS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (d) Woodworking equipment, constructed in 2007, uncontrolled and vented to the indoors, consisting of the following:
- (1) one (1) Jet Drill Press, DP1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (2) one (1) Jet Drill Press, DP2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (3) one (1) Jet Drill Press, DP3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (4) one (1) Jet Drill Press, DP4, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (5) one (1) Jet Bandsaw, BW1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (6) one (1) Powermatic Bandsaw, BW2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (7) one (1) Powermatic Bandsaw, BW3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (8) one (1) Grizzly Vertical Sander, VS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;

- (9) one (1) Protech Chop Saw, CS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (10) one (1) Delta Chop Saw, CS2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (11) one (1) Dewalt Chop Saw, CS3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr, consisting of the following;
- (1) Sixteen (16) natural gas-fired forced air space heaters, identified as H1 through H16, each rated at 0.25 MMBTU/hr heat input capacity.
 - (2) Ten (10) natural gas-fired forced air space heaters, identified as H17 through H26, each rated at 0.17 MMBTU/hr heat input capacity.
 - (3) Five (5) natural gas-fired forced air space heaters, identified as H27 through H31, each rated at 0.06 MMBTU/hr heat input capacity.
 - (4) One (1) natural gas-fired air makeup unit, identified as AM1, each rated at 0.213 MMBTU/hr heat input capacity

SECTION B GENERAL CONDITIONS

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

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

B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

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

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

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

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

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

- (a) This permit, M039-23738-00658, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

B.6 Enforceability

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

B.7 Severability

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

B.8 Property Rights or Exclusive Privilege

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

B.9 Duty to Provide Information

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

B.10 Certification

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

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

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

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
MC 61-53 IGCN 1003
100 North Senate Avenue,
Indianapolis, IN 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.12 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

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

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

- (a) All terms and conditions of permits established prior to M039-23738-00658 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

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

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

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

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source.

The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

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

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

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

B.17 Source Modification Requirement

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

B.18 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to

assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

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

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

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

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

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

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

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

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

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

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

C.3 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

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

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

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

C.8 Performance Testing [326 IAC 3-6]

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

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

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

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

C.12 Instrument Specifications [326 IAC 2-1.1-11]

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

Corrective Actions and Response Steps

C.13 Response to Excursions or Exceedances

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records;
 - (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: Surface Coating

- (a) One (1) surface coating booth used to coat wood furniture components, identified as B1, constructed in 2007, with a maximum capacity of 25 tables or 100 chairs per hour, using a dry filter for particulate control, and exhausting to stack E1. The booth uses one (1) high volume low pressure (HVLP) spray applicator, and utilizing a non-halogenated organic solvent for cleanup activities.
- (b) Three (3) surface coating booths used to coat wood furniture components, identified as B2 through B4, approved for construction in 2007, each with a maximum capacity of 25 tables or 100 chairs per hour, each using a dry filter for particulate control, and exhausting to stacks E2 through E4, respectively. Each booth uses one (1) high volume low pressure (HVLP) spray applicator, and utilizing a non-halogenated organic solvent for cleanup activities.

(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 surface coating booth B4 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.

Compliance Determination Requirements [326 IAC 6-3-2(d)]

D.1.3 Particulate Matter (PM) and PM10

The dry filter system for PM and PM10 control shall be in place and controlling overspray emissions at all times when the spray booths (B1-B4) are in operation.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2, the Permittee shall maintain records of the action taken as a result visibly detected overspray, any repairs to the control devices, or change in operations.
- (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

Emissions Unit Description: Woodworking Operation

- (b) One (1) woodworking operation, constructed in 2007, consisting of various woodworking equipment, with a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour) and particulate matter emissions controlled by individual portable dust collection systems, vented to the indoors, and other woodworking equipment, with insignificant particulate matter emissions, uncontrolled and vented to the indoors, consisting of the following:
- (1) one (1) Powermatic Panel Molder, PM1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (2) one (1) Powermatic Router, RT1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (3) one (1) Jet Router, RT2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (4) one (1) Surface Router, RT3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (5) one (1) Onsrud Router, RT4, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (6) one (1) Northwood Table Router, RT5, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (7) one (1) Wood Tech Belt Sander, BS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (8) one (1) Jet Belt Sander, BS2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (9) one (1) Ritter Belt Sander, BS3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (10) one (1) Timesavers Panel Sander, PS1, with insignificant particulate emissions, controlled by one (1) dust collection system, exhausting to the indoors;
 - (11) one (1) Grizzly Spindle Sander, SS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (12) one (1) Multicam Table Saw, ST1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (13) one (1) Omgaon Radial Arm Saw, RS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (14) one (1) Powermatic Table Saw, TS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate [326 IAC 6-3-2] [326 IAC 2-2]

Pursuant to 326 IAC 6-3-2(e)(2) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking operation shall not exceed 2.81 pounds per hour based on a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour).

The pounds per hour limitation was calculated using 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:

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

Compliance Determination Requirements [326 IAC 6-3-2]

D.2.2 Particulate Control [326 IAC 6-3-2(d)]

- (a) In order to comply with condition D.2.1, the portable filtration units for particulate control shall be in operation and control emissions at all times the woodworking operation is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.3 Visible Emissions Notations

- (a) Daily visible emission notations of the woodworking operations stacks exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. 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.

D.2.4 Portable Filtration Unit Inspections

An inspection shall be performed each calendar quarter of all portable filtration units controlling the woodworking operations when venting to the atmosphere. All defective units shall be replaced.

D.2.5 Broken or Failed Portable Filtration Unit Detection

In the event that bag failure has been observed:

- (a) For portable filtration units, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.6 Record Keeping Requirements

- (a) To document compliance with Condition D.2.3, the Permittee shall maintain records of daily visible emission notations of the wood working operations stacks exhaust. 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 process did not operate that day).
- (b) To document compliance with Condition D.2.4, the Permittee shall maintain records of the results of the inspections required under Condition D.2.4 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description - Insignificant Activities [326 IAC 2-8-4(10)] :

- (d) Woodworking equipment, constructed in 2007, uncontrolled and vented to the indoors, consisting of the following:
- (1) one (1) Jet Drill Press, DP1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (2) one (1) Jet Drill Press, DP2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (3) one (1) Jet Drill Press, DP3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (4) one (1) Jet Drill Press, DP4, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (5) one (1) Jet Bandsaw, BW1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (6) one (1) Powermatic Bandsaw, BW2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (7) one (1) Powermatic Bandsaw, BW3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (8) one (1) Grizzly Vertical Sander, VS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (9) one (1) Protech Chop Saw, CS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (10) one (1) Delta Chop Saw, CS2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (11) one (1) Dewalt Chop Saw, CS3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr, consisting of the following:
- (1) Sixteen (16) natural gas-fired forced air space heaters, identified as H1 through H16, each rated at 0.25 MMBTU/hr heat input capacity.
 - (2) Ten (10) natural gas-fired forced air space heaters, identified as H17 through H26, each rated at 0.17 MMBTU/hr heat input capacity.
 - (3) Five (5) natural gas-fired forced air space heaters, identified as H27 through H31, each rated at 0.06 MMBTU/hr heat input capacity.
 - (4) One (1) natural gas-fired air makeup unit, identified as AM1, each rated at 0.213 MMBTU/hr heat input capacity.

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

Emission Limitations and Standards [326 IAC 2-8-4(1)]

There are no specifically applicable state or federal requirements for these units.

**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:	PW Products, LLC
Address:	1515 Leininger Ave
City:	Elkhart, Indiana 46517
Phone #:	(574) 266-1777
MSOP #:	M039-23738-00658

I hereby certify that PW Products, LLC is :

still in operation.

no longer in operation.

I hereby certify that PW Products, LLC is :

in compliance with the requirements of MSOP M039-23738-00658.

not in compliance with the requirements of MSOP M039-23738-00658.

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 ?_____, 100TONS/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 PERM 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

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

PW Products, LLC
1515 Leininger Avenue,
Elkhart, Indiana 46517

Affidavit of Construction

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

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____, I have personal knowledge of the
(Company Name)
representations contained in this affidavit and am authorized to make these representations on behalf of
_____.
(Company Name)

4. I hereby certify that PW Products, LLC, 1515 Leininger Avenue, Elkhart, Indiana 46517 completed construction of the stationary surface coating booth used to coat wood furniture and recreational vehicle components on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on March 29, 2005 and as permitted pursuant to New Source Construction Permit and Minor Source Operating Permit No. CP-039-23738-00658, Plant ID No. 039-00658 issued on _____.

Further Affiant said not.

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

Signature _____

Date _____

STATE OF INDIANA)
)SS

COUNTY OF _____)

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

My Commission expires: _____

Signature _____

Name (typed or printed)

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Significant Permit Revision to a Minor Source Operating Permit

Source Background and Description

Source Name:	PW Products, LLC
Source Location:	1515 Leininger Ave., Elkhart, Indiana 46517
County:	Elkhart
SIC Code:	2511
Operation Permit No.:	M039-23738-00658
Operation Permit Issuance Date:	January 26, 2007
Significant Permit Revision No.:	M039-25038-00658
Permit Reviewer:	Hannah L. Desrosiers

On September 24, 2007, the Office of Air Quality (OAQ) had a notice published in The Elkhart Truth, Elkhart, Indiana, stating that PW Products, LLC had applied for a Significant Permit Revision (SPR) to a Minor Source Operating Permit (MSOP) to construct and operate new equipment, and change the operation of existing equipment, at their existing stationary wood furniture and vehicle component surface coating plant located at 1515 Leininger Ave., Elkhart, Indiana 46517. The notice also stated that the OAQ proposed to issue an MSOP SPR 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.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Additional Changes To Permit

IDEM, OAQ has decided to make the following additional revisions to the permit:

- (a) IDEM inadvertently deleted original conditions D.1.3 (a) and (b), Record Keeping Requirements. These conditions are being added back into the permit as condition D.1.4 (a) and (b).
- (b) In Section D.2 Emissions Unit Operation Conditions for the Woodworking Operations, the operation description has been modified to create consistency with the corresponding description found in Section A.2 Emission Units and Pollution Control Equipment Summary.
- (c) On page 28 of 29 of the permit, the report form listed as "Minor Source Operating Permit Quarterly Compliance Monitoring Report" was erroneously added into the permit and serves no function. Therefore it has been deleted.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

...

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.4 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.2, the Permittee shall maintain records of the action taken as a result visibly detected overspray, any repairs to the control devices, or change in operations.
- (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

Emissions Unit Description: Woodworking Operation

(b c) One (1) woodworking operation, constructed in 2007, consisting of various woodworking equipment, with a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour) and particulate matter emissions controlled by individual portable dust collection systems, vented to the indoors, and other woodworking equipment, with insignificant particulate matter emissions, uncontrolled and vented to the indoors, **consisting of the following:**

...

...

OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

MINOR SOURCE OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: _____ PW Products, LLC
 Source Address: 1515 Leininger Ave, Elkhart, Indiana 46517
 Mailing Address: 1515 Leininger Ave, Elkhart, Indiana 46517
 Phone #: _____ (574) 266-1777
 MSOP Permit No.: _____ M039-23738-00658

Months: _____ to _____ Year: _____

~~This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".~~

~~E NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.~~

~~E THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.~~

Compliance Monitoring Requirement (e.g. Permit Condition D.1.6)	Number of Deviations	Date of each Deviation
--	----------------------	------------------------

...

Form Completed By: _____
 Title/Position: _____
 Date: _____
 Phone: _____

Attach a signed certification to complete this report.

Clarification of the TSD

IDEM, OAQ has decided to clarify information contained in the TSD:

- (a) On Page 3 of 3, in the Permit Level Determination – MSOP Revision section of the TSD, the PTE summary table header has been revised and a descriptive statement added, and the Justification for Revision has been supplemented for clarification.

Permit Level Determination – MSOP Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table summarizes the potential to emit (PTE), reflecting all limits, of the emission units, before controls. Any control equipment is considered enforceable only after issuance of this MSOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Pollutant	PTE of revision the entire source after the SPR (tons/year)
PM	83.58
PM10	83.74
SO ₂	0.02
VOC	95.18
CO	2.29
NO _x	2.72
Total HAPs	0.56

This table summarizes the PTE of the entire source after the Significant Permit Revision (SPR).

Justification for Revision

Pursuant to 326 IAC 2-6.1-6(i)(1)(E), the MSOP is being modified through a Significant Permit Revision, since this modification has the potential to emit greater than or equal to twenty-five (25) tons per year of PM and PM10. **The Source is maintaining its MSOP status because no regulated pollutant is emitted at a rate of 100 tons per year or more.**

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision (SPR) to a Minor Source Operating Permit (MSOP).

Source Description and Location

Source Name:	PW Products, LLC
Source Location:	1515 Leininger Ave., Elkhart, Indiana 46517
County:	Elkhart
SIC Code:	2511
Operation Permit No.:	M039-23738-00658
Operation Permit Issuance Date:	January 26, 2007
Significant Permit Revision No.:	M039-25038-00658
Permit Reviewer:	Hannah L. Desrosiers

The Office of Air Quality (OAQ) has received a Significant Permit Revision (SPR) application from PW Products, LLC, relating to the construction and operation of three (3) stationary surface coating booths and miscellaneous woodworking operations used to produce wood furniture, and a change in operation for existing surface coating booth B1.

Existing Approvals

The source was issued MSOP No. M039-23738-00658 on January 26, 2007.

All conditions from previous approvals were incorporated into this permit.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM10	Attainment or Unclassifiable
PM2.5	Attainment or Unclassifiable
SO ₂	Attainment
NO _x	Attainment or Unclassifiable
8-Hour Ozone	Attainment
CO	Attainment or Unclassifiable
Lead	Attainment or Unclassifiable

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.

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

- (b) Elkhart County has been classified as attainment or unclassifiable for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.
- (c) Elkhart County has been classified as attainment or unclassifiable for all the other regulated criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (d) Fugitive Emissions are not counted toward determination of PSD and Emission Offset applicability since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3, and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980. See the State Rule Applicability – Entire Source section.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Emissions (tons/year)
PM	14.95
PM10	14.95
SO ₂	0.00
VOC	83.70
CO	0.00
NO _x	0.00

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (tons/year)
Cumene	0.79
Ethyl Benzene	0.39
Formaldehyde	2.09
Toluene	8.12
Xylene	0.39
TOTAL	11.78

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

- (c) These emissions are based upon MSOP Permit No. M039-23738-00658, issued on January 26, 2007

Background and Description of New Source Construction and Proposed Modification

Decorative Wood Designs, Inc. was issued a Minor Source Operating Permit (MSOP) No. M039-23738-00658 on January 26, 2007, for a stationary wood furniture and vehicle component surface coating plant.

On July 18, 2007, the Office of Air Quality (OAQ) received an application from the source requesting the following:

- (1) To update the MSOP to indicate a transfer of ownership and a company name change to PW Products, LLC.
- (2) To update the source description to a stationary wood dining room furniture manufacturing and surface coating plant.
- (3) Approval to construct and operate three (3) stationary surface coating booths and miscellaneous woodworking operations used to produce wood furniture, and to change the operation of existing Spray Booth 1, identified as B1, to apply stain surface coating to a maximum capacity of 25 tables or 100 chairs per hour.

The following is a list of the proposed new emission unit(s) and pollution control device(s):

- (a) Three (3) surface coating booths used to coat wood furniture components, identified as B2 through B4, approved for construction in 2007, each with a maximum capacity of 25 tables or 100 chairs per hour, each using a dry filter for particulate control, and exhausting to stacks E2 through E4, respectively. Each booth uses one (1) high volume low pressure (HVLP) spray applicator, and utilizing a non-halogenated organic solvent for cleanup activities.
- (b) One (1) woodworking operation, constructed in 2007, consisting of various woodworking equipment, with a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour) and particulate matter emissions controlled by individual portable dust collection systems, vented to the indoors, consisting of the following:
 - (1) one (1) Powermatic Panel Molder, PM1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (2) one (1) Powermatic Router, RT1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (3) one (1) Jet Router, RT2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (4) one (1) Surface Router, RT3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (5) one (1) Onsrud Router, RT4, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (6) one (1) Northwood Table Router, RT5, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;

- (7) one (1) Wood Tech Belt Sander, BS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (8) one (1) Jet Belt Sander, BS2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (9) one (1) Ritter Belt Sander, BS3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (10) one (1) Timesavers Panel Sander, PS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (11) one (1) Grizzly Spindle Sander, SS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (12) one (1) Multicam Table Saw, ST1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (13) one (1) Omgaon Radial Arm Saw, RS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (14) one (1) Powermatic Table Saw, TS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;

The following is a list of the proposed new insignificant activities:

- (a) Woodworking equipment, constructed in 2007, uncontrolled and vented to the indoors, consisting of the following:
 - (1) one (1) Jet Drill Press, DP1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (2) one (1) Jet Drill Press, DP2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (3) one (1) Jet Drill Press, DP3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (4) one (1) Jet Drill Press, DP4, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (5) one (1) Jet Bandsaw, BW1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (6) one (1) Powermatic Bandsaw, BW2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (7) one (1) Powermatic Bandsaw, BW3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (8) one (1) Grizzly Vertical Sander, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (9) one (1) Protech Chop Saw, CS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;

- (10) one (1) Delta Chop Saw, CS2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
- (11) one (1) Dewalt Chop Saw, CS3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
- (b) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr, consisting of the following:
 - (1) Sixteen (16) natural gas-fired forced air space heaters, identified as H1 through H16, each rated at 0.25 MMBTU/hr heat input capacity.
 - (2) Ten (10) natural gas-fired forced air space heaters, identified as H17 through H26, each rated at 0.17 MMBTU/hr heat input capacity.
 - (3) Five (5) natural gas-fired forced air space heaters, identified as H27 through H31, each rated at 0.06 MMBTU/hr heat input capacity.
 - (4) One (1) natural gas-fired air makeup unit, identified as AM1, each rated at 0.213 MMBTU/hr heat input capacity.

The following is a list of the modified emission unit(s) and pollution control device(s):

- (a) One (1) surface coating booth used to coat wood furniture components, identified as B1, constructed in 2007, with a maximum capacity of 25 tables or 100 chairs per hour, using a dry filter for particulate control, and exhausting to stack E1. The booth uses one (1) high volume low pressure (HVLP) spray applicator, and utilizing a non-halogenated organic solvent for cleanup activities.

Enforcement Issues

There are no pending enforcement actions related to this revision.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Stack Summary

Stack ID	Operation	Height(ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
E1	Spray Booth Stack	25.0	2.5	12,190	77
E2 – E4	Spray Booth Stack	22.0	2.0	10,290	77
H1 - H16	Space Heating Stacks	22.0	0.042	1,500	300
H17 – H26	Space Heating Stacks	22.0	0.042	1,250	300
H27 – H31	Space Heating Stacks	22.0	0.028	1,000	250

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Permit Level Determination – MSOP Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table summarizes the potential to emit (PTE), reflecting all limits, of the emission units, before controls. Any control equipment is considered enforceable only after issuance of this MSOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Pollutant	PTE of revision (tons/year)
PM	83.58
PM10	83.74
SO ₂	0.02
VOC	95.18
CO	2.29
NO _x	2.72
Total HAPs	0.56

Justification for Revision

Pursuant to 326 IAC 2-6.1-6(i)(1)(E), the MSOP is being modified through a Significant Permit Revision, since this modification has the potential to emit greater than or equal to twenty-five (25) tons per year of PM and PM10.

Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations, 40 CFR 63 Subpart JJ and 326 IAC 20-14 are not included in this revision because this source is not a major source of HAP emissions.
- (c) The requirements of 40 CFR 63, Subpart T (63.460 through 63.470), NESHAP for Halogenated Solvent Cleaning and 326 IAC 20-6, are not included in this revision because this operation does not use a degreasing solvent that contains any of the halogenated compounds listed in 40 CFR 63.460(a).
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

This existing source will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This existing source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Elkhart County, it is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year. Therefore, pursuant to 326 IAC 2-6-1(b), the source is only subject to additional information requests as provided in 326 IAC 2-6-5.

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 the 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.

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.

State Rule Applicability - Surface Coating Operations

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

- (a) Pursuant to 326 IAC 6-3-1(b)(14), surface coating booths B-1, B-2 and B-3 are each exempt from the requirements of 326 IAC 6-3, because each have potential particulate emissions that are less than five hundred fifty-one thousandths (0.551) pound per hour.
- (b) Surface coating booth B-4 is subject to the requirements of 326 IAC 6-3-2, since it has potential particulate emissions that are greater than five hundred fifty-one thousandths (0.551) pound per hour and has the potential to use greater than five (5) gallons per day of surface coatings. Pursuant to 326 IAC 6-3-2(d), particulate from surface coating booth B-4 shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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

- (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.

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 (VOC rules: General Reduction Requirements for New Facilities)

The requirements of 326 IAC 8-1-6 are not applicable to cleanup solvent usage in the surface coating booths B-1 through B-4, since it does not have the potential to emit greater than twenty-five (25) tons of VOCs per year.

326 IAC 8-2-12 (Volatile Organic Compounds - Wood Furniture and Cabinet Coating)

This rule applies to surface coating of wood furnishings, including cabinets (kitchen, bath, and vanity), tables, beds, chairs, sofas (nonupholstered), art objects, and any other coated furnishings made of solid wood, wood composition, or simulated wood material. Surface coating, in surface coating booths B-1, B-2, B-3 and B-4, are each subject to 326 IAC 8-2-12, since they are each a facility of the type described in 326 IAC 8-2-12, the source was constructed after July 1, 1990, and each will have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls. Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the Permittee shall perform surface coating of wood furniture and cabinets, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) or more of the following 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) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system. Since surface coating booths B-1, B-2 B-3 and B-4 each use HVLP spray application, they each are in compliance with 326 IAC 8-2-12.

326 IAC 8-11-3 (Volatile Organic Compounds, Wood Furniture Coatings)

The requirements of 326 IAC 8-11-3 are not applicable to this source, since this source is not located in Lake, Porter, Clark, or Floyd County.

There are no other 326 IAC 8 Rules that are applicable to surface coating booths B1 - B4.

State Rule Applicability - Woodworking Operations

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

- (a) The requirements of 326 IAC 6-3 are applicable to the woodworking operation (units BS1 through BS3, PM1, PS1, RS1, RT1 through RT5, SS1, ST1, and TS1). Pursuant to 326 IAC 6-3-2(e)(2), the particulate emissions from the woodworking operation shall not exceed 2.81 pounds per hour based on a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour).

In order to comply with the allowable rate of emission, particulate control devices shall be in operation and control emissions from the woodworking equipment at all times that the woodworking equipment is in operation.

The allowable rate of emission was calculated as follows:

Interpolation of the data in the table in 326 IAC 6-3-2(e)(2) for the process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

- (b) The requirements of 326 IAC 6-3-2 are not applicable to units BW1 through BW3, CS1 through CS3, DP1 through DP4, and VS1, since the potential to emit particulate matter is less than 0.551 lbs per hour each.

State Rule Applicability - Natural Gas Combustion

326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)

Each of the natural gas-fired forced air space heaters (H-1 through H-31), and air makeup unit (AM1), are exempt from the requirements of 326 IAC 6-2, as they are not sources of indirect heating.

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

Each of the natural gas-fired forced air space heaters (H-1 through H-31), and air makeup unit (AM1), are exempt from the requirements of 326 IAC 6-3, since they are each not a "manufacturing process" as defined by 326 IAC 6-3-1.5.

326 IAC 7-1 (Sulfur dioxide emission limitations: applicability)

Each of the natural gas-fired forced air space heaters (H-1 through H-31), and air makeup unit (AM1), are exempt from the requirements of 326 IAC 7-1, because the potential and the actual emissions of each are less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-6 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-6.1-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section

D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Compliance Monitoring Requirements

(a) The compliance monitoring requirements applicable to surface coating booth B-4, are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Paint Booth B-4 dry filters	Inspections	Daily	Normal-Abnormal	Response Steps
The coating emissions from the stack E-4 and the presence of overspray on the rooftops and the nearby ground	Inspections	Weekly and Monthly	Normal-Abnormal	Response Steps

These monitoring conditions for the filters for the one (1) spray paint booth, B-4, must operate properly to ensure compliance with with 326 IAC 6-3-2(d) (Particulate emission limitations, work practices, and control technologies).

(b) The compliance monitoring requirements applicable to the woodworking operation are as follows:

- (1) The Permittee shall perform daily visible emission notations of the woodworking operation stack exhaust; and
- (2) The Permittee shall perform quarterly inspections of the individual, portable dust collection systems.
- (3) These monitoring conditions are necessary because the individual, portable dust collection systems must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes).

Proposed Changes

The changes listed below have been made to Minor Source Operating Permit, No. M039-23738-00658. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

...

The Source Name has been changed throughout the permit, as follows:

~~Decorative Wood Designs, Inc.~~ **PW Products, LLC**

...

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) surface coating booth used to coat wood furniture ~~and wooden recreational vehicle~~ **components**, identified as B1, ~~approved for construction~~ **ed**

in 2007, with a maximum capacity of ~~75~~ **25 tables or 100 chairs** per hour, using a dry filter for particulate control, and exhausting to stack E1. The booth uses one (1) high volume low pressure (HVLP) spray applicator, **and utilizing a non-halogenated organic solvent for cleanup activities.**

- (b) **Three (3) surface coating booths used to coat wood furniture components, identified as B2 through B4, approved for construction in 2007, each with a maximum capacity of 25 tables or 100 chairs per hour, each using a dry filter for particulate control, and exhausting to stacks E2 through E4, respectively. Each booth uses one (1) high volume low pressure (HVLP) spray applicator, and utilizing a non-halogenated organic solvent for cleanup activities.**

- (c) **One (1) woodworking operation, constructed in 2007, consisting of various woodworking equipment, with a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour) and particulate matter emissions controlled by individual portable dust collection systems, vented to the indoors, consisting of the following:**
 - (1) **one (1) Powermatic Panel Molder, PM1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**
 - (2) **one (1) Powermatic Router, RT1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**
 - (3) **one (1) Jet Router, RT2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**
 - (4) **one (1) Surface Router, RT3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**
 - (5) **one (1) Onsrud Router, RT4, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**
 - (6) **one (1) Northwood Table Router, RT5, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**
 - (7) **one (1) Wood Tech Belt Sander, BS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**
 - (8) **one (1) Jet Belt Sander, BS2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**
 - (9) **one (1) Ritter Belt Sander, BS3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;**

- (10) one (1) Timesavers Panel Sander, PS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (11) one (1) Grizzly Spindle Sander, SS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (12) one (1) Multicam Table Saw, ST1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (13) one (1) Omgaon Radial Arm Saw, RS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (14) one (1) Powermatic Table Saw, TS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
- (d) Woodworking equipment, constructed in 2007, uncontrolled and vented to the indoors, consisting of the following:
- (1) one (1) Jet Drill Press, DP1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (2) one (1) Jet Drill Press, DP2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (3) one (1) Jet Drill Press, DP3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (4) one (1) Jet Drill Press, DP4, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (5) one (1) Jet Bandsaw, BW1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (6) one (1) Powermatic Bandsaw, BW2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (7) one (1) Powermatic Bandsaw, BW3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (8) one (1) Grizzly Vertical Sander, VS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (9) one (1) Protech Chop Saw, CS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (10) one (1) Delta Chop Saw, CS2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (11) one (1) Dewalt Chop Saw, CS3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr, consisting of the following;

- (1) Sixteen (16) natural gas-fired forced air space heaters, identified as H1 through H16, each rated at 0.25 MMBTU/hr heat input capacity.
- (2) Ten (10) natural gas-fired forced air space heaters, identified as H17 through H26, each rated at 0.17 MMBTU/hr heat input capacity.
- (3) Five (5) natural gas-fired forced air space heaters, identified as H27 through H31, each rated at 0.06 MMBTU/hr heat input capacity.
- (4) One (1) natural gas-fired air makeup unit, identified as AM1, each rated at 0.213 MMBTU/hr heat input capacity

....

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Surface Coating

- (a) One (1) surface coating booth used to coat wood furniture and ~~wooden recreational vehicle components~~, identified as B1, ~~approved for construction in 2007~~, with a maximum capacity of ~~75~~ **25 tables or 100 chairs** per hour, using a dry filter for particulate control, and exhausting to stack E1. The booth uses one (1) high volume low pressure (HVLP) spray applicator, **and utilizing a non-halogenated organic solvent for cleanup activities.**
- (b) Three (3) surface coating booths used to coat wood furniture components, identified as B2 through B4, approved for construction in 2007, each with a maximum capacity of 25 tables or 100 chairs per hour, each using a dry filter for particulate control, and exhausting to stacks E2 through E4, respectively. Each booth uses one (1) high volume low pressure (HVLP) spray applicator, and utilizing a non-halogenated organic solvent for cleanup activities.

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

...

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

- (a) Particulate emissions from the surface coating ~~operations~~ **booth B-4** shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

...

Compliance Determination Requirements [326 IAC 6-3-2(d)]

D.1.3 Particulate Matter (PM) and PM10

The dry filter system for PM and PM10 control shall be in place and controlling overspray emissions at all times when spray booth B4 is in operation.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Woodworking Operation

- (c) One (1) woodworking operation, constructed in 2007, consisting of various woodworking equipment, with a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour) and particulate matter emissions controlled by individual portable dust collection systems, vented to the indoors, and other woodworking equipment, with insignificant particulate matter emissions, uncontrolled and vented to the indoors.
- (1) one (1) Powermatic Panel Molder, PM1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (2) one (1) Powermatic Router, RT1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (3) one (1) Jet Router, RT2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (4) one (1) Surface Router, RT3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (5) one (1) Onsrud Router, RT4, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (6) one (1) Northwood Table Router, RT5, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (7) one (1) Wood Tech Belt Sander, BS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (8) one (1) Jet Belt Sander, BS2, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (9) one (1) Ritter Belt Sander, BS3, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (10) one (1) Timesavers Panel Sander, PS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (11) one (1) Grizzly Spindle Sander, SS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (12) one (1) Multicam Table Saw, ST1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (13) one (1) Omgaon Radial Arm Saw, RS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;
 - (14) one (1) Powermatic Table Saw, TS1, with insignificant particulate emissions, controlled by one (1) dust collection system and exhausting to the indoors;

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate [326 IAC 6-3-2] [326 IAC 2-2]

Pursuant to 326 IAC 6-3-2(e)(2) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the woodworking operation shall not exceed 2.81 pounds per hour based on a process weight rate equal to 0.631 tons of wood per hour (1,263.15 pounds of wood per hour).

The pounds per hour limitation was calculated using 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:

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

Compliance Determination Requirements [326 IAC 6-3-2]

D.2.2 Particulate Control [326 IAC 6-3-2(d)]

- (a) In order to comply with condition D.2.1, the portable filtration units for particulate control shall be in operation and control emissions at all times the woodworking operation is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.3 Visible Emissions Notations

- (a) Daily visible emission notations of the woodworking operations stacks exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. 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.

D.2.4 Portable Filtration Unit Inspections

An inspection shall be performed each calendar quarter of all portable filtration units controlling the woodworking operations when venting to the atmosphere. All defective units shall be replaced.

D.2.5 Broken or Failed Portable Filtration Unit Detection

In the event that portable filtration unit(s) failure has been observed:

- (a) For portable filtration units, failed units and the associated process will be shut down immediately until the failed unit(s) have been repaired or replaced. Operations may continue only if the event qualifies as an

emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.6 Record Keeping Requirements

- (a) To document compliance with Condition D.2.3, the Permittee shall maintain records of daily visible emission notations of the wood working operations stacks exhaust. 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 process did not operate that day).
- (b) To document compliance with Condition D.2.4, the Permittee shall maintain records of the results of the inspections required under Condition D.2.4 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

...

SECTION D.3

FACILITY CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

- (f) Woodworking equipment, constructed in 2007, uncontrolled and vented to the indoors, consisting of the following:
 - (1) one (1) Jet Drill Press, DP1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (2) one (1) Jet Drill Press, DP2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (3) one (1) Jet Drill Press, DP3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (4) one (1) Jet Drill Press, DP4, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (5) one (1) Jet Bandsaw, BW1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (6) one (1) Powermatic Bandsaw, BW2, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (7) one (1) Powermatic Bandsaw, BW3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (8) one (1) Grizzly Vertical Sander, VS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (9) one (1) Protech Chop Saw, CS1, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;
 - (10) one (1) Delta Chop Saw, CS2, with insignificant particulate emissions,

- uncontrolled and exhausting to the indoors;**
- (11) **one (1) Dewalt Chop Saw, CS3, with insignificant particulate emissions, uncontrolled and exhausting to the indoors;**
- (g) **Natural gas-fired combustion sources with heat input equal to or less than ten (10) MMBtu/hr, consisting of the following;**
- (1) **Sixteen (16) natural gas-fired forced air space heaters, identified as H1 through H16, each rated at 0.25 MMBTU/hr heat input capacity.**
- (2) **Ten (10) natural gas-fired forced air space heaters, identified as H17 through H26, each rated at 0.17 MMBTU/hr heat input capacity.**
- (3) **Five (5) natural gas-fired forced air space heaters, identified as H27 through H31, each rated at 0.06 MMBTU/hr heat input capacity.**
- (4) **One (1) natural gas-fired air makeup unit, identified as AM1, each rated at 0.213 MMBTU/hr heat input capacity**
- (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

Emission Limitations and Standards [326 IAC 2-8-4(1)]

There are no specifically applicable state or federal requirements to these units.

...

Additionally, IDEM, OAQ has decided to make several administrative revisions to the permit as described below. The permit is revised as follows with deleted language as ~~strikeouts~~ and new language **bolded**:

- (a) All occurrences of IDEM mailing addresses have been revised to include a mail code (MC) as follows:
- | | |
|---|---------------------------|
| Asbestos Section: | MC 61-52 IGCN 1003 |
| Compliance Branch: | MC 61-53 IGCN 1003 |
| Permits Branch: | MC 61-53 IGCN 1003 |
| Technical Support and Modeling Section: | MC 61-50 IGCN 1003 |
- (b) IDEM has begun implementing a new procedure and will no longer list the name or title of the Authorized Individual (A.I.) in the permit document. Section A.1 is updated as follows:
- Authorized Individual: ~~Greg Companion~~
- (c) All occurrences of the Compliance Data Branch telephone and facsimile numbers have been revised to 317-233-~~5674~~ **0178** and 317-233-~~5967~~ **6865**, respectively.

All other conditions of the permit shall remain unchanged and in effect.

Conclusion and Recommendation

The construction of this proposed modification and the operation of the entire source shall be subject to the conditions of the attached proposed Minor Source Operating Significant Permit Revision, No. M039-25038-00658. The staff recommends to the Commissioner that the Significant Permit Revision, be approved.

Unless otherwise stated, information used in this review was derived from the application and received by the Office of Air Quality (OAQ) on July 18, 2007. Additional information was received on July 27, 2007 and July 30, 2007.

Copies of the preliminary findings have been provided to the Elkhart Public Library.

IDEM Contact

Questions regarding this proposed permit can be directed to Ms. Hannah Desrosiers at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5374 or toll free at 1-800-451-6027 extension 4-5374.

Appendix A: Emissions Calculations
Emission Summary

Company Name: PW Products, LLC
Address City IN Zip: 1515 Leininger Ave., Elkhart, In 46517
Permit Number: 25038
PI# ID: 039-00658
Reviewer: Hannah Desrosiers
Date: 7/24/2007

Uncontrolled Potential Emissions (tons/year)									
Emissions Generating Activity									
Category	Pollutant	New & Modified Emission Units							TOTAL
		Woodworking Operation	Process Heaters and Air Make Up Units	Surface Coating Booth B1 (Stain)	Surface Coating Booth B2 (Stain)	Surface Coating Booth B3 (Stain)	Surface Coating Booth B4 (Sealer/Topcoat)	Organic Solvent Booths B1-B4 (Cleaner)	
Criteria Pollutants	PM	77.04	0.05	0.20	0.20	0.20	5.88	0	83.58
	PM10	77.04	0.21	0.20	0.20	0.20	5.88	0	83.74
	SO2	0	0.02	0	0	0	0	0	0.02
	NOx	0	2.72	0	0	0	0	0	2.72
	VOC	0	0.15	13.65	13.65	13.65	51.64	2.45	95.18
	CO	0.00	2.29	0	0	0	0	0	2.29
Hazardous Air Pollutants	Benzene	0	5.71E-05	0	0	0	0	0	5.71E-05
	Cadmium	0	2.99E-05	0	0	0	0	0	2.99E-05
	Chromium	0	3.81E-05	0	0	0	0	0	3.81E-05
	Dichlorobenzene	0	3.27E-05	0	0	0	0	0	3.27E-05
	Formaldehyde	0	2.04E-03	0	0	0	0	0	2.04E-03
	Lead	0	1.36E-05	0	0	0	0	0	1.36E-05
	Manganese	0	1.03E-05	0	0	0	0	0	1.03E-05
	Hexane	0	4.90E-02	0	0	0	0	0	4.90E-02
	Nickel	0	5.71E-05	0	0	0	0	0	5.71E-05
	Toluene	0	9.25E-05	0	0	0	0	5.08E-01	0.51
Totals	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.51	0.56
								Worst Case HAP	0.51

Total emissions based on rated capacity at 8,760 hours/year.

Controlled Potential Emissions (tons/year)									
Emissions Generating Activity									
Category	Pollutant	New & Modified Emission Units							TOTAL
		Woodworking Operation	Process Heaters and Air Make Up Units	Surface Coating Booth B1 (Stain)	Surface Coating Booth B2 (Stain)	Surface Coating Booth B3 (Stain)	Surface Coating Booth B4 (Sealer/Topcoat)	Organic Solvent Booths B1-B4 (Cleaner)	
Criteria Pollutants	PM	2.52	0.05	0.04	0.04	0.04	1.23	0.00	3.93
	PM10	2.52	0.21	0.04	0.04	0.04	1.23	0.00	4.08
	SO2	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
	NOx	0.00	2.72	0.00	0.00	0.00	0.00	0.00	2.72
	VOC	0.00	0.15	13.65	13.65	13.65	51.64	2.45	95.18
	CO	0.00	2.29	0.00	0.00	0.00	0.00	0.00	2.29
Hazardous Air Pollutants	Benzene	0	5.71E-05	0	0	0	0	0	5.71E-05
	Cadmium	0	2.99E-05	0	0	0	0	0	2.99E-05
	Chromium	0	3.81E-05	0	0	0	0	0	3.81E-05
	Dichlorobenzene	0	3.27E-05	0	0	0	0	0	3.27E-05
	Formaldehyde	0	2.04E-03	0	0	0	0	0	2.04E-03
	Lead	0	1.36E-05	0	0	0	0	0	1.36E-05
	Manganese	0	1.03E-05	0	0	0	0	0	1.03E-05
	Hexane	0	4.90E-02	0	0	0	0	0	0.05
	Nickel	0	5.71E-05	0	0	0	0	0	5.71E-05
	Toluene	0	9.25E-05	0	0	0	0	5.08E-01	0.51
Totals	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.51	0.56
								Worst Case HAP	0.51

Total emissions based on rated capacity at 8,760 hours/year.

**Appendix A: Emissions Calculations
Process Heaters and Air Make-Up Units
Natural Gas Combustion Only
MM BTU/HR <100**

Company Name: PW Products, LLC
Address City IN Zip: 1515 Leininger Ave., Elkhart, In 46517
Permit Number: 25038
Plt ID: 039-00658
Reviewer: Hannah Desrosiers
Date: 7/24/2007

Emission Unit	Number of Units	Unit Heat Input Capacity MMBtu/hr	Combined Total Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission tons/yr					
					PM*	PM10*	SO2	NOx**	VOC	CO
Natural gas-fired forced air space heaters (H1 through H16)	16	0.250	4.000	35.04	3.3E-02	0.133	1.1E-02	1.752	0.096	1.472
Natural gas-fired forced air space heaters (H17 through H26)	10	0.170	1.700	14.89	1.4E-02	0.057	4.5E-03	0.745	0.041	0.625
Natural gas-fired forced air space heaters (H27 through H31)	5	0.060	0.300	2.63	2.5E-03	0.010	7.9E-04	0.131	0.007	0.110
Natural gas-fired air makeup unit (AM1)	1	0.213	0.213	1.87	1.8E-03	0.007	5.6E-04	0.093	0.005	0.078
Totals	32		6.21		0.052	0.207	0.016	2.721	0.150	2.286

Emission Unit	Potential Emission tons/yr									
	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Natural gas-fired forced air space heaters (H1 through H16)	3.7E-05	2.1E-05	1.3E-03	3.2E-02	6.0E-05	8.8E-06	1.9E-05	2.5E-05	6.7E-06	3.7E-05
Natural gas-fired forced air space heaters (H17 through H26)	1.6E-05	8.9E-06	5.6E-04	1.3E-02	2.5E-05	3.7E-06	8.2E-06	1.0E-05	2.8E-06	1.6E-05
Natural gas-fired forced air space heaters (H27 through H31)	2.8E-06	1.6E-06	9.9E-05	2.4E-03	4.5E-06	6.6E-07	1.4E-06	1.8E-06	5.0E-07	2.8E-06
Natural gas-fired air makeup unit (AM1)	2.0E-06	1.1E-06	7.0E-05	1.7E-03	3.2E-06	4.7E-07	1.0E-06	1.3E-06	3.5E-07	2.0E-06
Totals	5.7E-05	3.3E-05	2.0E-03	4.9E-02	9.3E-05	1.4E-05	3.0E-05	3.8E-05	1.0E-05	5.7E-05

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

Total HAPs =	0.0514 tpy
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**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

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

Methodology

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

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

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

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu, MMCF = 1,000,000 Cubic Feet of Gas

Abbreviations

PM = Particulate Matter

NOx = Nitrous Oxides

DCB = Dichlorobenzene

Cr = Chromium

PM10 = Particulate Matter (<10 um)

VOC = Volatile Organic Compounds

Pb = Lead

Mn = Manganese

SO2 = Sulfur Dioxide

CO = Carbon Monoxide

Cd = Cadmium

Ni = Nickel

**Appendix A: Emissions Calculations
Surface Coat Finishing Line
Stain, Sealer, and Topcoat
Volatile Organic Comounds (VOC) and Particulate Matter (PM)**

Company Name: PW Products, LLC
Address City IN Zip: 1515 Leininger Ave., Elkhart, In 46517
Permit Number: 25038
Pit ID: 039-00658
Reviewer: Hannah Desrosiers
Date: 7/24/2007

Unrestricted Potential to Emit

Operation and Material*	Primary Type of Surface Coated	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water + Non-VOCs	Weight % Solids	Weight % VOCs	Volume % Water + Non-VOCs	Volume % Solids	Usage (gal/unit)	Maximum Capacity (unit/hr)	Maximum Usage (gal/day)	Maximum Usage (lb/hr)	Maximum Usage (lb/day)	Pounds VOC per gallon of coating less water and non-VOCs	Pounds VOC per gallon of coating	PTE VOC (lb/hr)	*Actual PTE VOC (lb/day)	PTE VOC (lb/day)	PTE VOC (tons/yr)	PTE PM/PM10 (lb/hr)	PTE PM/PM10 (tons/yr)	lb VOC per gal solids	Transfer Efficiency
Spray Paint Booth B-1																							
SN80 M-7728 Stain	Wood	6.60	94.42%	0.00%	5.58%	94.42%	0.00%	3.37%	0.0200	25	12.0	3.3	79.2	6.23	6.23	3.1	31.2	74.8	13.65	0.05	0.2	184.92	75%
Spray Paint Booth B-2																							
SN80 M-7728 Stain	Wood	6.60	94.42%	0.00%	5.58%	94.42%	0.00%	3.37%	0.0200	25	12.0	3.3	79.2	6.23	6.23	3.1	31.2	74.8	13.65	0.05	0.2	184.92	75%
Spray Paint Booth B-3																							
SN80 M-7728 Stain	Wood	6.60	94.42%	0.00%	5.58%	94.42%	0.00%	3.37%	0.0200	25	12.0	3.3	79.2	6.23	6.23	3.1	31.2	74.8	13.65	0.05	0.2	184.92	75%
Spray Paint Booth B-4																							
NM5212-0090F Sealer/Topcoat	Wood	7.80	68.70%	0.00%	31.30%	68.70%	0.00%	23.95%	0.0880	25	52.8	17.2	411.8	5.36	5.36	11.8	117.9	282.9	51.64	1.34	5.9	22.37	75%
Cleaner																							
Best Grade Lacquer - Cleanup	Wood	7.00	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.0032	25	1.9	0.6	13.4	7.00	7.00	0.560	5.6	13.4	2.45	0.00	0.0	0.00	100%

* Based on 10hour workday

Total Uncontrolled Potential to Emit (PTE) =	95.03	1.48	6.49
Dry Filter Control Efficiency =	79.1%		
Stain Line PM/PM10 Emissions after controls/limits =	0.029	0.126	
Sealer Line PM/PM10 Emissions after controls/limits =	0.281	1.229	
Topcoat Line PM/PM10 Emissions after controls/limits =	0.000	0.000	
Total Controlled/Limited PTE of PM/PM10 (tons/yr) =	0.310	1.356	

METHODOLOGY

Maximum Usage (gal/day) = [Usage (gal/unit)] * [Maximum Capacity (units/hour)] * [24 hours/day]
 Maximum Usage (lbs/hr) = [Maximum Usage (gal/day)] * [Density (lb/gal)] / [24 hour/day]
 Pounds of VOC per Gallon Coating less Water and non-VOCs = [Density (lb/gal)] * [Weight % VOCs] / [1 - (Volume % water and non-VOCs)]
 Pounds of VOC per Gallon Coating = [Density (lb/gal)] * [Weight % VOCs]
 PTE of VOC (lbs/hr) = [Maximum Usage (lbs/hr)] * [Weight % VOCs]
 PTE of VOC (lbs/day) = [PTE of VOC (lbs/hr)] * [24 hours/day]
 PTE of VOC (tons/yr) = [PTE of VOC (lbs/day)] * [(365 days/yr)] * [1 ton/2000 lbs]
 PTE of PM/PM10 (tons/yr) = [Density (lbs/gal)] * [Maximum Usage (gal/day)] * [(Weight % Solids)] * [1 - Transfer efficiency] * [365 days/yr] * [1 ton/2000 lbs]
 Pounds VOC per Gallon of Solids = [Density (lbs/gal)] * [Weight % VOCs] / [Volume % solids]
 Controlled PTE = [Uncontrolled PTE] * [1 - Control Efficiency]
 Actual Emissions of VOCs (lbs/day) = [Uncontrolled PTE of VOCs (lbs/hour)] * [Actual Hours of Operation (hours/day)]

**Appendix A: Emissions Calculations
Surface Coat Finishing Line
Stain, Sealer, and Topcoat
Hazardous Air Pollutants (HAPs)**

Company Name: PW Products, LLC
Address City IN Zip: 1515 Leininger Ave., Elkhart, In 46517
Permit Number: 25038
Plt ID: 039-00658
Reviewer: Hannah Desrosiers
Date: 7/24/2007

Unrestricted Potential to Emit

Operation and Material	Maximum Usage (lb/hr)	Weight % Toluene	Toluene Emissions (tons/yr)	Total HAPs (tons/yr)
Spray Paint Booth B-1				
SN80 M-7728 Stain	3.3	0%	0.0	0.00
Spray Paint Booth B-2				
SN80 M-7728 Stain	3.3	0%	0.0	0.00
Spray Paint Booth B-3				
SN80 M-7728 Stain	3.3	0%	0.0	0.00
Spray Paint Booth B-4				
NM5212-0090F Sealer/Topcoat	17.2	0%	0.0	0.00
Cleaner				
Best Grade Lacquer - Cleanup	0.6	21%	0.5	0.51
Worst Case Coating			0.51	0.51

METHODOLOGY

HAPS emission rate (tons/yr) = [Maximum Usage (lb/hr)] * [Weight % HAP] * [8760 hours/yr] * [1 ton/2000 lbs]

**Appendix A: Emission Calculations
Controlled Woodworking Operations - CWW**

Company Name: PW Products, LLC
Address City IN Zip: 1515 Leininger Ave., Elkhart, In 46517
Permit Number: 25038
Plt ID: 039-00658
Reviewer: Hannah Desrosiers
Date: 7/24/2007

Emission Unit Description	Emission Unit ID	Control Device Description	Control Device ID	Control Device Filter Area (ft2)	Air to Cloth Ratio	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	PM Emission Rate before Controls (lb/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
Wood Tech Belt Sander	BS1	Grizzly G1028Z/G1029	DC1	31	45	99.0%	0.001	1,400	1.20	5.26	0.012	0.053
Grizzly Spindle Sander	SS1	See DC1										
Powermatic Router	RT1	Grizzly G1028Z/G1029	DC2	31	45	99.0%	0.001	1,400	1.20	5.26	0.012	0.053
Jet Belt Sander	BS2	Grizzly G1030	DC3	62	37	99.0%	0.001	2,300	1.97	8.63	0.020	0.086
Omgaon Radial Arm Saw	RS1	Grizzly G1028Z/G1029	DC4	31	45	99.0%	0.001	1,400	1.20	5.26	0.012	0.053
Jet Router	RT2	Jet DC-1200	DC5	30	40	99.0%	0.001	1,200	1.03	4.51	0.010	0.045
Powermatic Panel Molder	PM1	Jet DC-1100A	DC6	30	36	99.0%	0.001	1,100	0.94	4.13	0.009	0.041
Surface Router	RT3	See DC6										
Timesavers Panel Sander	PS1	Coral	DC7	56	27	99.0%	0.001	1,550	1.33	5.82	0.013	0.058
Onsrud Router	RT4	Grizzly G1030	DC8	62	37	99.0%	0.001	2,300	1.97	8.63	0.0	0.086
Ritter Belt Sander	BS3	Grizzly G1028Z/G1029	DC9	31	45	99.0%	0.001	1,400	1.20	5.26	0.012	0.053
Multicam Saw Table	ST1	Grizzly G1030	DC10	62	37	99.0%	0.001	2,300	1.97	8.63	0.020	0.086
Northwood Table Router	RT5	Grizzly G1030	DC11	62	37	99.0%	0.001	2,300	1.97	8.63	0.020	0.086
Powermatic Table Saw	TS1	Grizzly G1028Z/G1029	DC12	31	45	99.0%	0.001	1,400	1.20	5.26	0.012	0.053
TOTALS									17.19	75.27	0.172	0.75

Methodology

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

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

Allowable Rate of Emissions

Process Rate (materials throughput) (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
1,136.83	0.568	2.81	12.30

Methodology

Allowable Emissions (lb/hr) = 4.10(Process Weight Rate)^{0.67}
 Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)*8760)/2000

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

Company Name: PW Products, LLC
Address City IN Zip: 1515 Leininger Ave., Elkhart, In 46517
Permit Number: 25038
Plt ID: 039-00658
Reviewer: Hannah Desrosiers
Date: 7/24/2007

Shaping/Grinding/Sanding

Process/Operation	Description	ID	Surface Thickness Removed (in)	Surface Width Removed (in)	Surface Distance (in/hr)	Material Loss (in ³ /hr)	Material Density (lb/in ³)	Material Loss (lb/hr)
Grizzly Vertical Sander	Verticle Sander	VS1	0.0625	2.000	40.0	5.000	0.023	0.115
Estimated Emissions (lb/hr)								0.115
Estimated Emissions (tons/yr)								0.50

METHODOLOGY

Material Loss (in³/hr) = Surface Thickness (in) * Surface Width (in) * Surface Distance (in/hr)

Material Density (lbs/in³) = Southern Pine, (40 lb/ft³)*(ft³/(12in)³)

Estimated Emissions (lb/hr) = Material Loss (in³/hr) * Material Density (lb/in³)

Estimated Emissions (tons/yr) = Material Loss (lbs/hr) * 8,760 (hrs/yr) * (1ton/2,000lbs)

Cutting

Process/Operation	Description	ID	Material Thickness (in)	Cutting Surface Thickness (in)	Process rate (in/hr)	Material Loss (in ³ /hr)	Material Density (lb/in ³)	Material Loss (lb/hr)
Jet Bandsaw	Vertical Bandsaw	BW1	1.5	0.0625	10.0	0.938	0.023	0.022
Protech Chop Saw	Chop Saw	CS1	1.5	0.125	12.0	2.250	0.023	0.052
Delta Chop Saw	Chop Saw	CS2	1.5	0.125	12.0	2.250	0.023	0.052
Powermatic Bandsaw	Vertical Bandsaw	BW2	1.5	0.0625	10.0	0.938	0.023	0.022
Powermatic Bandsaw	Vertical Bandsaw	BW3	1.5	0.0625	10.0	0.938	0.023	0.022
Dewalt Chop Saw	Chop Saw	CS3	1.5	0.125	12.0	2.250	0.023	0.052
Estimated Emissions (lb/hr)								0.220
Estimated Emissions (tons/yr)								0.963

METHODOLOGY

Same as Shaping/Grinding/Sanding Table

Drilling

Process/Operation	Description	ID	Material Thickness (in)	Drilling Area (in ²)	Drill rate (holes/hr)	Material Loss (in ³ /hr)	Material Density (lb/in ³)	Material Loss (lb/hr)
Jet Drill Press	Drill Press	DP1	1.5	0.050	10.00	0.75	0.023	0.017
Jet Drill Press	Drill Press	DP2	1.5	0.050	10.00	0.75	0.023	0.017
Jet Drill Press	Drill Press	DP3	1.5	0.050	10.00	0.75	0.023	0.017
Jet Drill Press	Drill Press	DP4	1.5	0.050	10.00	0.75	0.023	0.017
Estimated Emissions (lb/hr)								0.069
Estimated Emissions (tons/yr)								0.302

Summary

Total Estimated Uncontrolled Emissions (lb/hr)		0.404
Total Estimated Uncontrolled Emissions (tons/yr)		1.769

METHODOLOGY

Material Loss (in³/hr) = Material Thickness (in) * Drilling Area (in²) * Process rate (holes/hr)

Other equations the same as above.

Allowable Rate of Emissions

Process Rate (materials throughput) (lbs/hr)	Process Weight Rate (tons/hr)	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
126.32	0.063	0.64	2.82

Methodology

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

Allowable Emissions (tons/yr) = (Allowable Emissions (lb/hr)*8760)/2000