



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: March 8, 2006
RE: Indiana Dimension/Indiana Furniture Co. / 037-17504-00104
FROM: Paul Dubenetzky
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, 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 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) 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.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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.



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Indianapolis, Indiana 46204-2251
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PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

**Indiana Furniture Industries and Indiana Dimension
1224 N. Mill Street and 13th and Vine Street
Jasper, Indiana 47547**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 037-17504-00104	
Issued by: Original signed by Paul Dubenetzky, Assistant Commissioner Office of Air Quality	Issuance Date: March 8, 2006 Expiration Date: March 8, 2011

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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, A.3 and A.4 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 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary wood furniture manufacturing source.

Responsible Official:	Human Resources Director
Source Address:	1224 N. Mill Street and 13th and Vine Street, Jasper, Indiana 47547
Mailing Address:	P.O. Box 270, Jasper, Indiana 47547-0270
General Source Phone Number:	(812) - 482 - 5727
SIC Code:	2511
County Location:	Dubois
Source Location Status:	Nonattainment for PM _{2.5} Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Renewal Program Minor Source, under PSD Major Source, Section 112 of the Clean Air Act

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This Source Definition from the previous Title V (T 037-6036-00104) was incorporated into this permit as follows:

This wood furniture manufacturing source consists of two (2) plants:

- (a) Plant 1 Indiana Furniture is located at and 1224 N. Mill Street, Jasper, Indiana; and
- (b) Plant 2 Indiana Dimension is located at 13th and Vine Street Jasper, Indiana.

Since the two (2) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of the T 037-6036-00104 issued on December 17, 1998.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

Indiana Furniture Industries

- (a) Ten (10) wood desk surface coating booths, consisting of the following:
 - (1) One (1) downdraft booth, identified as emission EU 145, installed in 1998, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 12, capacity: 23 desks per hour.
 - (2) One (1) SAP booth, identified as EU 225, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 3, capacity: 23 desks per hour.

- (3) One (1) NGR booth, identified as EU 227, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 4, capacity: 23 desks per hour.
- (4) One (1) washcoat booth, identified as EU 228, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 5, capacity: 23 desks per hour.
- (5) One (1) wipestain booth, identified as EU 229, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 6, capacity: 23 desks per hour.
- (6) One (1) sealer booth, identified as EU 230, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 7, capacity: 23 desks per hour.
- (7) One (1) topcoat booth, identified as EU 232, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 8, capacity: 23 desks per hour.
- (8) One (1) topcoat booth, identified as EU 233, installed in 1998, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 9A, capacity: 23 desks per hour.
- (9) One (1) trim line booth, identified as EU 234, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 11, capacity: 23 desks per hour.
- (10) One (1) off line booth, identified as EU 438, installed in 1992, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 10, capacity: 23 desks per hour.
- (b) Woodworking operations, identified as WW1, equipped with a baghouse (# 102) for particulate control, exhausted at Stack 1, capacity: 7,000 pounds of wood per hour
- (c) One (1) natural gas fired boiler, identified as EU 520, installed in 1998, exhausted at Stack 15, rated at 10 million British thermal units.

Indiana Dimension Plant

- (d) One (1) wood chair finish booth, identified as EU 457, installed in 1992, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 16, capacity: 7.5 chairs per hour.
- (e) Woodworking operations, identified as WW2, equipped with a baghouse (# 254) for particulate control, exhausted at Stack 17, capacity: 1,003 pounds of wood per hour.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) One (1) natural gas fired boiler, identified as EU 460, installed in 1998, exhausted at Stack 18, rated at 6.7 million British thermal units per hour [326 IAC 6.5-1-2].
- (b) The following equipment related to manufacturing activities not resulting in the emission of

HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6.5-1-2].

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit 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.

B.3 Enforceability [326 IAC 2-7-7]

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.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(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 nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(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 the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(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 a responsible official 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.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report 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) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
Southwest Regional Office: 812-380-2305, Facsimile Number: 812-380-2304

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification, which shall be submitted by the Permittee, does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

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

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

- (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 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (1) A timely renewal application is one that is:
- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) 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.
- (2) If IDEM, OAQ, upon receiving a timely and complete 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
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 2-7 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.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 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
Indianapolis, Indiana 46204-2251
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [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 Part 70 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 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 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 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.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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
Indianapolis, Indiana 46204-2251

The application, which shall be submitted by the Permittee, does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][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. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

- (c) 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.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [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 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 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. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.3 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. 326 IAC 9-1-2 is not federally enforceable.

C.4 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). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted on October 15, 1997. The plan consists of:

- (a) applying water to the unpaved parking lot; and
- (b) posting six (6) five mile per hour speed limit signs with two (2) at each entry.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

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
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 the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 2-7-6(1)]

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
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 the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, 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 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification, which shall be submitted by the Permittee, does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emissions or emission units added through a source modification 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] [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

- (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 [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on April 4, 2005.
- (b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

- (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.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (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 and 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(3), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at the minimum the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The emission statement 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.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (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.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and 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
Indianapolis, Indiana 46204-2251
- (c) 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.

- (d) 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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Eleven (11) surface coating booths

Indiana Furniture Industries

- (a) Ten (10) wood desk surface coating booths, consisting of the following:
- (1) One (1) downdraft booth, identified as emission EU 145, installed in 1998, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 12, capacity: 23 desks per hour.
 - (2) One (1) SAP booth, identified as EU 225, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 3, capacity: 23 desks per hour.
 - (3) One (1) NGR booth, identified as EU 227, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 4, capacity: 23 desks per hour.
 - (4) One (1) washcoat booth, identified as EU 228, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 5, capacity: 23 desks per hour.
 - (5) One (1) wipestain booth, identified as EU 229, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 6, capacity: 23 desks per hour.
 - (6) One (1) sealer booth, identified as EU 230, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 7, capacity: 23 desks per hour.
 - (7) One (1) topcoat booth, identified as EU 232, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 8, capacity: 23 desks per hour.
 - (8) One (1) topcoat booth, identified as EU 233, installed in 1998, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 9A, capacity: 23 desks per hour.
 - (9) One (1) trim line booth, identified as EU 234, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 11, capacity: 23 desks per hour.
 - (10) One (1) off line booth, identified as EU 438, installed in 1992, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 10, capacity: 23 desks per hour.

Indiana Dimension Plant

- (d) One (1) wood chair finish booth, identified as EU 457, installed in 1992, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 16, capacity: 7.5 chairs per hour.

(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 2-7-5(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 in the surface coating booths identified as, EU 145, 438, 457 and 233 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 Matter Limitation (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2 (a)(Particulate emissions for Steam generators, asphalt plants, grain elevators, foundries mineral aggregates) (formerly 326 IAC 6-1-2(a)) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the eleven (11) surface coating spray booths, identified as EU 145, 225, 227, 228, 229, 230, 232, 233, 234, 438 and 457 shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

There are no compliance determination requirements applicable to this source.

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

D.1.4 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks 3, 4, 5, 6, 7, 8, 9A, 10, 11, 12, and 16 while one or more of the booths are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C -

Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

D.1.5 Record Keeping Requirements

To document compliance with Condition D.1.4, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

D.1.6 General Provisions Relating to NESHAP JJ [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.809, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in Table 1 of 40 CFR Part 63, Subpart JJ in accordance with the schedule in 40 CFR 63 Subpart JJ.

D.1.7 NESHAP JJ Requirements [40 CFR Part 63, Subpart JJ]

Pursuant to CFR Part 63, Subpart JJ, the Permittee shall comply with the provisions of 40 CFR Part 63.800, the one (1) wood chair finish booth, identified as EU 457, the one (1) off line booth, identified as EU 438, the one (1) trim line booth, identified as EU 234, the one (1) topcoat booth, identified as EU 233, the one (1) topcoat booth, identified as EU 232, the one (1) sealer booth, identified as EU 230, the one (1) wipestain booth, identified as EU 229, the one (1) washcoat booth, identified as EU 228, the one (1) NGR booth, identified as EU 227, the one (1) SAP booth, identified as EU 225 and the one (1) downdraft booth, identified as emission EU 145, as specified as follows:

§ 63.800 Applicability.

(a) The affected source to which this subpart applies is each facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR part 63, subpart A, §63.2. The owner or operator of a source that meets the definition for an incidental wood furniture manufacturer shall maintain purchase or usage records demonstrating that the source meets the definition in §63.801 of this subpart, but the source shall not be subject to any other provisions of this subpart.

(d) Owners or operators of affected sources shall also comply with the requirements of subpart A of this part (General Provisions), according to the applicability of subpart A to such sources, as identified in Table 1 of this subpart.

(e) The compliance date for existing affected sources that emit less than 50 tons per year of HAP in 1996 is December 7, 1998. The compliance date for existing affected sources that emit 50 tons or more of hazardous air pollutants in 1996 is November 21, 1997. The owner or operator of an existing area source that increases its emissions of (or its potential to emit) HAP such that the source becomes a major source that is subject to this subpart shall comply with this subpart one year after becoming a major source.

§ 63.801 Definitions.

(a) All terms used in this subpart that are not defined below have the meaning given to them in the CAA and in subpart A (General Provisions) of this part.

Adhesive means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. Under this subpart, adhesives shall not be considered coatings or finishing materials. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative.

Aerosol adhesive means an adhesive that is dispensed from a pressurized container as a suspension of fine solid or liquid particles in gas.

Affected source means a wood furniture manufacturing facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR part 63.2, excluding sources that meet the criteria established in §63.800(a), (b) and (c) of this subpart.

Alternative method means any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for a determination of compliance.

As applied means the HAP and solids content of the coating or contact adhesive that is actually used for coating or gluing the substrate. It includes the contribution of materials used for in-house dilution of the coating or contact adhesive.

Basecoat means a coat of colored material, usually opaque, that is applied before graining inks, glazing coats, or other opaque finishing materials, and is usually topcoated for protection.

Baseline conditions means the conditions that exist prior to an affected source implementing controls, such as a control system.

Building enclosure means a building housing a process that meets the requirements of a temporary total enclosure. The EPA Method 204E is used to identify all emission points from the building enclosure and to determine which emission points must be tested. For additional information see *Guidelines for Determining Capture Efficiency*, January 1994. Docket No. A-93-10, Item No. IV-B-1.

Capture device means a hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.

Capture efficiency means the fraction of all organic vapors generated by a process that are directed to a control device.

Certified product data sheet (CPDS) means documentation furnished by coating or adhesive suppliers or an outside laboratory that provides:

- (1) The VHAP content of a finishing material, contact adhesive, or solvent, by percent weight, measured using the EPA Method 311 (as promulgated in this subpart), or an equivalent or alternative method (or formulation data if the coating meets the criteria specified in §63.805(a));
- (2) The solids content of a finishing material or contact adhesive by percent weight, determined using data from the EPA Method 24, or an alternative or equivalent method (or formulation data if the coating meets the criteria specified in §63.805 (a)); and
- (3) The density, measured by EPA Method 24 or an alternative or equivalent method. Therefore, the reportable VHAP content shall represent the maximum aggregate emissions potential of the finishing material, adhesive, or solvent in concentrations greater than or equal to 1.0 percent by weight or 0.1 percent for VHAP that are carcinogens, as defined by the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR part 1910), as formulated. Only VHAP present in concentrations greater than or equal to 1.0 percent by weight, or 0.1 percent for VHAP that are carcinogens, must be reported on the CPDS. The purpose of the CPDS is to assist the affected source in demonstrating compliance with the emission limitations presented in §63.802.

Note: Because the optimum analytical conditions under EPA Method 311 vary by coating, the coating or adhesive supplier may also choose to include on the CPDS the optimum analytical conditions for analysis of the coating, adhesive, or solvent using EPA Method 311. Such information may include, but not be

limited to, separation column, oven temperature, carrier gas, injection port temperature, extraction solvent, and internal standard.)

Cleaning operations means operations in which organic HAP solvent is used to remove coating materials or adhesives from equipment used in wood furniture manufacturing operations.

Coating means a protective, decorative, or functional film applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, enamels, inks, and temporary protective coatings. Aerosol spray paints used for touch-up and repair are not considered coatings under this subpart.

Coating application station means the part of a coating operation where the coating is applied, e.g., a spray booth.

Coating operation means those activities in which a coating is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

Coating solids (or solids) means the part of the coating which remains after the coating is dried or cured; solids content is determined using data from the EPA Method 24, or an equivalent or alternative method.

Compliant coating/contact adhesive means a finishing material, contact adhesive, or strippable booth coating that meets the emission limits specified in Table 3 of this subpart.

Contact adhesive means an adhesive that is applied to two substrates, dried, and mated under only enough pressure to result in good contact. The bond is immediate and sufficiently strong to hold pieces together without further clamping, pressure, or airing.

Continuous coater means a finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor. Finishing materials that are not transferred to the part are recycled to a reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roll coating, dip coating, and flow coating.

Continuous compliance means that the affected source is meeting the emission limitations and other requirements of the rule at all times and is fulfilling all monitoring and recordkeeping provisions of the rule in order to demonstrate compliance.

Control device means any equipment that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Includes, but is not limited to, incinerators, carbon adsorbers, and condensers.

Control device efficiency means the ratio of the pollutant released by a control device and the pollutant introduced to the control device.

Control system means the combination of capture and control devices used to reduce emissions to the atmosphere.

Conventional air spray means a spray coating method in which the coating is atomized by mixing it with compressed air and applied at an air pressure greater than 10 pounds per square inch (gauge) at the point of atomization. Airless and air assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air. Electrostatic spray technology is also not considered conventional air spray because an electrostatic charge is employed to attract the coating to the workpiece.

Data quality objective (DQO) approach means a set of approval criteria that must be met so that data from an alternative test method can be used in determining the capture efficiency of a control system. For additional information, see *Guidelines for Determining Capture Efficiency*, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Day means a period of 24 consecutive hours beginning at midnight local time, or beginning at a time consistent with a facility's operating schedule.

Disposed offsite means sending used organic HAP solvent or coatings outside of the facility boundaries for disposal.

Emission means the release or discharge, whether directly or indirectly, of HAP into the ambient air.

Enamel means a coat of colored material, usually opaque, that is applied as a protective topcoat over a basecoat, primer, or previously applied enamel coats. In some cases, another finishing material may be applied as a topcoat over the enamel.

Equipment leak means emissions of VHAP from pumps, valves, flanges, or other equipment used to transfer or apply coatings, adhesives, or organic HAP solvents.

Equivalent method means any method of sampling and analyzing for an air pollutant that has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specific conditions.

Finishing material means a coating used in the wood furniture industry. Such materials include, but are not limited to, stains, basecoats, washcoats, enamels, sealers, and topcoats.

Finishing operation means those operations in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

Foam adhesive means a contact adhesive used for gluing foam to fabric, foam to foam, and fabric to wood.

Gluing operation means those operations in which adhesives are used to join components, for example, to apply a laminate to a wood substrate or foam to fabric.

Incidental wood furniture manufacturer means a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.

Incinerator means, for the purposes of this industry, an enclosed combustion device that thermally oxidizes volatile organic compounds to CO and CO₂. This term does not include devices that burn municipal or hazardous waste material.

Janitorial maintenance means the upkeep of equipment or building structures that is not directly related to the manufacturing process, for example, cleaning of restroom facilities.

Lower confidence limit (LCL) approach means a set of approval criteria that must be met so that data from an alternative test method can be used in determining the capture efficiency of a control system. For additional information, see *Guidelines for Determining Capture Efficiency*, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Material safety data sheet (MSDS) means the documentation required for hazardous chemicals by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR Part 1910) for a solvent, cleaning material, contact adhesive, coating, or other material that identifies select reportable hazardous ingredients of the material, safety and health considerations, and handling procedures.

Noncompliant coating/contact adhesive means a finishing material, contact adhesive, or strippable booth coating that has a VHAP content (VOC content for the strippable booth coating) greater than the emission limitation presented in Table 3 of this subpart.

Nonporous substrate means a surface that is impermeable to liquids. Examples include metal, rigid plastic, flexible vinyl, and rubber.

Normally closed container means a container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

Operating parameter value means a minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limit.

Organic HAP solvent means a HAP that is a volatile organic liquid used for dissolving or dispersing constituents in a coating or contact adhesive, adjusting the viscosity of a coating or contact adhesive, or cleaning equipment. When used in a coating or contact adhesive, the organic HAP solvent evaporates during drying and does not become a part of the dried film.

Overall control efficiency means the efficiency of a control system, calculated as the product of the capture and control device efficiencies, expressed as a percentage.

Permanent total enclosure means a permanently installed enclosure that completely surrounds a source of emissions such that all emissions are captured and contained for discharge through a control device. For additional information, see *Guidelines for Determining Capture Efficiency*, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Recycled onsite means the reuse of an organic HAP solvent in a process other than cleaning or washoff.

Reference method means any method of sampling and analyzing for an air pollutant that is published in Appendix A of 40 CFR part 60.

Research or laboratory facility means any stationary source whose primary purpose is to conduct research and development to develop new processes and products where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.

Responsible official has the meaning given to it in 40 CFR part 70, State Operating Permit Programs (Title V permits).

Sealer means a finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Special purpose finishing materials that are used in some finishing systems to optimize aesthetics are not sealers.

Solvent means a liquid used in a coating or contact adhesive to dissolve or disperse constituents and/or to adjust viscosity. It evaporates during drying and does not become a part of the dried film.

Stain means any color coat having a solids content by weight of no more than 8.0 percent that is applied in single or multiple coats directly to the substrate. It includes, but is not limited to, nongrain raising stains, equalizer stains, prestains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

Storage containers means vessels or tanks, including mix equipment, used to hold finishing, gluing, cleaning, or washoff materials.

Strippable spray booth material means a coating that:

- (1) Is applied to a spray booth wall to provide a protective film to receive over spray during finishing operations;
- (2) That is subsequently peeled off and disposed; and

(3) By achieving (1) and (2) of this definition reduces or eliminates the need to use organic HAP solvents to clean spray booth walls.

Substrate means the surface onto which a coating or contact adhesive is applied (or into which a coating or contact adhesive is impregnated).

Temporary total enclosure means an enclosure that meets the requirements of §63.805(e)(1) (i) through (iv) and is not permanent, but constructed only to measure the capture efficiency of pollutants emitted from a given source. Additionally, any exhaust point from the enclosure shall be at least four equivalent duct or hood diameters from each natural draft opening. For additional information, see *Guidelines for Determining Capture Efficiency*, January 1994. (Docket No. A-93-10, Item No. IV-B-1).

Thinner means a volatile liquid that is used to dilute coatings or contact adhesives (to reduce viscosity, color strength, and solids, or to modify drying conditions).

Topcoat means the last film-building finishing material that is applied in a finishing system.

Touchup and repair means the application of finishing materials to cover minor finishing imperfections.

VHAP means any volatile hazardous air pollutant listed in Table 2 to Subpart JJ.

VHAP of potential concern means any VHAP from the list in table 6 of this subpart.

Volatile organic compound (VOC) means any organic compound which participates in atmospheric photochemical reactions, that is, any organic compound other than those which the Administrator designates as having negligible photochemical reactivity. A VOC may be measured by a reference method, an equivalent method, an alternative method, or by procedures specified under any rule. A reference method, an equivalent method, or an alternative method, however, may also measure nonreactive organic compounds. In such cases, the owner or operator may exclude the nonreactive organic compounds when determining compliance with a standard. For a list of compounds that the Administrator has designated as having negligible photochemical reactivity, refer to 40 CFR part 51.10.

Washcoat means a transparent special purpose finishing material having a solids content by weight of 12.0 percent by weight or less. Washcoats are applied over initial stains to protect, to control color, and to stiffen the wood fibers in order to aid sanding.

Washoff operations means those operations in which organic HAP solvent is used to remove coating from wood furniture or a wood furniture component.

Wood furniture means any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

Wood furniture component means any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops. However, foam seat cushions manufactured and fabricated at a facility that does not engage in any other wood furniture or wood furniture component manufacturing operation are excluded from this definition.

Wood furniture manufacturing operations means the finishing, gluing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

(b) The nomenclature used in this subpart has the following meaning:

(1) A_k = the area of each natural draft opening (k) in a total enclosure, in square meters.

(2) C_c =the VHAP content of a finishing material (c), in kilograms of volatile hazardous air pollutants per kilogram of coating solids (kg VHAP/kg solids), as supplied. Also given in pounds of volatile hazardous air pollutants per pound of coating solids (lb VHAP/lb solids).

(3) C_{aj} =the concentration of VHAP in gas stream (j) exiting the control device, in parts per million by volume.

(4) C_{bi} =the concentration of VHAP in gas stream (i) entering the control device, in parts per million by volume.

(5) C_{di} =the concentration of VHAP in gas stream (i) entering the control device from the affected source, in parts per million by volume.

(6) C_{rk} =the concentration of VHAP in uncontrolled gas stream (k) emitted directly to the atmosphere from the affected source, in parts per million by volume.

(7) E=the emission limit achieved by an emission point or a set of emission points, in kg VHAP/kg solids (lb VHAP/lb solids).

(8) F=the control device efficiency, expressed as a fraction.

(9) FV=the average inward face velocity across all natural draft openings in a total enclosure, in meters per hour.

(10) G=the VHAP content of a contact adhesive, in kg VHAP/kg solids (lb VHAP/lb solids), as applied.

(11) M=the mass of solids in finishing material used monthly, kg solids/month (lb solids/month).

(12) N=the capture efficiency, expressed as a fraction.

(13) Q_{aj} =the volumetric flow rate of gas stream (j) exiting the control device, in dry standard cubic meters per hour.

(14) Q_{bi} =the volumetric flow rate of gas stream (i) entering the control device, in dry standard cubic meters per hour.

(15) Q_{di} =the volumetric flow rate of gas stream (i) entering the control device from the emission point, in dry standard cubic meters per hour.

(16) Q_{rk} =the volumetric flow rate of uncontrolled gas stream (k) emitted directly to the atmosphere from the emission point, in dry standard cubic meters per hour.

(17) Q_{ini} =the volumetric flow rate of gas stream (i) entering the total enclosure through a forced makeup air duct, in standard cubic meters per hour (wet basis).

(18) Q_{outj} =the volumetric flow rate of gas stream (j) exiting the total enclosure through an exhaust duct or hood, in standard cubic meters per hour (wet basis).

(19) R=the overall efficiency of the control system, expressed as a percentage.

(20) S=the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials.

(21) W=the amount of solvent, in kilograms (pounds), added to finishing materials during the monthly averaging period.

(22) ac=after the control system is installed and operated.

(23) bc=before control.

[60 FR 62936, Dec. 7, 1995, as amended at 62 FR 30260, June 3, 1997; 62 FR 31363, June 9, 1997; 63 FR 71380, Dec. 28, 1998]

§ 63.802 Emission limits.

(a) Each owner or operator of an existing affected source subject to this subpart shall:

(1) Limit VHAP emissions from finishing operations by meeting the emission limitations for existing sources presented in Table 3 of this subpart, using any of the compliance methods in §63.804(a). To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the owner or operator of the affected source shall use the methods presented in §63.803(l)(2) for determining styrene and formaldehyde usage.

(3) Limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied.

§ 63.803 Work practice standards.

(a) *Work practice implementation plan.* (1) Each owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture operation manufacturing operation and addresses each of the work practice standards presented in paragraphs (b) through (l) of this section. The plan shall be developed no more than 60 days after the compliance date.

(2) The written work practice implementation plan shall be available for inspection by the Administrator (or delegated State, local, or Tribal authority) upon request. If the Administrator (or delegated State, local, or Tribal authority) determines that the work practice implementation plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator (or delegated State, local, or Tribal authority) may require the affected source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.

(3) The inspection and maintenance plan required by paragraph (c) of this section and the formulation assessment plan for finishing operations required by paragraph (l) of this section are also reviewable by the Administrator (or delegated State, local, or Tribal authority).

(b) *Operator training course.* Each owner or operator of an affected source shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of this subpart. All new personnel, those hired after the compliance date of the standard, shall be trained upon hiring. All existing personnel, those hired before the compliance date of the standard, shall be trained within six months of the compliance date of the standard. All personnel shall be given refresher training annually. The affected source shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

(1) A list of all current personnel by name and job description that are required to be trained;

(2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;

(3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and

(4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

(c) *Inspection and maintenance plan.* Each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:

(1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;

(2) An inspection schedule;

(3) Methods for documenting the date and results of each inspection and any repairs that were made;

(4) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:

(i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and

(ii) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.

(d) *Cleaning and washoff solvent accounting system.* Each owner or operator of an affected source shall develop an organic HAP solvent accounting form to record:

(1) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of this subpart;

(2) The number of pieces washed off, and the reason for the washoff; and

(3) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.

(e) *Chemical composition of cleaning and washoff solvents.* Each owner or operator of an affected source shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 to this subpart, in concentrations subject to MSDS reporting as required by OSHA.

(f) *Spray booth cleaning.* Each owner or operator of an affected source shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

(g) *Storage requirements.* Each owner or operator of an affected source shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.

(h) *Application equipment requirements.* Each owner or operator of an affected source shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:

(1) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;

(2) For touchup and repair under the following conditions:

(i) The touchup and repair occurs after completion of the finishing operation; or

(ii) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.

(3) When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;

(4) When emissions from the finishing application station are directed to a control device;

(5) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or

(6) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology.

The affected source shall demonstrate technical or economic infeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the affected source's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the affected source's claim of technical or economic infeasibility:

(i) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or

(ii) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.

(i) *Line cleaning.* Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

(j) *Gun cleaning.* Each owner or operator of an affected source shall collect all organic HAP solvent used to clean spray guns into a normally closed container.

(k) *Washoff operations.* Each owner or operator of an affected source shall control emissions from washoff operations by:

(1) Using normally closed tanks for washoff; and

(2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.

(l) *Formulation assessment plan for finishing operations.* Each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:

(1) Identifies VHAP from the list presented in Table 5 of this subpart that are being used in finishing operations by the affected source;

(2) Establishes a baseline level of usage by the affected source, for each VHAP identified in paragraph (l)(1) of this section. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified in paragraph (l)(1) of this section. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16. Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the equation in §63.805 (d) or (e).

(3) Tracks the annual usage of each VHAP identified in (l)(1) by the affected source that is present in amounts subject to MSDS reporting as required by OSHA.

(4) If, after November 1998, the annual usage of the VHAP identified in paragraph (l)(1) exceeds its baseline level, then the owner or operator of the affected source shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:

- (i) The exceedance is no more than 15.0 percent above the baseline level;
- (ii) Usage of the VHAP is below the *de minimis* level presented in Table 5 of this subpart for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in §63.805 (d) or (e);
- (iii) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
- (iv) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.

(5) If none of the above explanations are the reason for the increase, the owner or operator shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

(6) If, after November 1998, an affected source uses a VHAP of potential concern listed in table 6 of this subpart for which a baseline level has not been previously established, then the baseline level shall be established as the *de minimis* level provided in that same table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in this paragraph that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the *de minimis* level listed in table 6 of this subpart for that chemical, then the affected source shall provide an explanation to the permitting authority that documents the reason for the exceedance of the *de minimis* level. If the explanation is not one of those listed in paragraphs (l)(4)(i) through (l)(4)(iv) of this section, the affected source shall follow the procedures in paragraph (l)(5) of this section.

§ 63.804 Compliance procedures and monitoring requirements.

(a) The owner or operator of an existing affected source subject to §63.802(a)(1) shall comply with those provisions using any of the methods presented in §63.804 (a)(1) through (a)(4).

(1) Calculate the average VHAP content for all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 1.0;

$$E = \frac{(M_{c1} C_{c1} + M_{c2} C_{c2} + \dots + M_{cn} C_{cn} + S_1 W_1 + S_2 W_2 + \dots + S_n W_n)}{(M_{c1} + M_{c2} + \dots + M_{cn})} \quad \text{Equation 1}$$

(2) Use compliant finishing materials according to the following criteria:

- (i) Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;
- (ii) Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 kg

VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner; and

(iii) Demonstrate that each washcoat, basecoat, and enamel that is formulated at the affected source is formulated using a finishing material containing no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent VHAP by weight.

(f) *Initial compliance.* (1) Owners or operators of an affected source subject to the provisions of §63.802 (a)(1) or (b)(1) that comply through the procedures established in §63.804 (a)(1) or (d)(1) shall submit the results of the averaging calculation (Equation 1) for the first month with the initial compliance status report required by §63.807(b). The first month's calculation shall include data for the entire month in which the compliance date falls. For example, if the source's compliance date is November 21, 1997, the averaging calculation shall include data from November 1, 1997 to November 30, 1997.

(2) Owners or operators of an affected source subject to the provisions of §63.802 (a)(1) or (b)(1) that comply through the procedures established in §63.804 (a)(2) or (d)(2) shall submit an initial compliance status report, as required by §63.807(b), stating that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, are being used by the affected source.

(7) Owners or operators of an affected source subject to the provisions of §63.802 (a)(3) or (b)(3) shall submit an initial compliance status report, as required by §63.807(b), stating that compliant strippable spray booth coatings are being used by the affected source.

(8) Owners or operators of an affected source subject to the work practice standards in §63.803 shall submit an initial compliance status report, as required by §63.807(b), stating that the work practice implementation plan has been developed and procedures have been established for implementing the provisions of the plan.

(g) *Continuous compliance demonstrations.* (1) Owners or operators of an affected source subject to the provisions of §63.802 (a)(1) or (b)(1) that comply through the procedures established in §63.804 (a)(1) or (d)(1) shall demonstrate continuous compliance by submitting the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report required by §63.807(c).

(i) The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0 for existing sources or 0.8 for new sources. An affected source is in violation of the standard if E is greater than 1.0 for existing sources or 0.8 for new sources for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(2) Owners or operators of an affected source subject to the provisions of §63.802 (a)(1) or (b)(1) that comply through the procedures established in §63.804 (a)(2) or (d)(2) shall demonstrate continuous compliance by using compliant coatings and thinners, maintaining records that demonstrate the coatings and thinners are compliant, and submitting a compliance certification with the semiannual report required by §63.807(c).

(i) The compliance certification shall state that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(7) Owners or operators of an affected source subject to the provisions of §63.802 (a)(3) or (b)(3) shall submit a compliance certification with the semiannual report required by §63.807(c).

(i) The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

(8) Owners or operators of an affected source subject to the work practice standards in §63.803 shall submit a compliance certification with the semiannual report required by §63.807(c).

(i) The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that an owner or operator is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation.

(ii) The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source.

§ 63.805 Performance test methods.

(a) The EPA Method 311 of appendix A of part 63 shall be used in conjunction with formulation data to determine the VHAP content of the liquid coating. Formulation data shall be used to identify VHAP present in the coating. The EPA Method 311 shall then be used to quantify those VHAP identified through formulation data. The EPA Method 311 shall not be used to quantify HAP such as styrene and formaldehyde that are emitted during the cure. The EPA Method 24 (40 CFR part 60, appendix A) shall be used to determine the solids content by weight and the density of coatings. If it is demonstrated to the satisfaction of the Administrator that a coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted. The owner or operator of an affected source may request approval from the Administrator to use an alternative method for determining the VHAP content of the coating. In the event of any inconsistency between the EPA Method 24 or Method 311 test data and a facility's formulation data, that is, if the EPA Method 24/311 value is higher, the EPA Method 24/311 test shall govern unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were correct. Sampling procedures shall follow the guidelines presented in "Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis by Reference Method 24 and Reference Method 24A," EPA-340/1-91-010. (Docket No. A-93-10, Item No. IV-A-1).

§ 63.806 Recordkeeping requirements.

(a) The owner or operator of an affected source subject to this subpart shall fulfill all recordkeeping requirements of §63.10 of subpart A, according to the applicability criteria in §63.800(d) of this subpart.

(b) The owner or operator of an affected source subject to the emission limits in §63.802 of this subpart shall maintain records of the following:

(1) A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in §63.802; and

(2) The VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each finishing material and contact adhesive subject to the emission limits in §63.802; and

(3) The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating subject to the emission limits in §63.802 (a)(3) or (b)(3).

(c) The owner or operator of an affected source following the compliance method in §63.804 (a)(1) or (d)(1) shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1.

(e) The owner or operator of an affected source subject to the work practice standards in §63.803 of this subpart shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:

(1) Records demonstrating that the operator training program required by §63.803(b) is in place;

(2) Records collected in accordance with the inspection and maintenance plan required by §63.803(c);

(3) Records associated with the cleaning solvent accounting system required by §63.803(d);

(4) Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by §63.803(h)(5).

(5) Records associated with the formulation assessment plan required by §63.803(l); and

(6) Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.

(i) The owner or operator of an affected source shall maintain records of all other information submitted with the compliance status report required by §63.9(h) and §63.807(b) and the semiannual reports required by §63.807(c).

(j) The owner or operator of an affected source shall maintain all records in accordance with the requirements of §63.10(b)(1).

§ 63.807 Reporting requirements.

(a) The owner or operator of an affected source subject to this subpart shall fulfill all reporting requirements of §63.7 through §63.10 of subpart A (General Provisions) according to the applicability criteria in §63.800(d) of this subpart.

(b) The owner or operator of an affected source demonstrating compliance in accordance with §63.804(f) (1), (2), (3), (5), (7) and (8) shall submit the compliance status report required by §63.9(h) of subpart A (General Provisions) no later than 60 days after the compliance date. The report shall include the information required by §63.804(f) (1), (2), (3), (5), (7), and (8) of this subpart.

(c) The owner or operator of an affected source demonstrating compliance in accordance with §63.804(g) (1), (2), (3), (5), (7), and (8) shall submit a report covering the previous 6 months of wood furniture manufacturing operations:

(1) The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.

(2) Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.

(3) The semiannual reports shall include the information required by §63.804(g) (1), (2), (3), (5), (7), and (8), a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance.

(4) The frequency of the reports required by paragraph (c) of this section shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.

(e) The owner or operator of an affected source required to provide a written notification under §63.803(1)(4) shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

§ 63.808 Implementation and enforcement.

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or Tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.

(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (5) of this section.

(1) Approval of alternatives to the requirements in §§63.800, 63.802, and 63.803(a)(1), (b), (c) introductory text, and (d) through (l).

(2) Approval of alternatives to the monitoring and compliance requirements in §§63.804(f)(4)(iv)(D) and (E), 63.804(g)(4)(iii)(C), 63.804(g)(4)(vi), and 63.804(g)(6)(vi).

(3) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart, as well as approval of any alternatives to the specific test methods under §§63.805(a), 63.805(d)(2)(v), and 63.805(e)(1).

(4) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.

(5) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

Table 2 to Subpart JJ of Part 63—List of Volatile Hazardous Air Pollutants

Chemical name	CAS No.
Acetaldehyde.....	75070
Acetamide.....	60355
Acetonitrile.....	75058
Acetophenone.....	98862
2-Acetylaminofluorine.....	53963
Acrolein.....	107028
Acrylamide.....	79061
Acrylic acid.....	79107
Acrylonitrile.....	107131
Allyl chloride.....	107051
4-Aminobiphenyl.....	92671

Aniline.....	62533
o-Anisidine.....	90040
Benzene.....	71432
Benzidine.....	92875
Benzotrichloride.....	98077
Benzyl chloride.....	100447
Biphenyl.....	92524
Bis (2-ethylhexyl) phthalate (DEHP).....	117817
Bis (chloromethyl) ether.....	542881
Bromoform.....	75252
1,3-Butadiene.....	106990
Carbon disulfide.....	75150
Carbon tetrachloride.....	56235
Carbonyl sulfide.....	463581
Catechol.....	120809
Chloroacetic acid.....	79118
2-Chloroacetophenone.....	532274
Chlorobenzene.....	108907
Chloroform.....	67663
Chloromethyl methyl ether.....	107302
Chloroprene.....	126998
Cresols (isomers and mixture).....	1319773
o-Cresol.....	95487
m-Cresol.....	108394
p-Cresol.....	106445
Cumene.....	98828
2,4-D (2,4-Dichlorophenoxyacetic acid, including salts and esters).....	94757
DDE (1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene).....	72559
Diazomethane.....	334883
Dibenzofuran.....	132649
1,2-Dibromo-3-chloropropane.....	96128
Dibutylphthalate.....	84742
1,4-Dichlorobenzene.....	106467
3,3[prime]-Dichlorobenzidine.....	91941
Dichloroethyl ether (Bis(2-chloroethyl)ether).....	111444
1,3-Dichloropropene.....	542756
Diethanolamine.....	111422
N,N-Dimethylaniline.....	121697
Diethyl sulfate.....	64675
3,3[prime]-Dimethoxybenzidine.....	119904
4-Dimethylaminoazobenzene.....	60117
3,3[prime]-Dimethylbenzidine.....	119937
Dimethylcarbamoyl chloride.....	79447
N,N-Dimethylformamide.....	68122
1,1-Dimethylhydrazine.....	57147
Dimethyl phthalate.....	131113
Dimethyl sulfate.....	77781
4,6-Dinitro-o-cresol, and salts.....	534521
2,4-Dinitrophenol.....	51285
2,4-Dinitrotoluene.....	121142
1,4-Dioxane (1,4-Diethyleneoxide).....	123911
1,2-Diphenylhydrazine.....	122667
Epichlorohydrin (1-Chloro-2,3-epoxypropane).....	106898
1,2-Epoxybutane.....	106887
Ethyl acrylate.....	140885
Ethylbenzene.....	100414
Ethyl carbamate (Urethane).....	51796
Ethyl chloride (Chloroethane).....	75003

Ethylene dibromide (Dibromoethane).....	106934
Ethylene dichloride (1,2-Dichloroethane).....	107062
Ethylene glycol.....	107211
Ethylene oxide.....	75218
Ethylenethiourea.....	96457
Ethylidene dichloride (1,1-Dichloroethane).....	75343
Formaldehyde.....	50000
Glycoethers a.....
Hexachlorobenzene.....	118741
Hexachloro-1,3-butadiene.....	87683
Hexachloroethane.....	67721
Hexamethylene-1,6-diisocyanate.....	822060
Hexamethylphosphoramide.....	680319
Hexane.....	110543
Hydrazine.....	302012
Hydroquinone.....	123319
Isophorone.....	78591
Maleic anhydride.....	108316
Methanol.....	67561
Methyl bromide (Bromomethane).....	74839
Methyl chloride (Chloromethane).....	74873
Methyl chloroform (1,1,1-Trichloroethane).....	71556
Methyl ethyl ketone (2-Butanone).....	78933
Methylhydrazine.....	60344
Methyl iodide (Iodomethane).....	74884
Methyl isobutyl ketone (Hexone).....	108101
Methyl isocyanate.....	624839
Methyl methacrylate.....	80626
Methyl tert-butyl ether.....	1634044
4,4[prime]-Methylenebis (2-chloroaniline).....	101144
Methylene chloride (Dichloromethane).....	75092
4,4[prime]-Methylenediphenyl diisocyanate (MDI).....	101688
4,4[prime]-Methylenedianiline.....	101779
Naphthalene.....	91203
Nitrobenzene.....	98953
4-Nitrobiphenyl.....	92933
4-Nitrophenol.....	100027
2-Nitropropane.....	79469
N-Nitroso-N-methylurea.....	684935
N-Nitrosodimethylamine.....	62759
N-Nitrosomorpholine.....	59892
Phenol.....	108952
p-Phenylenediamine.....	106503
Phosgene.....	75445
Phthalic anhydride.....	85449
Polychlorinated biphenyls (Aroclors).....	1336363
Polycyclic Organic Matter b.....
1,3-Propane sultone.....	1120714
beta-Propiolactone.....	57578
Propionaldehyde.....	123386
Propoxur (Baygon).....	114261
Propylene dichloride (1,2-Dichloropropane).....	78875
Propylene oxide.....	75569
1,2-Propylenimine (2-Methyl aziridine).....	75558
Quinone.....	106514
Styrene.....	100425
Styrene oxide.....	96093
2,3,7,8-Tetrachlorodibenzo-p-dioxin.....	1746016
1,1,2,2-Tetrachloroethane.....	79345

Tetrachloroethylene (Perchloroethylene).....	127184
Toluene.....	108883
2,4-Toluenediamine.....	95807
Toluene-2,4-diisocyanate.....	584849
o-Toluidine.....	95534
1,2,4-Trichlorobenzene.....	120821
1,1,2-Trichloroethane.....	79005
Trichloroethylene.....	79016
2,4,5-Trichlorophenol.....	95954
2,4,6-Trichlorophenol.....	88062
Triethylamine.....	121448
Trifluralin.....	1582098
2,2,4-Trimethylpentane.....	540841
Vinyl acetate.....	108054
Vinyl bromide.....	593602
Vinyl chloride.....	75014
Vinylidene chloride (1,1-Dichloroethylene).....	75354
Xylenes (isomers and mixture).....	1330207
o-Xylene.....	95476
m-Xylene.....	108383
p-Xylene.....	106423

- a Includes mono- and di-ethers of ethylene glycol, diethylene glycols and triethylene glycol; R-(OCH2CH2) RR-OR where:
 n = 1, 2, or 3,
 R = alkyl or aryl groups
 R[prime]= R, H, or groups which, when removed, yield glycol ethers with the structure: R-(OCH2CH2)n_OH. Polymers are excluded from the glycol category.
- b Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

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Table 3 to Subpart JJ of Part 63—Summary of Emission Limits

Emission point	Existing source	New source
Finishing Operations:		
(a) Achieve a weighted average VHAP content across all coatings (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied).....	a 1.0	a 0.8
(b) Use compliant finishing materials (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied):		
_stains.....	a 1.0	a 1.0
_washcoats.....	a,b 1.0	a,b 0.8
_sealers.....	a 1.0	a 0.8
_topcoats.....	a 1.0	a 0.8
_basecoats.....	a,b 1.0	a,b 0.8
_enamels.....	a,b 1.0	a,b 0.8
_thinners (maximum percent VHAP allowable); or.....	10.0	10.0
or.....		

(d) Use any combination of (a), (b), and (c)	1.0	0.8
Cleaning Operations:		
Strippable spray booth material (maximum VOC content, kg VOC/kg solids [1b VOC/lb solids]).....	0.8	0.8

-
- a The limits refer to the VHAP content of the coating, as applied.
 - b Washcoats, basecoats, and enamels must comply with the limits presented in this table if they are purchased premade, that is, if they are not formulated onsite by thinning other finishing materials. If they are formulated onsite, they must be formulated using compliant finishing materials, i.e., those that meet the limits specified in this table, and thinners containing no more than 3.0 percent VHAP by weight.
 - d There is no limit on the VHAP content of these adhesives.

[60 FR 62936, Dec. 7, 1995, as amended at 62 FR 30260, June 3, 1997]

Table 4 to Subpart JJ of Part 63—Pollutants Excluded From Use in Cleaning and Washoff Solvents

Chemical name	CAS No.
4-Aminobiphenyl.....	92671
Styrene oxide.....	96093
Diethyl sulfate.....	64675
N-Nitrosomorpholine.....	59892
Dimethyl formamide.....	68122
Hexamethylphosphoramide.....	680319
Acetamide.....	60355
4,4[prime]-Methylenedianiline.....	101779
o-Anisidine.....	90040
2,3,7,8-Tetrachlorodibenzo-p-dioxin.....	1746016
Beryllium salts.....
Benzidine.....	92875
N-Nitroso-N-methylurea.....	684935
Bis (chloromethyl) ether.....	542881
Dimethyl carbamoyl chloride.....	79447
Chromium compounds (hexavalent).....
1,2-Propylenimine (2-Methyl aziridine).....	75558
Arsenic and inorganic arsenic compounds.....	99999904
Hydrazine.....	302012
1,1-Dimethyl hydrazine.....	57147
Beryllium compounds.....	7440417
1,2-Dibromo-3-chloropropane.....	96128
N-Nitrosodimethylamine.....	62759
Cadmium compounds.....
Benzo (a) pyrene.....	50328
Polychlorinated biphenyls (Aroclors).....	1336363
Heptachlor.....	76448
3,3[prime]-Dimethyl benzidine.....	119937
Nickel subsulfide.....	12035722
Acrylamide.....	79061
Hexachlorobenzene.....	118741
Chlordane.....	57749

1,3-Propane sultone.....	1120714
1,3-Butadiene.....	106990
Nickel refinery dust.....
2-Acetylaminoflourine.....	53963
3,3[prime]-Dichlorobenzidine.....	53963
Lindane (hexachlorocyclohexane, gamma).....	58899
2,4-Toluene diamine.....	95807
Dichloroethyl ether (Bis(2-chloroethyl) ether).....	111444
1,2-Diphenylhydrazine.....	122667
Toxaphene (chlorinated camphene).....	8001352
2,4-Dinitrotoluene.....	121142
3,3[prime]-Dimethoxybenzidine.....	119904
Formaldehyde.....	50000
4,4[prime]-Methylene bis (2-chloroaniline).....	101144
Acrylonitrile.....	107131
Ethylene dibromide (1,2-Dibromoethane).....	106934
DDE (1,1-p-chlorophenyl 1-2 dichloroethylene).....	72559
Chlorobenzilate.....	510156
Dichlorvos.....	62737
Vinyl chloride.....	75014
Coke Oven Emissions.....
Ethylene oxide.....	75218
Ethylene thiourea.....	96457
Vinyl bromide (bromoethene).....	593602
Selenium sulfide (mono and di).....	7488564
Chloroform.....	67663
Pentachlorophenol.....	87865
Ethyl carbamate (Urethane).....	51796
Ethylene dichloride (1,2-Dichloroethane).....	107062
Propylene dichloride (1,2-Dichloropropane).....	78875
Carbon tetrachloride.....	56235
Benzene.....	71432
Methyl hydrazine.....	60344
Ethyl acrylate.....	140885
Propylene oxide.....	75569
Aniline.....	62533
1,4-Dichlorobenzene(p).....	106467
2,4,6-Trichlorophenol.....	88062
Bis (2-ethylhexyl) phthalate (DEHP).....	117817
o-Toluidine.....	95534
Propoxur.....	114261
1,4-Dioxane (1,4-Diethyleneoxide).....	123911
Acetaldehyde.....	75070
Bromoform.....	75252
Captan.....	133062
Epichlorohydrin.....	106898
Methylene chloride (Dichloromethane).....	75092
Dibenz (ah) anthracene.....	53703
Chrysene.....	218019
Dimethyl aminoazobenzene.....	60117
Benzo (a) anthracene.....	56553
Benzo (b) fluoranthene.....	205992
Antimony trioxide.....	1309644
2-Nitropropane.....	79469
1,3-Dichloropropene.....	542756
7, 12-Dimethylbenz(a) anthracene.....	57976
Benz(c) acridine.....	225514
Indeno(1,2,3-cd)pyrene.....	193395
1,2:7,8-Dibenzopyrene.....	189559

[63 FR 71382, Dec. 28, 1998]

Table 5 to Subpart JJ of Part 63—List of VHAP of Potential Concern Identified by Industry

CAS No.	Chemical name	EPA de minimis, tons/yr
68122.....	Dimethyl formamide	1.0
50000.....	Formaldehyde	0.2
75092.....	Methylene chloride	4.0
79469.....	2-Nitropropane	1.0
78591.....	Isophorone	0.7
1000425.....	Styrene monomer	1.0
108952.....	Phenol	0.1
111422.....	Dimethanolamine	5.0
109864.....	2-Methoxyethanol	10.0
111159.....	2-Ethoxyethyl acetate	10.0

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Table 6 to Subpart JJ of Part 63—VHAP of Potential Concern

CAS No.	Chemical name	EPA de minimis, tons/yr*
92671.....	4-Aminobiphenyl.....	1.0
96093.....	Styrene oxide.....	1.0
64675.....	Diethyl sulfate.....	1.0
59892.....	N-Nitrosomorpholine.....	1.0
68122.....	Dimethyl formamide.....	1.0
680319.....	Hexamethylphosphoramide.....	0.01
60355.....	Acetamide.....	1.0
101779.....	4,4[prime]-Methylenedianiline....	1.0
90040.....	o-Anisidine.....	1.0
1746016.....	2,3,7,8-Tetrachlorodibenzo-p-dioxin.	0.00000006
92875.....	Benzidine.....	0.00003
684935.....	N-Nitroso-N-methylurea.....	0.00002
542881.....	Bis(chloromethyl) ether.....	0.00003
79447.....	Dimethyl carbamoyl chloride.....	0.002
75558.....	1,2-Propylenimine (2-Methyl aziridine).	0.0003
57147.....	1,1-Dimethyl hydrazine.....	0.0008
96128.....	1,2-Dibromo-3-chloropropane.....	0.001
62759.....	N-Nitrosodimethylamine.....	0.0001
50328.....	Benzo (a) pyrene.....	0.001
1336363.....	Polychlorinated biphenyls	0.0009

	(Aroclors).	
76448.....	Heptachlor.....	0.002
119937.....	3,3[prime]-Dimethyl benzidine....	0.001
79061.....	Acrylamide.....	0.002
118741.....	Hexachlorobenzene.....	0.004
57749.....	Chlordane.....	0.005
1120714.....	1,3-Propane sultone.....	0.003
106990.....	1,3-Butadiene.....	0.007
53963.....	2-Acetylaminoflourine.....	0.0005
91941.....	3,3[prime]-Dichlorobenzidine.....	0.02
58899.....	Lindane (hexachlorocyclohexane, gamma).	0.005
95807.....	2,4-Toluene diamine.....	0.002
111444.....	Dichloroethyl ether (Bis(2- chloroethyl)ether).	0.006
122667.....	1,2_Diphenylhydrazine.....	0.009
8001352.....	Toxaphene (chlorinated camphene).	0.006
121142.....	2,4-Dinitrotoluene.....	0.002
119904.....	3,3[prime]-Dimethoxybenzidine....	0.01
50000.....	Formaldehyde.....	0.2
101144.....	4,4[prime]-Methylene bis(2- chloroaniline).	0.02
107131.....	Acrylonitrile.....	0.03
106934.....	Ethylene dibromide(1,2- Dibromoethane).	0.01
72559.....	DDE (1,1-p-chlorophenyl 1-2 dichloroethylene).	0.01
510156.....	Chlorobenzilate.....	0.04
62737.....	Dichlorvos.....	0.02
75014.....	Vinyl chloride.....	0.02
75218.....	Ethylene oxide.....	0.09
96457.....	Ethylene thiourea.....	0.06
593602.....	Vinyl bromide (bromoethene).....	0.06
67663.....	Chloroform.....	0.09
87865.....	Pentachlorophenol.....	0.07
51796.....	Ethyl carbamate (Urethane).....	0.08
107062.....	Ethylene dichloride (1,2- Dichloroethane).	0.08
78875.....	Propylene dichloride (1,2- Dichloropropane).	0.1
56235.....	Carbon tetrachloride.....	0.1
71432.....	Benzene.....	0.2
140885.....	Ethyl acrylate.....	0.1
75569.....	Propylene oxide.....	0.5
62533.....	Aniline.....	0.1
106467.....	1,4-Dichlorobenzene(p).....	0.3
88062.....	2,4,6-Trichlorophenol.....	0.6
117817.....	Bis (2-ethylhexyl) phthalate (DEHP).	0.5
95534.....	o-Toluidine.....	0.4
114261.....	Propoxur.....	2.0
79016.....	Trichloroethylene.....	1.0
123911.....	1,4-Dioxane (1,4-Diethyleneoxide)	0.6
75070.....	Acetaldehyde.....	0.9
75252.....	Bromoform.....	2.0
133062.....	Captan.....	2.0
106898.....	Epichlorohydrin.....	2.0
75092.....	Methylene chloride (Dichloromethane).	4.0

127184.....	Tetrachloroethylene (Perchloroethylene).	4.0
53703.....	Dibenz (ah) anthracene.....	0.01
218019.....	Chrysene.....	0.01
60117.....	Dimethyl aminoazobenzene.....	1.0
56553.....	Benzo (a) anthracene.....	0.01
205992.....	Benzo (b) fluoranthene.....	0.01
79469.....	2-Nitropropane.....	1.0
542756.....	1,3-Dichloropropene.....	1.0
57976.....	7,12-Dimethylbenz (a) anthracene.	0.01
225514.....	Benz(c)acridine.....	0.01
193395.....	Indeno(1,2,3-cd)pyrene.....	0.01
189559.....	1,2:7,8-Dibenzopyrene.....	0.01
79345.....	1,1,2,2-Tetrachloroethane.....	0.03
91225.....	Quinoline.....	0.0006
75354.....	Vinylidene chloride (1,1- Dichloroethylene).	0.04
87683.....	Hexachlorobutadiene.....	0.09
82688.....	Pentachloronitrobenzene (Quintobenzene).	0.03
78591.....	Isophorone.....	0.7
79005.....	1,1,2-Trichloroethane.....	0.1
74873.....	Methyl chloride (Chloromethane)..	1.0
67721.....	Hexachloroethane.....	0.5
1582098.....	Trifluralin.....	0.9
1319773.....	Cresols/Cresylic acid (isomers and mixture).	1.0
108394.....	m-Cresol.....	1.0
75343.....	Ethylidene dichloride (1,1- Dichloroethane).	1.0
95487.....	o-Cresol.....	1.0
106445.....	p-Cresol.....	1.0
74884.....	Methyl iodide (Iodomethane).....	1.0
100425.....	Styrene.....	1.0
107051.....	Allyl chloride.....	1.0
334883.....	Diazomethane.....	1.0
95954.....	2,4,5-Trichlorophenol.....	1.0
133904.....	Chloramben.....	1.0
106887.....	1,2-Epoxybutane.....	1.0
108054.....	Vinyl acetate.....	1.0
126998.....	Chloroprene.....	1.0
123319.....	Hydroquinone.....	1.0
92933.....	4-Nitrobiphenyl.....	1.0
56382.....	Parathion.....	0.1
13463393.....	Nickel Carbonyl.....	0.1
60344.....	Methyl hydrazine.....	0.006
151564.....	Ethylene imine.....	0.0003
77781.....	Dimethyl sulfate.....	0.1
107302.....	Chloromethyl methyl ether.....	0.1
57578.....	beta-Propiolactone.....	0.1
100447.....	Benzyl chloride.....	0.04
98077.....	Benzotrichloride.....	0.0006
107028.....	Acrolein.....	0.04
584849.....	2,4-Toluene diisocyanate.....	0.1
75741.....	Tetramethyl lead.....	0.01
78002.....	Tetraethyl lead.....	0.01
12108133.....	Methylcyclopentadienyl manganese.	0.1
624839.....	Methyl isocyanate.....	0.1
77474.....	Hexachlorocyclopentadiene.....	0.1

62207765.....	Fluomine.....	0.1
10210681.....	Cobalt carbonyl.....	0.1
79118.....	Chloroacetic acid.....	0.1
534521.....	4,6-Dinitro-o-cresol, and salts..	0.1
101688.....	Methylene diphenyl diisocyanate..	0.1
108952.....	Phenol.....	0.1
62384.....	Mercury, (acetato-o) phenyl.....	0.01
98862.....	Acetophenone.....	1.0
108316.....	Maleic anhydride.....	1.0
532274.....	2-Chloroacetophenone.....	0.06
51285.....	2,4-Dinitrophenol.....	1.0
109864.....	2-Methoxy ethanol.....	10.0
98953.....	Nitrobenzene.....	1.0
74839.....	Methyl bromide (Bromomethane)....	10.0
75150.....	Carbon disulfide.....	1.0
121697.....	N,N-Dimethylaniline.....	1.0
106514.....	Quinone.....	5.0
123386.....	Propionaldehyde.....	5.0
120809.....	Catechol.....	5.0
85449.....	Phthalic anhydride.....	5.0
463581.....	Carbonyl sulfide.....	5.0
132649.....	Dibenzofurans.....	5.0
100027.....	4-Nitrophenol.....	5.0
540841.....	2,2,4-Trimethylpentane.....	5.0
111422.....	Diethanolamine.....	5.0
822060.....	Hexamethylene-1,6-diisocyanate...	5.0
	Glycol ethersa.....	5.0
	Polycyclic organic matterb.....	0.01

* These values are based on the de minimis levels provided in the proposed rulemaking pursuant to section 112(g) of the Act using a 70-year lifetime exposure duration for all VHAP. Default assumptions and the de minimis values based on inhalation reference doses (RfC) are not changed by this adjustment.

a Except for ethylene glycol butyl ether, ethylene glycol ethyl ether (2-ethoxy ethanol), ethylene glycol hexyl ether, ethylene glycol methyl ether (2-methoxyethanol), ethylene glycol phenyl ether, ethylene glycol propyl ether, ethylene glycol mono-2-ethylhexyl ether, diethylene glycol butyl ether, diethylene glycol ethyl ether, diethylene glycol methyl ether, diethylene glycol hexyl ether, diethylene glycol phenyl ether, diethylene glycol propyl ether, triethylene glycol butyl ether, triethylene glycol ethyl ether, triethylene glycol methyl ether, triethylene glycol propyl ether, ethylene glycol butyl ether acetate, ethylene glycol ethyl ether acetate, and diethylene glycol ethyl ether acetate.

b Except for benzo(b)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, 7,12-dimethylbenz(a)anthracene, benz(c)acridine, chrysene, dibenz(ah)anthracene, 1,2:7,8-dibenzopyrene, indeno(1,2,3-cd)pyrene, but including dioxins and furans.

D.1.8 One Time Deadlines Relating to NESHAP JJ

- (a) The Permittee must conduct the performance tests, performance evaluations, design evaluations, capture efficiency testing, and other initial compliance demonstrations by December 7, 1998.
- (b) The Permittee must submit a notification of compliance status on or before the close of business on February 7, 1999.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Woodworking operations

Indiana Furniture Industries

- (b) Woodworking operations, identified as WW1, equipped with a baghouse (# 102) for particulate control, exhausted at Stack 1, capacity: 7,000 pounds of wood per hour.

(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 2-7-5(1)]

D.2.1 Particulate Matter Limitation (PM) [326 IAC 6.5-4]

Pursuant to 326 IAC 6.5-4 (formerly 326 IAC 6-1-9), the particulate matter (PM) emissions from the woodworking operations (WW1) shall be limited to 5.4 tons per year.

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.3 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Condition D.2.1, the baghouse used for particulate control, shall be in operation and control emissions from the woodworking at all times that the woodworking operations are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.2.4 Visible Emissions Notations

- (a) Visible emission notations of the woodworking stack exhaust (Stack 1), shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.2.5 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation. All defective bags shall be replaced.

D.2.6 Broken or Failed Bag Detection

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

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

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

D.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of visible emission notations of the woodworking Stack 1 exhaust once per day.
- (b) To document compliance with Condition D.2.5, the Permittee shall maintain records of the results of the inspections required under Condition D.2.5.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Natural Gas-Fired Boiler

Indiana Furniture Industries

- (c) One (1) natural gas fired boiler, identified as EU 520, installed in 1998, exhausted at Stack 15, rated at 10 million British thermal units.

(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 2-7-5(1)]

D.3.1 Particulate Matter Limitation [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2 (Particulate emissions for Steam generators, asphalt plants, grain elevators, foundries mineral aggregates) (formerly 326 IAC 6-1-9), particulate matter (PM) emissions from the ten (10) million British thermal units per hour natural gas boiler, identified as EU 520, shall be limited to 0.01 grains per dry standard cubic foot of exhaust air.

Compliance Determination Requirements

D.3.2 Natural Gas

In order to demonstrate compliance with Condition D.3.1, the natural gas fired boiler, identified as EU 520, shall burn only natural gas.

Compliance Monitoring Requirements

There are no compliance monitoring requirements applicable to this facility.

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

There are no record keeping and reporting requirements applicable to this facility.

New Source Performance Standard (NSPS) Requirements [326 IAC 2-7-5(1)]

D.3.3 General Provisions Relating to NSPS Dc [326 IAC 12-1] [40 CFR 60, Subpart A]

The provisions of 40 CFR 60 Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart Dc.

D.3.4 NSPS Dc Requirements [326 IAC 12-1-1] [40 CFR 60, Subpart Dc]

Pursuant to CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart Dc, which are incorporated by reference as 326 IAC 12-1-1 for the one (1) natural gas fired boiler, identified as EU 520, as specified as follows:

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, §60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units which meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO₂) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in §60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under §60.14.

§ 60.41c Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam ch a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society for Testing and Materials in ASTM D388–77, “Standard Specification for Classification of Coals by Rank” (incorporated by reference—see §60.17); coal refuse; and petroleum coke. Synthetic fuels derived from coal for the purpose of creating useful heat, including but not limited to solvent-refined coal, gasified coal, coal-oil mixtures, and coal-water mixtures, are included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit (i.e., the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396–78, 89, 90, 92, 96, or 98, “Standard Specification for Fuel Oils” (incorporated by reference—see §60.17).

Dry flue gas desulfurization technology means a sulfur dioxide (SO₂) control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry

or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO₂ control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under §60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR Parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means (1) a naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane, or (2) liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835-86, 87, 91, or 97, "Standard Specification for Liquefied Petroleum Gases" (incorporated by reference—see §60.17).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO₂ emissions (nanograms per joule [ng/J], or pounds per million Btu [lb/million Btu] heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and

Materials in ASTM D396–78, 89, 90, 92, 96, or 98, “Standard Specification for Fuel Oils” (incorporated by reference—see §60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or any other heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Wet flue gas desulfurization technology means an SO₂ control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of particulate matter (PM) or SO₂.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

§ 60.48c Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by §60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(g) The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

SECTION D.4

FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Woodworking Operations

Indiana Dimension Plant

- (e) Woodworking operations, identified as WW2, equipped with a baghouse (# 254) for particulate control, exhausted at Stack 17, capacity: 1,003 pounds of wood per hour.

(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 2-7-5(1)]

D.4.1 Particulate Matter Limitation (PM) [326 IAC 6.5-4]

Pursuant to 326 IAC 6.5-4 (formerly 326 IAC 6-1-9), the particulate matter (PM) emissions from the woodworking operations (WW2) shall be limited to 0.4 tons per year.

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.4.3 Particulate Control [326 IAC 2-7-6(6)]

- (a) In order to comply with Condition D.4.1, the baghouse for particulate control shall be in operation and control emissions from the woodworking at all times that the woodworking operations are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

D.4.4 Visible Emissions Notations

- (a) Visible emission notations of the woodworking stack exhaust (Stack 17), shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

D.4.5 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation when venting to the atmosphere. All defective bags shall be replaced.

D.4.6 Broken or Failed Bag Detection

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

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

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

D.4.7 Record Keeping Requirements

- (a) To document compliance with Condition D.4.4, the Permittee shall maintain records of visible emission notations of the woodworking stack (Stack 17) exhaust once per day.
- (b) To document compliance with Condition D.4.5, the Permittee shall maintain records of the results of the inspections required under Condition D.4.5.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

Indiana Dimension Plant

- (a) One (1) natural gas fired boiler, identified as EU 460, installed in 1998, exhausted at Stack 18, rated at 6.7 million British thermal units per hour.
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6.5-1-2].

(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 2-7-5(1)]

D.5.1 Particulate Matter Limitation (PM) [326 IAC 6.5-1-2]

- (a) Pursuant to 326 IAC 6.5-1-2(a), (Particulate emissions for Steam generators, asphalt plants, grain elevators, foundries mineral aggregates) (formerly 326 IAC 6-1-2(a)) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the 6.7 million British thermal units per hour natural gas boiler, identified as EU 460, shall be limited to 0.01 grains per dry standard cubic foot of exhaust air.
- (b) Pursuant to 326 IAC 6.5-1-2(a), (Particulate emissions for Steam generators, asphalt plants, grain elevators, foundries mineral aggregates) (formerly 326 IAC 6-1-2(a)) (Nonattainment Area Particulate Limitations), particulate matter (PM) emissions from the insignificant brazing, soldering and welding equipment and the cutting torches shall not exceed 0.03 grains per dry standard cubic foot.

Compliance Determination Requirements

D.5.2 Natural Gas

In order to demonstrate compliance with Condition D.5.1, the natural gas fired boiler, identified as EU 460, shall burn only natural gas.

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

There are no compliance monitoring requirements applicable to this facility.

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

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Indiana Furniture Industries and Indiana Dimension
Source Address: 1224 N. Mill Street and 13th and Vine Street, Jasper, Indiana 47547
Mailing Address: P.O. Box 270, Jasper, Indiana 47547-0270
Part 70 Permit No.: T 037-17504-00104

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

Please check what document is being certified:

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

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

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
Indianapolis, Indiana 46204-2251
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Indiana Furniture Industries and Indiana Dimension
Source Address: 1224 N. Mill Street and 13th and Vine Street, Jasper, Indiana 47547
Mailing Address: P.O. Box 270, Jasper, Indiana 47547-0270
Part 70 Permit No.: T 037-17504-00104

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)
<input type="checkbox"/> The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
<input type="checkbox"/> The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

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

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Indiana Furniture Industries and Indiana Dimension
Source Address: 1224 N. Mill Street and 13th and Vine Street, Jasper, Indiana 47547
Mailing Address: P.O. Box 270, Jasper, Indiana 47547-0270
Part 70 Permit No.: T 037-17504-00104

Months: _____ to _____ Year: _____

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

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

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name:	Indiana Furniture Industries and Indiana Dimension
Source Location:	1224 N. Mill Street and 13th and Vine Street, Jasper, Indiana 47547
County:	Dubois
SIC Code:	2511
Operation Permit No.:	T 037-6036-00104
Operation Permit Issuance Date:	December 17, 1998
Permit Renewal No.:	T 037-17504-00104
Permit Reviewer:	Brian J. Pedersen

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Indiana Furniture Industries and Indiana Dimension relating to the operation of a wood furniture manufacturing source.

Source Definition

This operation of this wood furniture manufacturing company consists of two (2) plants:

- (a) Indiana Furniture Industries is located at 1224 N. Mill Street, Jasper, Indiana; and
- (b) Indiana Dimension is located at 13th and Vine Street, Jasper, Indiana.

Since the two (2) plants are located in contiguous properties, have the same SIC codes and are owned by one (1) company, they will be considered one (1) source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

Indiana Furniture Industries

- (a) Ten (10) wood desk surface coating booths, consisting of the following:
 - (1) One (1) downdraft booth, identified as emission EU 145, installed in 1998, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 12, capacity: 23 desks per hour.
 - (2) One (1) SAP booth, identified as EU 225, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 3, capacity: 23 desks per hour.
 - (3) One (1) NGR booth, identified as EU 227, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 4, capacity: 23 desks per hour.
 - (4) One (1) washcoat booth, identified as EU 228, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 5, capacity: 23 desks per hour.

- (5) One (1) wipestain booth, identified as EU 229, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 6, capacity: 23 desks per hour.
- (6) One (1) sealer booth, identified as EU 230, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 7, capacity: 23 desks per hour.
- (7) One (1) topcoat booth, identified as EU 232, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 8, capacity: 23 desks per hour.
- (8) One (1) topcoat booth, identified as EU 233, installed in 1998, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 9A, capacity: 23 desks per hour.
- (9) One (1) trim line booth, identified as EU 234, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 11, capacity: 23 desks per hour.
- (10) One (1) off line booth, identified as EU 438, installed in 1992, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 10, capacity: 23 desks per hour.
- (b) Woodworking operations, identified as WW1, equipped with a baghouse (# 102) for particulate control, exhausted at Stack 1, capacity: 7,000 pounds of wood per hour.
- (c) One (1) natural gas fired boiler, identified as EU 520, installed in 1998, exhausted at Stack 15, rated at 10 million British thermal units.

Indiana Dimension Plant

- (d) One (1) wood chair finish booth, identified as EU 457, installed in 1992, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 16, capacity: 7.5 chairs per hour.
- (e) Woodworking operations, identified as WW2, equipped with a baghouse (# 254) for particulate control, exhausted at Stack 17, capacity: 1,003 pounds of wood per hour.

Unpermitted Emission Units and Pollution Control Equipment

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

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) One (1) natural gas fired boiler, identified as EU 460, installed in 1998, exhausted at Stack 18, rated at 6.7 million British thermal units per hour [326 IAC 6.5-1-2].
- (b) One (1) natural gas-fired oven, identified as EU 509, installed in 1993, exhausted at Stack 13, rated at one (1) million British thermal units per hour.

- (c) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceed 2,000,000 British thermal units per hour.
- (d) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (e) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6.5-1-2].
- (f) Closed loop heating and cooling systems.
- (g) Infrared cure equipment.
- (h) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.
- (i) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Paved and unpaved roads and parking lots with public access.
- (l) Asbestos abatement projects regulated by 326 IAC 14-10.
- (m) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (n) On-site fire and emergency response training approved by the department.

Existing Approvals

The source has constructed or has been operating under the following previous approvals

- (a) T 037-6036-00104, issued on December 17, 1998;
- (b) Administrative Amendment 037-10653-00104, issued on March 21, 2001 and
- (c) Reopening 037-13195-00104, issued on December 21, 2001.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised or added in this Part 70 Operating Permit

- (a) IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request, records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted paragraph (b) of Condition B.12 (Preventive Maintenance Plan) from T 037-6036-00002, issued on December 17, 1998.

- (b) IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan (Condition C.16 from T 037-6036-00002) with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated.
- (c) All references to the condition entitled, Compliance Response Plan - Preparation, Implementation, Records, and Reports, have been revised to reflect the new condition title, Response to Excursions or Exceedances.
- (d) Indiana was required to incorporate credible evidence provisions into state rules consistent with the SIP call published by U.S. EPA in 1997 (62 FR 8314). Indiana has incorporated the credible evidence provision in 326 IAC 1-1-6. This rule is effective March 16, 2005; therefore, a new condition, entitled, Credible Evidence, reflecting this rule will be incorporated into Section B of the permit.
- (e) IDEM realizes that the instrument specifications can only be practically applied to analog units, and has therefore clarified Condition C.12 to state that the condition only applies to analog units. IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the accuracy requirements have been removed from Condition C.12.
- (f) Paragraph (a) of Conditions D.2.7 and D.6.7 (Broken or Failed Baghouse) from T 037-6036-00002, issued on December 17, 1998, have been deleted. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. However, a requirement has been added to Conditions D.2.7 and D.6.7 requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.

Paragraph (b) of this condition has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this proposed Part 70 Operating Permit:

- (a) T 037-6036-00002, issued on December 17, 1998, all conditions that applied to the two (2) wood coal/fired boilers

Reason not incorporated: The two (2) wood/coal fired boilers are no longer in operation and have been removed. Hence, all conditions applying to the two (2) wood/coal fired boilers are no longer applicable.

(b) Since the requirements of Condition C.7 (Operation of Equipment) have been incorporated in the D Sections, Condition C.7 has been removed from the permit.

(c) PSD minor limit in Condition D.5.3 of T 037-6036-00002, issued on December 17, 1998

Reason not incorporated: The source has changed coatings for the surface coating operation. The present potential to emit is now is less than 250 tons per year. Therefore, Condition 5.3 has been removed and the limit of 39.6 tons per year for one (1) wood chair finish booth, identified as EU 457, is no longer required to be a minor source pursuant to 326 IAC 2-2.

(d) Visible Emissions Requirement from T 037-6036-00002, issued on December 17, 1998

Reason not incorporated: The 10% opacity limit can not be used in lieu of a stack test. The source must show compliance with 326 IAC 6.5 and 326 IAC 5-1.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

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

An administratively complete Part 70 permit renewal application for the purposes of this review was received on December 20, 2002. Additional information was received on August 20, 2004, January 18, 2005 and February 4, 2005.

Emission Calculations

See pages 1 through 21 of Appendix A of this document for detailed emission calculations.

Potential to Emit of the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source 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."

The source was issued a Part 70 Operating Permit on December 17, 1998. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the original Part 70 Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential To Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Woodworking operation Indiana Furniture Industries	5.4*	21.0	-	-	-	-	-
Woodworking operation Indiana Dimension Plant	0.4*	39.6	-	-	-	-	-
Surface coating operations	15.6	15.6	-	148	-	-	22.5
Boilers	0.139	0.556	0.044	0.402	6.14	7.31	0.138
Insignificant Activities	5.01	5.03	0.003	0.024	0.368	0.438	0.008
Total Emissions	26.6	81.8	0.047	149	6.51	7.75	22.6

* Limited potential pursuant to 326 IAC 6.5-4-8 and 326 IAC 6.5-4-9 (formerly 326 IAC 6-1-9)

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	Not Reported
PM ₁₀	0.050
SO ₂	0.010
VOC	17.3
CO	0.710
NO _x	1.00
HAP	Not Reported

County Attainment Status

The source is located in Dubois County.

Pollutant	Status
PM _{2.5}	Nonattainment
PM ₁₀	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-Hour Ozone	Attainment
8-Hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (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 and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Dubois County has been designated as attainment or unclassifiable for ozone. Therefore, VOC 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 for the source section.
- (b) Dubois County has been classified as nonattainment for PM_{2.5} in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions pursuant to the Nonattainment New Source Review requirements. See the State Rule Applicability for the source section.
- (c) Dubois County has been classified as attainment or unclassifiable in Indiana for all remaining 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 for the source section.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) This source does not involve a pollutant-specific emissions unit as defined in 40 CFR 64.1 for any criteria pollutant:
- (1) with the potential to emit before controls equal to or greater than the major source threshold,
 - (2) that is subject to an emission limitation or standard, and
 - (3) uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to this source.

- (b) The requirements of the New Source Performance Standard, 326 IAC 12 (40 CFR 60 Subpart Dc) are not included in the permit for the natural gas fired boiler, rated at 6.7 million British thermal units per hour, identified as EU 460, because it has an input heat capacity less than 10 million British thermal units per hour.
- (c) The natural gas-fired boiler, identified as EU 520, is subject to the New Source Performance Standard, 326 IAC 12, 40 CFR 60.40c, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units). The provisions of this subpart apply to the natural gas-fired boiler, identified as EU 520, because this natural gas-fired boiler was constructed after June 9, 1989 and has a maximum design heat input capacity of one hundred (100) million British thermal units per hour or less, but greater than or equal to ten (10) million British thermal units per hour, as defined in 60.40(c). The specific facility included is the following:

One (1) natural gas fired boiler, identified as EU 520, installed in 1998, exhausted at Stack 15, rated at 10 million British thermal units.

Non applicable portions of the NSPS will not be included in the permit. The natural gas-fired boiler, identified as EU 520, is subject to the following portions of Subpart Dc:

- (a) 40 CFR 60.40c
 - (b) 40 CFR 60.41c
 - (c) 40 CFR 60.48c (a)(1) and (3), (g), (i), and (j)
- (d) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (e) The (2) two natural gas-fired boilers, identified as EU 520 and 460, are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. The (2) two natural gas fired boilers, identified as EU 520 and 460, are part of the affected source for the small gaseous fuel subcategory, as defined by 40 CFR 63.7575, because they have a rated capacity of less than or equal to 10 million British thermal units per hour heat input. However, pursuant to 40 CFR 63.7506(c), there are no applicable requirements from 40 CFR 63, Subpart DDDDD and 40 CFR 63, Subpart A for the affected sources for the small solid fuel subcategory, small liquid fuel subcategory, or small gaseous fuel subcategory.

- (f) This source performs wood furniture manufacturing and is a major source of Hazardous Air Pollutants (HAPs). Therefore, this source is subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 20-25-3 (40 CFR 63.5780 Subpart (JJ)). The affected source to which this subpart applies is each facility that is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source. The specific facilities include the following:
- (1) One (1) downdraft booth, identified as emission EU 145, installed in 1998, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 12, capacity: 23 desks per hour.
 - (2) One (1) SAP booth, identified as EU 225, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 3, capacity: 23 desks per hour.
 - (3) One (1) NGR booth, identified as EU 227, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 4, capacity: 23 desks per hour.
 - (4) One (1) washcoat booth, identified as EU 228, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 5, capacity: 23 desks per hour.
 - (5) One (1) wipestain booth, identified as EU 229, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 6, capacity: 23 desks per hour.
 - (6) One (1) sealer booth, identified as EU 230, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 7, capacity: 23 desks per hour.
 - (7) One (1) topcoat booth, identified as EU 232, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 8, capacity: 23 desks per hour.
 - (8) One (1) topcoat booth, identified as EU 233, installed in 1998, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 9A, capacity: 23 desks per hour.
 - (9) One (1) trim line booth, identified as EU 234, installed prior to 1973, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 11, capacity: 23 desks per hour.
 - (10) One (1) off line booth, identified as EU 438, installed in 1992, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 10, capacity: 23 desks per hour.
 - (11) One (1) wood chair finish booth, identified as EU 457, installed in 1992, utilizing an air assisted airless HVLP application system, equipped with dry filters for particulate control, exhausted at Stack 16, capacity: 7.5 chairs per hour.

Non applicable portions of the NESHAP will not be included in the permit. The one (1) wood chair finish booth, identified as EU 457, the one (1) off line booth, identified as EU 438, the one (1) trim line booth, identified as EU 234, the one (1) topcoat booth, identified

as EU 233, the one (1) topcoat booth, identified as EU 232, the one (1) sealer booth, identified as EU 230, the one (1) wipestain booth, identified as EU 229, the one (1) wash-coat booth, identified as EU 228, the one (1) NGR booth, identified as EU 227, the one (1) SAP booth, identified as EU 225 and the one (1) downdraft booth, identified as emission EU 145, are subject to the following portions of Subpart JJ:

- (a) 40 CFR 63.800 (a), (d), and (e)
- (b) 40 CFR 63.801
- (c) 40 CFR 63.802 (a)(1), (3)
- (d) 40 CFR 63.803
- (e) 40 CFR 63.804 (a)(1) and (2), (f)(1), (2), (7) and (8), (g)(1), (2), (7) and (8)
- (f) 40 CFR 63.805 (a)
- (g) 40 CFR 63.806 (a), (b), (c), (e), (i), and (j)
- (h) 40 CFR 63.807 (a) (b) and (e)
- (i) 40 CFR 63.808 (a), (b) and (c)

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart (JJ).

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

Previous determinations from CP 037-2052 and T 037-6036-00104 show that the potential to emit of VOC from the entire source was greater than two hundred-fifty (250) tons per year. Therefore, pursuant to 326 IAC 2-2, this source was classified as a major source. The present potential to emit of VOC is now less than two hundred-fifty (250) tons per year. The unrestricted potential emissions of each remaining attainment criteria pollutant is less than two hundred-fifty (250) tons per year. Therefore, this source, which is not one of the twenty-eight (28) listed source categories, is now a minor source pursuant to 326 IAC 2-2, PSD.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7, Part 70. In accordance with the compliance schedule in 326 IAC 2-6-3, starting in 2006 and every three (3) years thereafter, an emission statement must be submitted by July 1. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

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:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

Pursuant to 326 IAC 6-5 and T 037-6036-00104, the fugitive particulate matter emissions shall be controlled according to the plan submitted for Indiana Furniture Industries on October 15, 1997. The plan consists of:

- (a) Applying water to the unpaved parking lot; and
- (b) Posting six (6) five mile per hour speed limit signs with two (2) at each entry.

State Rule Applicability – Individual Facilities

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

The wood surface coating booths, identified as EU 145, 233, 225, 227, 228, 229, 230, 232, 234, 438, and 457 are subject to NESHAP JJ. Pursuant to 326 IAC 2-4.1-1(b)(2) they are specifically regulated by a standard issued pursuant to Section 112(d). Therefore the requirements of 326 IAC 2-4.1 do not apply.

326 IAC 6.5-1-2 (Particulate emissions for Steam generators, asphalt plants, grain elevators, foundries mineral aggregates)

- (a) Pursuant to 326 IAC 6.5-1-2 (formerly 326 IAC 6-1-2(a)) (Nonattainment Area Particulate Limitations), particulate matter emissions from the ten (10) million British thermal units per hour natural gas boiler, identified as emission unit 520, shall not exceed 0.01 grains per dry standard cubic foot.
- (b) Pursuant to 326 IAC 6.5-1-2 (formerly 326 IAC 6-1-2(a)) (Nonattainment Area Particulate Limitations), particulate matter emissions from each of the eleven (11) spray booths, EU 145, 225, 227, 228, 229, 230, 232, 233, 234, 457, and 438 shall not exceed 0.03 grains per dry standard cubic foot. Compliance with this rule is demonstrated by using dry filters for overspray control.

326 IAC 6.5-4 (Dubois County)

Pursuant to 326 IAC 6.5-4 (formerly 326 IAC 6-1-9), the particulate matter emissions from the woodworking operations at Indiana Furniture and Indiana Dimension shall be limited to 5.4 (WW1) and 0.4 (WW2) tons per year, respectively. (Although the source is currently operating under the name Indiana Furniture and Indiana Dimension, 326 IAC 6.5-4 (formerly 326 IAC 6-1-9) lists the source's original names, Indiana Desk and Indiana Chair.). Compliance with this rule is demonstrated by operating the baghouses, identified as # 102 and # 254, at all times that the woodworking operations are in operation.

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

Pursuant to 326 IAC 6-2-1(e), if any limitation established by this rule is inconsistent with applicable limitations contained in 326 IAC 6.5, then the limitations contained in 326 IAC 6.5 prevail. Therefore, the requirements of rule 326 IAC 6-2 do not apply.

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

- (a) The surface coating booths, identified as EU 438, 457, 233, and 145 were constructed after 1990 and the actual VOC emissions from each booth is greater than fifteen (15) pounds per day. Therefore the surface coating booths are subject to the requirements of 326 IAC 8-2-12. This rule requires that the Permittee of a wood furniture or cabinet coating operation apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repairs, using one (1) or more of the following application systems:

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

High Volume Low Pressure (HVLP) 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 the surface coating booths, identified as EU 438, 457, 233 and 145 use HVLP application methods, these surface coating booths comply with this rule.

- (b) The surface coating booths, identified as EU 225, 227, 228, 229, 230, 232, and 234, were constructed prior to 1990. Therefore, these surface coating booths are not subject to the requirements of 326 IAC 8-2-12.

326 IAC 8-1-6 (New Facilities; general reduction requirements)

This rule applies for sources that are constructed on or after January 1, 1980. The surface coating booths, identified as EU 225, 227, 228, 229, 230, 232, and 234, were constructed prior to 1980. Therefore, the requirements of this rule do not apply.

326 IAC 8-6 (Organic Solvent Emission Limitations)

Pursuant to 326 IAC 8-6-1(2), this rule applies for sources that commenced operation after October 7, 1974, and prior to January 1, 1980. Since none of the surface coating booths commenced operation during the aforementioned time period the requirements of rule 326 IAC 8-6 do not apply

State Rule Applicability – Insignificant Activities

326 IAC 6.5-1-2 (Particulate emissions for Steam generators, asphalt plants, grain elevators, foundries mineral aggregates)

Pursuant to 326 IAC 6.5-1-2 (formerly 326 IAC 6-1-2(a)) (Nonattainment Area Particulate Limitations), particulate matter emissions from the insignificant brazing, soldering and welding equipment and the cutting torches shall not exceed 0.03 grains per dry standard cubic foot.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions 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.

The compliance monitoring requirements applicable to this source are as follows:

The eleven (11) surface coating spray booths, identified as EU 145, 225, 227, 228, 230, 232, 233, 234, 438, and 457 have applicable compliance monitoring conditions as specified below:

Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed. Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the filters for the surface coating booths must operate properly to ensure compliance with 326 IAC 6.5-1-2 (Particulate emissions for Steam generators, asphalt plants, grain elevators, foundries mineral aggregates) (formerly 326 IAC 6-1-2(a)) (Nonattainment Area Particulate Limitations) and 326 IAC 2-7 (Part 70).

The (2) two woodworking operations, identified as WW1 and WW2, have applicable compliance monitoring conditions as specified below:

- (a) Visible emissions notations of the woodworking stacks exhaust (Stack 1 and Stack 17), shall be performed once per day during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. 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 start up or shut down time. 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. 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. If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

- (b) An inspection shall be performed each calendar quarter of all bags controlling the wood-working. All defective bags shall be replaced.
- (c) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. 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).
- (d) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the woodworking operation. 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).

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

These monitoring conditions are necessary because the baghouses for the woodworking operations (WW1 and WW2) must operate properly to ensure compliance with 326 IAC 6.5-4 (Dubois County) (formerly 326 IAC 6-1-2(a)), 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2-7 (Part 70).

Conclusion

The operation of this wood furniture manufacturing source shall be subject to the conditions of this Part 70 Permit T 037-17504-00104.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Indiana Furniture Industries and Indiana Dimension
Source Location: 1224 N. Mill Street, Jasper, Indiana 47547-0270
County: Dubois
SIC Code: 2511
Operation Permit No.: T 037-17504-00104
Permit Reviewer: Brian J. Pedersen/MES

On December 12, 2005, the Office of Air Quality (OAQ) had a notice published in the Herald, Jasper, Indiana, stating that Indiana Furniture Industries and Indiana Dimension had applied for a Part 70 Operating Permit to operate a wood furniture manufacturing source with dry filters and baghouses for particulate control. The notice also stated that OAQ proposed to issue a Part 70 Operating Permit for this operation and provided information on how the public could review the proposed Part 70 Operating 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 Part 70 Operating Permit should be issued as proposed.

On January 10, 2006, Larry Urick of Indiana Furniture Industries submitted a comment on the proposed Part 70 Operating Permit. The comment is as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

In reference to 40 CFR 63.807(c), the previous permit noted that semi-annual Continuous Compliance Reports were required. However, 807(c) is excluded from this permit, even though it is referenced in 804(g). Please clarify whether or not the semi-annual Continuous Compliance Reports are required.

Response 1:

The semi-annual Continuous Compliance Report requirement shall be required and has been added to the Reporting requirements for NESHAP Subpart JJ as follows:

§ 63.807 Reporting requirements.

(a) The owner or operator of an affected source subject to this subpart shall fulfill all reporting requirements of §63.7 through §63.10 of subpart A (General Provisions) according to the applicability criteria in §63.800(d) of this subpart.

(b) The owner or operator of an affected source demonstrating compliance in accordance with §63.804(f) (1), (2), (3), (5), (7) and (8) shall submit the compliance status report required by §63.9(h) of subpart A (General Provisions) no later than 60 days after the compliance date. The report shall include the information required by §63.804(f) (1), (2), (3), (5), (7), and (8) of this subpart.

(c) The owner or operator of an affected source demonstrating compliance in accordance with §63.804(g) (1), (2), (3), (5), (7), and (8) shall submit a report covering the previous 6 months of wood furniture manufacturing operations:

(1) The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date.

(2) Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report.

(3) The semiannual reports shall include the information required by §63.804(g) (1), (2), (3), (5), (7), and (8), a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance.

(4) The frequency of the reports required by paragraph (c) of this section shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status.

(e) The owner or operator of an affected source required to provide a written notification under §63.803(1)(4) shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

Upon further review, the OAQ has decided to make the following changes to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

Change 1:

Dubois County has been designated nonattainment for PM_{2.5}. Therefore, Section A.1 has been amended to reflect this change.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary wood furniture manufacturing source.

Responsible Official:	Human Resources Director
Source Address:	1224 N. Mill Street and 13th and Vine Street, Jasper, Indiana 47547
Mailing Address:	P.O. Box 270, Jasper, Indiana 47547-0270
General Source Phone Number:	(812) - 482 - 5727
SIC Code:	2511
County Location:	Dubois
Source Location Status:	Nonattainment for PM_{2.5} Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Renewal Program Minor Source, under PSD Major Source, Section 112 of the Clean Air Act

Change 2:

The following typo has been corrected in the heading of Condition D.1.7:

D.1.7 NESHAP ~~WWW~~ JJ Requirements [40 CFR Part 63, Subpart JJ]

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

**Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Pit ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
SAP Booth (EU 225)																
Acetone	6.59	100%	1.00%	99.0%	0.00%	0.00%	0.002	23.0	6.52	6.52	0.279	6.70	1.22	0.00	NA	75%
Walnut Sap	6.71	99.1%	0.850%	98.2%	0.00%	0.940%	0.033	23.0	6.59	6.59	4.94	119	21.6	0.052	701	75%
White Oak Sap	6.59	100%	1.00%	99.0%	0.00%	0.030%	0.0003	23.0	6.52	6.52	0.041	0.979	0.179	0.00	21740	75%
Booth Coat	7.35	74%	0.590%	98.2%	0.00%	25.8%	0.0004	23.0	7.22	7.22	0.059	1.41	0.258	0.017	28.0	75%

PM Control Efficiency: 90.0%

State Potential Emissions

Add worst case coating to all solvents

Uncontrolled	4.94	119	21.6	0.052
Controlled	4.94	119	21.6	0.005

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
NGR Booth (EU 227)																
Stain Reducer	6.49	100%	0.00%	100%	0.00%	0.00%	0.008	23.0	6.49	6.49	1.24	29.9	5.45	0.00	NA	75%
Stain Reducer	6.51	100%	0.00%	100%	0.00%	0.00%	0.005	23.0	6.51	6.51	0.817	19.6	3.58	0.00	NA	75%
Booth Coat	7.35	74.2%	0.590%	73.6%	0.00%	25.8%	0.0004	23.0	5.41	5.41	0.044	1.06	0.193	0.017	NA	75%
Med. Oak Toner	6.82	97.1%	0.00%	97.1%	0.00%	2.86%	0.003	23.0	6.62	6.62	0.443	10.63	1.94	0.014	NA	75%
Trad Wal. Toner	6.79	98.1%	0.00%	98.1%	0.00%	1.88%	0.0001	23.0	6.66	6.66	0.010	0.232	0.042	0.0002	354	75%
Vict. Cherry Toner	6.83	97.3%	0.00%	97.3%	0.00%	2.73%	0.0001	23.0	6.64	6.64	0.013	0.308	0.056	0.0004	243	75%
Imp. Wal. NGR	6.70	99.0%	0.880%	98.1%	0.00%	0.980%	0.006	23.0	6.58	6.58	0.970	23.3	4.25	0.011	671	75%
Pres. Wal. NGR	6.74	98.4%	0.830%	97.6%	0.00%	1.58%	0.003	23.0	6.58	6.58	0.414	9.94	1.81	0.007	416	75%
Trad Mah. NGR	6.76	97.7%	0.820%	96.9%	0.00%	2.28%	0.002	23.0	6.55	6.55	0.255	6.12	1.12	0.007	287	75%
Gunstock Wal. NGR	6.71	99.2%	0.850%	98.3%	0.00%	0.850%	0.0003	23.0	6.60	6.60	0.044	1.07	0.195	0.0004	776	75%
Dark Cherry NGR	6.69	97.6%	0.930%	96.7%	0.00%	2.36%	0.0001	23.0	6.47	6.47	0.009	0.225	0.041	0.000	274	75%
Dark Cherry NGR	6.73	97.8%	0.930%	96.9%	0.00%	2.21%	0.0006	23.0	6.52	6.52	0.097	2.33	0.426	0.002	295	75%
Hert. Cherry NGR	6.78	97.7%	0.810%	96.9%	0.00%	2.29%	0.015	23.0	6.57	6.57	2.27	54.5	9.95	0.059	287	75%
Mah. Wal. NGR	6.74	98.7%	0.840%	97.8%	0.00%	1.33%	0.024	23.0	6.59	6.59	3.65	87.6	16.0	0.054	496	75%
NGR Base	6.59	100%	0.00%	100%	0.00%	0.00%	0.0004	23.0	6.59	6.59	0.057	1.37	0.250	0.00	NA	75%
NGR Base	6.59	100%	0.00%	100%	0.00%	0.00%	0.001	23.0	6.59	6.59	0.105	2.51	0.458	0.00	NA	75%
Acetone	6.59	100%	1.00%	99.0%	0.00%	0.00%	0.002	23.0	6.52	6.52	0.279	6.70	1.22	0.00	NA	75%
VHC Red NGR	7.22	90.2%	0.060%	90.1%	0.00%	9.80%	0.00002	23.0	6.51	6.51	0.003	0.075	0.014	0.0004	66.4	75%

PM Control Efficiency: 90.0%

State Potential Emissions

Add worst case coating to all solvents

Uncontrolled	3.65	87.6	16.0	0.059
Controlled	3.65	87.6	16.0	0.006

METHODOLOGY

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

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

**Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Plt ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Washcoat Booth (EU 228)																
Pre-Cat Vinyl Washcoat	7.14	87.8%	0.070%	87.8%	0.070%	12.2%	0.028	23.0	6.27	6.27	4.07	97.6	17.8	0.617	51.5	75%
Booth Coat	7.35	74.2%	0.590%	73.6%	0.590%	25.8%	0.0004	23.0	5.44	5.41	0.044	1.06	0.193	0.017	21.0	75%
Acetone	6.59	100%	1.00%	99.0%	1.00%	0.00%	0.002	23.0	6.59	6.52	0.279	6.70	1.22	0.00	NA	75%

PM Control Efficiency: 90.0%

State Potential Emissions

Add worst case coating to all solvents

**Uncontrolled 4.07 97.6 17.8 0.617
Controlled 4.07 97.6 17.8 0.062**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Wipestain Booth (EU 229)																
Booth Coat	7.35	63.0%	0.590%	62.4%	0.00%	25.8%	0.0004	23.0	4.59	4.59	0.037	0.899	0.164	0.024	17.8	75%
Acetone	6.59	60.4%	1.00%	59.4%	0.00%	0.00%	0.002	23.0	3.91	3.91	0.167	4.02	0.733	0.122	NA	75%
Black Monocolor W/S	7.60	58.2%	0.030%	58.2%	0.00%	44.9%	0.0001	23.0	4.42	4.42	0.006	0.154	0.028	0.005	9.8	75%
Inert Mono W/S	9.37	59.0%	0.030%	59.0%	0.00%	51.1%	0.001	23.0	5.53	5.53	0.165	3.95	0.722	0.125	10.8	75%
Mah. On Walnut W/S	7.90	63.0%	0.010%	63.0%	0.00%	39.9%	0.0002	23.0	4.98	4.98	0.024	0.574	0.105	0.015	12.5	75%
Vict. Cherry W/S	8.07	62.8%	0.010%	62.8%	0.00%	39.9%	0.015	23.0	5.07	5.07	1.69	40.6	7.41	1.10	12.7	75%
Trad. Mah. W/S	8.10	62.9%	0.010%	62.9%	0.00%	41.3%	0.002	23.0	5.10	5.10	0.184	4.41	0.805	0.119	12.4	75%
Pres. Walnut W/S	7.87	63.4%	0.010%	63.4%	0.00%	37.9%	0.005	23.0	4.99	4.99	0.554	13.3	2.43	0.350	13.2	75%
VHC Light Oak W/S	7.1	12.2%	0.010%	12.2%	0.00%	16.2%	0.019	23.0	0.863	0.863	0.386	9.26	1.69	3.03	5.34	75%
Trad. Walnut W/S	7.9	12.4%	0.010%	12.4%	0.00%	37.1%	0.0001	23.0	0.982	0.982	0.003	0.079	0.014	0.025	2.65	75%
Imp. Walnut W/S	8.0	13.1%	0.010%	13.1%	0.00%	37.4%	0.027	23.0	1.05	1.05	0.663	15.9	2.90	4.80	NA	75%
Mahogany W/S	7.2	12.3%	0.010%	12.3%	0.00%	22.3%	0.026	23.0	0.889	0.889	0.528	12.7	2.31	4.12	3.98	75%
Medium Oak W/S	7.2	11.3%	0.020%	11.3%	0.00%	20.5%	0.010	23.0	0.818	0.818	0.193	4.63	0.846	1.66	NA	75%
Medium Oak Filler	15.1	13.9%	0.00%	13.9%	0.00%	87.6%	0.001	23.0	2.11	2.11	0.037	0.900	0.164	0.253	2.41	75%
Light Oak Filler	15.3	76.9%	0.00%	76.9%	0.00%	87.5%	0.0001	23.0	11.7	11.7	0.017	0.408	0.074	0.006	13.4	75%
Pres. Walnut Filler	14.4	66.8%	0.00%	66.8%	0.00%	88.1%	0.001	23.0	9.61	9.61	0.152	3.66	0.668	0.083	10.9	75%
Trad. Mah. Filler	15.0	68.5%	0.00%	68.5%	0.00%	89.9%	0.001	23.0	10.3	10.3	0.153	3.67	0.670	0.077	11.4	75%
Mah. On Walnut Filler	14.0	79.5%	0.00%	79.5%	0.00%	87.1%	0.003	23.0	11.2	11.2	0.832	20.0	3.64	0.235	12.8	75%
Vict. Cherry Filler	14.8	100%	0.00%	100%	0.00%	88.4%	0.002	23.0	14.8	14.8	0.794	19.1	3.48	0.00	NA	75%
Classic Wal Filler	15.3	13.6%	0.00%	13.6%	0.00%	88.9%	0.002	23.0	2.08	2.08	0.075	1.80	0.328	0.521	2.34	75%

PM Control Efficiency: 90.0%

State Potential Emissions

Add worst case coating to all solvents

**Uncontrolled 1.69 40.6 7.41 4.80
Controlled 1.69 40.6 7.41 0.480**

METHODOLOGY

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

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

**Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Pit ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Sealer Booth (EU 230)																
Booth Coat	7.35	74.2%	0.590%	73.6%	0.00%	25.8%	0.0004	23.0	5.41	5.41	0.044	1.06	0.193	0.017	21.0	75%
Acetone	6.59	100%	1.00%	99.0%	0.00%	0.00%	0.002	23.0	6.52	6.52	0.279	6.70	1.22	0.00	NA	75%
Cat. Vinyl Sealer	7.92	68.7%	0.00%	68.7%	0.00%	31.3%	0.045	23.0	5.44	5.44	5.57	134	24.4	2.78	17.4	75%
Catalyst	9.06	35.6%	0.00%	35.6%	0.00%	64.4%	0.002	23.0	3.23	3.23	0.135	3.24	0.591	0.267	5.01	75%
Catalyst	8.80	41.3%	0.00%	41.3%	0.00%	58.7%	0.0004	23.0	3.63	3.63	0.037	0.880	0.161	0.057	6.18	75%

PM Control Efficiency: 90.0%

State Potential Emissions

Add worst case coating to all solvents

**Uncontrolled 5.57 134 24.4 2.78
Controlled 5.57 134 24.4 0.278**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Topcoat Booths (EU 232 and EU 233)																
Lacquer Retarder	6.79	100%	0.00%	100%	0.00%	0.00%	0.0001	23.0	6.79	6.79	0.013	0.315	0.057	0.00	NA	75%
55 Sheen Topcoat	7.70	72.1%	0.00%	72.1%	0.00%	28.0%	0.006	23.0	5.55	5.55	0.789	18.9	3.46	0.335	19.8	75%
Booth Coat	7.35	74.2%	0.59%	73.6%	0.00%	25.8%	0.0004	23.0	5.41	5.41	0.044	1.06	0.193	0.017	21.0	75%
Acetone	6.59	100%	1.00%	99.0%	0.00%	0.00%	0.002	23.0	6.52	6.52	0.279	6.70	1.22	0.00	NA	75%
55 Sheen Topcoat	7.62	67.5%	0.00%	67.5%	0.00%	32.5%	0.047	23.0	5.14	5.14	5.53	133	24.2	2.91	15.8	75%
55 Sheen Topcoat	7.62	67.3%	0.00%	67.3%	0.00%	32.7%	0.073	23.0	5.13	5.13	8.58	206	37.6	4.57	15.7	75%
Catalyst	9.06	35.6%	0.00%	35.6%	0.00%	64.4%	0.002	23.0	3.23	3.23	0.178	4.28	0.781	0.353	5.01	75%
Catalyst	8.80	41.3%	0.00%	41.3%	0.00%	58.7%	0.001	23.0	3.63	3.63	0.049	1.17	0.214	0.076	6.18	75%

PM Control Efficiency: 90.0%

State Potential Emissions

Add worst case coating to all solvents

**Uncontrolled 8.58 206 37.6 4.57
Controlled 8.58 206 37.6 0.457**

METHODOLOGY

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

VOC and Particulate

From Surface Coating Operations

Company Name: Indiana Furniture Industries and Indiana Dimension
 Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
 Permit Number: T 037-17504
 Plt ID: 037-00104
 Reviewer: Brian J. Pedersen
 Application Date: December 20, 2002

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Off Line Booth (EU 438)																
White Booth Coat	7.35	74.2%	0.590%	73.6%	0.00%	25.8%	0.004	2.00	5.41	5.41	0.044	1.06	0.194	0.017	21.0	75%
Walnut Basecoat	7.54	77.8%	0.010%	77.8%	0.00%	22.2%	0.008	2.00	5.86	5.86	0.090	2.16	0.395	0.028	26.4	75%
VHC/Medium Oak Basecoat	7.56	77.2%	0.010%	77.2%	0.00%	22.8%	0.0005	2.00	5.83	5.83	0.006	0.135	0.025	0.002	25.6	75%
VHC/Light Oak Basecoat	7.63	76.3%	0.010%	76.3%	0.00%	23.7%	0.0005	2.00	5.82	5.82	0.006	0.134	0.025	0.002	24.6	75%
Walnut Edge Glaze	7.75	60.7%	0.010%	60.7%	0.00%	39.3%	0.010	2.00	4.71	4.71	0.091	2.17	0.396	0.064	12.0	75%
Acetone	6.59	100%	1.00%	99.0%	0.00%	0.500%	0.021	2.00	6.52	6.52	0.279	6.70	1.22	0.00	1305	75%

PM Control Efficiency: 90.0%

State Potential Emissions

Add worst case coating to all solvents

Uncontrolled	0.279	6.70	1.22	0.064
Controlled	0.279	6.70	1.22	0.006

METHODOLOGY

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

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

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

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

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

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

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

Total = Worst Coating + Sum of all solvents used

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Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Trim Line Booth (EU 234)																
Mineral Spirits	6.49	100%	0.00%	100%	0.00%	0.00%	0.0004	10.2	6.49	6.49	0.026	0.615	0.112	0.00	NA	75%
Stain Reducer	6.51	100%	0.00%	100%	0.00%	0.00%	0.002	10.2	6.51	6.51	0.133	3.19	0.582	0.00	NA	75%
Lacquer Retarder	6.79	100%	0.00%	100%	0.00%	0.00%	0.0001	10.2	6.79	6.79	0.005	0.113	0.021	0.00	NA	75%
Cat Vinyl Sealer	7.92	68.7%	0.00%	68.7%	0.00%	31.3%	0.0001	10.2	5.44	5.44	0.005	0.121	0.022	0.003	17.4	75%
Pre-Cat Vinyl Washcoat	7.14	87.8%	0.07%	87.8%	0.00%	12.2%	0.00005	10.2	6.27	6.27	0.003	0.070	0.013	0.0004	51.5	75%
White Booth Coat	7.35	74.2%	0.59%	73.6%	0.00%	25.8%	0.00005	10.2	5.41	5.41	0.003	0.061	0.011	0.001	21.0	75%
Medium Oak Toner	6.82	97.1%	0.00%	97.1%	0.00%	2.86%	0.00002	10.2	6.62	6.62	0.002	0.037	0.007	0.000	232	75%
Lacquer Fill	9.44	51.6%	0.00%	51.6%	0.00%	48.4%	0.00002	10.2	4.87	4.87	0.001	0.027	0.005	0.001	10.1	75%
Imperial Walnut NGR	6.70	99.0%	0.88%	98.1%	0.00%	0.980%	0.00002	10.2	6.58	6.58	0.002	0.037	0.007	0.00002	671	75%
Presidential Walnut NGR	6.74	98.4%	0.83%	97.6%	0.00%	1.58%	0.00005	10.2	6.58	6.58	0.003	0.074	0.013	0.00005	416	75%
Walnut Sap	6.71	99.1%	0.85%	98.2%	0.00%	0.940%	0.00002	10.2	6.59	6.59	0.002	0.037	0.007	0.00002	701	75%
Trad. Mah. NGR	6.76	97.7%	0.82%	96.9%	0.00%	2.28%	0.00002	10.2	6.55	6.55	0.002	0.037	0.007	0.00004	287	75%
Classic/Gunstock Wal. NGR	6.71	99.2%	0.85%	98.3%	0.00%	0.850%	0.00002	10.2	6.60	6.60	0.002	0.037	0.007	0.00001	776	75%
Dark Cherry NGR	6.69	97.6%	0.93%	96.7%	0.00%	2.36%	0.00002	10.2	6.47	6.47	0.002	0.036	0.007	0.00004	274	75%
Heritage Cherry NGR	6.78	97.7%	0.81%	96.9%	0.00%	2.29%	0.00002	10.2	6.57	6.57	0.002	0.037	0.007	0.00004	287	75%
Mah. Walnut NGR	6.74	98.7%	0.84%	97.8%	0.00%	1.33%	0.00005	10.2	6.59	6.59	0.003	0.074	0.014	0.00005	496	75%
Light Maple Toner	6.86	93.7%	0.51%	93.2%	0.00%	6.28%	0.00002	10.2	6.39	6.39	0.001	0.036	0.007	0.0001	102	75%
Acetone	6.59	100%	1.00%	99%	0.00%	0.00%	0.00002	10.2	6.52	6.52	0.002	0.037	0.007	0.00	NA	75%
Medium Oak W/S	7.99	62.7%	0.01%	62.7%	0.00%	37.3%	0.00002	10.2	5.01	5.01	0.001	0.028	0.005	0.001	13.4	75%
Mah. On Walnut W/S	7.90	60.1%	0.01%	60.1%	0.00%	39.9%	0.00002	10.2	4.75	4.75	0.001	0.027	0.005	0.001	11.9	75%
Vict. Cherry W/S	8.07	60.2%	0.01%	60.1%	0.00%	39.9%	0.0001	10.2	4.85	4.85	0.003	0.081	0.015	0.002	12.2	75%
Trad. Mah. W/S	8.10	58.8%	0.01%	58.7%	0.00%	41.3%	0.0001	10.2	4.76	4.76	0.007	0.159	0.029	0.005	11.5	75%
VHC Light Oak W/S	7.06	83.8%	0.01%	83.8%	0.00%	16.2%	0.00002	10.2	5.92	5.92	0.001	0.033	0.006	0.0003	36.6	75%
Classic/Gunstock Wal. W/S	7.88	63.3%	0.01%	63.3%	0.00%	36.7%	0.00005	10.2	4.99	4.99	0.002	0.056	0.010	0.001	13.6	75%
55 Sheen Rel-Plaz T/C	7.62	67.3%	0.00%	67.3%	0.00%	32.7%	0.00002	10.2	5.13	5.13	0.001	0.029	0.005	0.001	15.7	75%
Catalyst	9.06	35.6%	0.00%	35.6%	0.00%	64.4%	0.00002	10.2	3.23	3.23	0.001	0.018	0.003	0.001	5.01	75%
Catalyst	8.80	41.3%	0.00%	41.3%	0.00%	58.7%	0.00002	10.2	3.63	3.63	0.001	0.020	0.004	0.001	6.18	75%
Presidential Walnut Filler	14.38	11.9%	0.00%	11.9%	0.00%	88.1%	0.00005	10.2	1.72	1.72	0.001	0.019	0.004	0.006	1.95	75%
Mah. On Walnut Filler	14.04	12.9%	0.00%	12.9%	0.00%	87.1%	0.00002	10.2	1.81	1.81	0.000	0.010	0.002	0.003	2.08	75%
Vict. Cherry Filler	14.75	11.7%	0.00%	11.7%	0.00%	88.4%	0.0001	10.2	1.72	1.72	0.002	0.038	0.007	0.013	1.94	75%
Classic Wal. And Gunstock Filler	15.26	11.1%	0.00%	11.1%	0.00%	88.9%	0.0001	10.2	1.70	1.70	0.002	0.057	0.010	0.021	1.91	75%

PM Control Efficiency: 90.0%

State Potential Emissions

Add worst case coating to all solvents

Uncontrolled	0.133	3.19	0.582	0.021
Controlled	0.133	3.19	0.582	0.002

VOC and Particulate
From Surface Coating Operations

Company Name: Indiana Furniture Industries and Indiana Dimension
 Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
 Permit Number: T 037-17504
 Pit ID: 037-00104
 Reviewer: Brian J. Pedersen
 Application Date: December 20, 2002

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Downdraft Booth (EU 145)																
Mineral Spirits	6.49	100%	0.00%	100%	0.00%	0.00%	0.002	12.0	6.49	6.49	0.147	3.52	0.642	0.000	NA	75%
Stain Reducer	6.51	100%	0.00%	100%	0.00%	0.00%	0.002	12.0	6.51	6.51	0.156	3.76	0.685	0.000	NA	75%
Lacquer Retarder	6.79	100%	0.00%	100%	0.00%	0.00%	0.001	12.0	6.79	6.79	0.075	1.80	0.329	0.000	NA	75%
Paint Stripper	6.88	95.7%	0.020%	95.6%	0.00%	4.35%	0.000	12.0	6.58	6.58	0.025	0.608	0.111	0.001	151	75%
Paint Stripper	6.89	95.7%	0.020%	95.6%	0.00%	4.35%	0.001	12.0	6.59	6.59	0.079	1.90	0.347	0.004	151	75%
Cat Vinyl Sealer	7.92	68.7%	0.00%	68.7%	0.00%	31.3%	0.018	12.0	5.44	5.44	1.19	28.5	5.20	0.593	17.4	75%
Pre-Cat Vinyl Washcoat	7.14	87.8%	0.070%	87.8%	0.00%	12.2%	0.007	12.0	6.27	6.27	0.491	11.8	2.15	0.074	51.5	75%
White Booth Coat	7.35	74.2%	0.590%	73.6%	0.00%	25.8%	0.004	12.0	5.41	5.41	0.252	6.05	1.10	0.097	21.0	75%
Woodland Rose Toner	7.94	78.5%	0.190%	78.3%	0.00%	21.6%	0.0004	12.0	6.21	6.21	0.030	0.718	0.131	0.009	28.8	75%
Medium Oak Toner	6.82	97.1%	0.00%	97.1%	0.00%	2.86%	0.005	12.0	6.62	6.62	0.389	9.33	1.70	0.013	232	75%
Trad. Walnut Toner	6.79	98.1%	0.00%	98.1%	0.00%	1.88%	0.0001	12.0	6.66	6.66	0.010	0.230	0.042	0.000	354	75%
Vict. Cherry Toner	6.83	97.3%	0.00%	97.3%	0.00%	2.73%	0.0003	12.0	6.64	6.64	0.022	0.536	0.098	0.001	243	75%
Lacquer Filler	9.44	51.6%	0.00%	51.6%	0.00%	48.4%	0.001	12.0	4.87	4.87	0.087	2.08	0.379	0.089	10.1	75%
Imperial Walnut NGR	6.73	99.2%	0.840%	98.3%	0.00%	0.850%	0.0003	12.0	6.62	6.62	0.025	0.612	0.112	0.000	778	75%
Imperial Walnut NGR	6.70	99.0%	0.880%	98.1%	0.00%	0.980%	0.002	12.0	6.58	6.58	0.155	3.72	0.678	0.002	671	75%
Presidential Walnut NGR	6.74	98.4%	0.830%	97.6%	0.00%	1.58%	0.002	12.0	6.58	6.58	0.123	2.96	0.540	0.002	416	75%
Walnut Sap	6.71	99.1%	0.850%	98.2%	0.00%	0.940%	0.005	12.0	6.59	6.59	0.383	9.20	1.68	0.004	701	75%
Trad. Mah. NGR	6.76	97.7%	0.820%	96.9%	0.00%	2.28%	0.001	12.0	6.55	6.55	0.060	1.44	0.262	0.002	287	75%
Classic/Gunstock Wal. NGR	6.71	99.2%	0.850%	98.3%	0.00%	0.850%	0.011	12.0	6.60	6.60	0.894	21.5	3.92	0.008	776	75%
Dark Cherry NGR	6.69	97.6%	0.930%	96.7%	0.00%	2.36%	0.001	12.0	6.47	6.47	0.050	1.19	0.218	0.001	274	75%
Heritage Cherry NGR	6.78	97.7%	0.810%	96.9%	0.00%	2.29%	0.007	12.0	6.57	6.57	0.584	14.0	2.56	0.015	287	75%
Mah. Walnut NGR	6.74	98.7%	0.840%	97.8%	0.00%	1.33%	0.006	12.0	6.59	6.59	0.469	11.3	2.05	0.007	496	75%
Rubbing Oil	6.61	84.2%	0.00%	84.2%	0.00%	15.8%	0.005	12.0	5.57	5.57	0.332	7.97	1.45	0.068	35.3	75%
Light Maple Toner	6.74	97.7%	0.590%	97.1%	0.00%	2.29%	0.002	12.0	6.55	6.55	0.173	4.16	0.758	0.004	286	75%
Acetone	6.59	100%	1.00%	99.0%	0.00%	0.00%	0.011	12.0	6.52	6.52	0.866	20.8	3.79	0.000	NA	75%
Inert Mono W/S	9.37	48.9%	0.030%	48.9%	0.00%	51.1%	0.0002	12.0	4.58	4.58	0.009	0.211	0.039	0.010	8.97	75%
Woodland Rose W/S	8.40	62.0%	0.020%	62.0%	0.00%	38.0%	0.0004	12.0	5.21	5.21	0.025	0.601	0.110	0.017	13.7	75%
Medium Oak W/S	7.99	62.7%	0.010%	62.7%	0.00%	37.3%	0.005	12.0	5.01	5.01	0.313	7.51	1.37	0.204	13.4	75%
Mah. On Walnut W/S	7.90	60.1%	0.010%	60.1%	0.00%	39.9%	0.011	12.0	4.75	4.75	0.618	14.8	2.71	0.450	11.9	75%
Vict. Cherry W/S	8.07	60.2%	0.010%	60.1%	0.00%	39.9%	0.007	12.0	4.85	4.85	0.390	9.35	1.71	0.283	12.2	75%
Trad. Mah. W/S	8.10	58.8%	0.010%	58.7%	0.00%	41.3%	0.002	12.0	4.76	4.76	0.142	3.40	0.621	0.109	11.5	75%
Presidential Walnut W/S	7.87	62.1%	0.010%	62.1%	0.00%	37.9%	0.0002	12.0	4.88	4.88	0.012	0.281	0.051	0.008	12.9	75%
VHC Light Oak W/S	7.06	83.8%	0.010%	83.8%	0.00%	16.2%	0.004	12.0	5.92	5.92	0.250	6.01	1.10	0.053	36.6	75%
Trad. Walnut W/S	7.91	62.9%	0.010%	62.9%	0.00%	37.1%	0.000	12.0	4.97	4.97	0.002	0.057	0.010	0.002	13.4	75%
Classic/Gunstock Wal. W/S	7.88	63.3%	0.010%	63.3%	0.00%	36.7%	0.001	12.0	4.99	4.99	0.086	2.07	0.378	0.055	13.6	75%
Presidential Walnut Wipe	7.86	62.0%	0.010%	62.0%	0.00%	38.0%	0.0003	12.0	4.87	4.87	0.016	0.393	0.072	0.011	12.8	75%
55 Sheen Rel-Plaz T/C	7.62	67.3%	0.00%	67.3%	0.00%	32.7%	0.025	12.0	5.13	5.13	1.56	37.33	6.81	0.828	15.7	75%
Catalyst	9.06	35.6%	0.00%	35.6%	0.00%	64.4%	0.001	12.0	3.23	3.23	0.033	0.781	0.143	0.064	5.01	75%
Catalyst	8.80	41.3%	0.00%	41.3%	0.00%	58.7%	0.001	12.0	3.63	3.63	0.038	0.921	0.168	0.060	6.18	75%
Medium Oak Filler	15.1	12.4%	0.00%	12.4%	0.00%	87.6%	0.000	12.0	1.87	1.87	0.006	0.151	0.028	0.049	2.13	75%
Light Oak Filler	15.3	12.5%	0.00%	12.5%	0.00%	87.5%	0.000	12.0	1.90	1.90	0.007	0.176	0.032	0.056	2.17	75%
Presidential Walnut Filler	14.4	11.9%	0.00%	11.9%	0.00%	88.1%	0.001	12.0	1.72	1.72	0.020	0.476	0.087	0.160	1.95	75%
Trad. Walnut Filler	15.0	12.5%	0.00%	12.5%	0.00%	87.5%	0.0001	12.0	1.87	1.87	0.003	0.065	0.012	0.021	2.13	75%
Trad. Mah. Filler	15.0	10.1%	0.00%	10.1%	0.00%	89.9%	0.001	12.0	1.52	1.52	0.010	0.246	0.045	0.099	1.69	75%
Mah. On Walnut Filler	14.0	12.9%	0.00%	12.9%	0.00%	87.1%	0.002	12.0	1.81	1.81	0.042	1.00	0.183	0.309	2.08	75%
Vict. Cherry Filler	14.8	11.7%	0.00%	11.7%	0.00%	88.4%	0.002	12.0	1.72	1.72	0.045	1.09	0.199	0.377	1.94	75%
Classic Wal and Gunstock Filler	15.3	11.1%	0.00%	11.1%	0.00%	88.9%	0.001	12.0	1.70	1.70	0.018	0.431	0.079	0.157	1.91	75%

PM Control Efficiency: 90.0%

State Potential Emissions Add worst case coating to all solvents

Uncontrolled	1.56	37.3	6.81	0.828
Controlled	1.56	37.3	6.81	0.083

METHODOLOGY

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

Total = Worst Coating + Sum of all solvents used

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

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Plt ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Chair Finish Booth (EU 457)																
Mineral Spirits	6.49	100%	0.00%	100%	0.00%	0.00%	0.007	10.2	6.49	6.49	0.431	10.3	1.89	0.00	NA	75%
Cat. Vinyl Sealer	7.92	68.7%	0.00%	68.7%	0.00%	31.3%	0.058	10.2	5.44	5.44	3.22	77.2	14.1	1.61	17.4	75%
Booth Coat	7.35	74.2%	0.590%	73.6%	0.00%	25.8%	0.002	10.2	5.41	5.41	0.099	2.37	0.433	0.038	21.0	75%
Med. Oak Toner	6.82	97.1%	0.00%	97.1%	0.00%	2.86%	0.002	10.2	6.62	6.62	0.153	3.67	0.670	0.00	232	75%
Med. Oak Toner	6.91	96.0%	0.010%	96.0%	0.00%	3.98%	0.003	10.2	6.63	6.63	0.188	4.52	0.825	0.009	167	75%
Trad Wal. Toner	6.79	98.1%	0.00%	98.1%	0.00%	1.88%	0.0002	10.2	6.66	6.66	0.013	0.307	0.056	0.00	354	75%
Vict. Cherry Toner	6.81	97.2%	0.00%	97.2%	0.00%	2.80%	0.0001	10.2	6.62	6.62	0.006	0.153	0.028	0.00	236	75%
#37 Honey Cherry Stain	6.74	98.1%	0.00%	98.1%	0.00%	1.89%	0.002	10.2	6.61	6.61	0.121	2.90	0.529	0.00	350	75%
Imp. Wal. NGR	6.73	99.2%	0.840%	98.3%	0.00%	0.850%	0.004	10.2	6.62	6.62	0.254	6.11	1.11	0.00	778	75%
Imp. Wal. NGR	6.70	99.0%	0.880%	98.1%	0.00%	0.980%	0.003	10.2	6.58	6.58	0.180	4.33	0.789	0.00	671	75%
Pres. Wal. NGR	6.74	98.4%	0.830%	97.6%	0.00%	0.158%	0.003	10.2	6.58	6.58	0.187	4.48	0.817	0.00	4163	75%
Walnut Sap	6.71	99.1%	0.850%	98.2%	0.00%	0.940%	0.019	10.2	6.59	6.59	1.31	31.3	5.72	0.014	701	75%
Trad. Mah. NGR	6.76	97.7%	0.820%	96.9%	0.00%	2.28%	0.001	10.2	6.55	6.55	0.079	1.89	0.345	0.00	287	75%
Gunstock Wal. NGR	6.71	99.2%	0.850%	98.3%	0.00%	0.850%	0.0004	10.2	6.60	6.60	0.025	0.609	0.111	0.00	776	75%
Dark Cherry	6.69	97.6%	0.930%	96.7%	0.00%	2.36%	0.001	10.2	6.47	6.47	0.081	1.94	0.354	0.00	274	75%
IW NGR Stain	6.65	98.8%	0.080%	98.8%	0.00%	1.17%	0.002	10.2	6.57	6.57	0.104	2.50	0.456	0.00	561	75%
Hert. Cherry NGR	6.78	97.7%	0.810%	96.9%	0.00%	2.29%	0.012	10.2	6.57	6.57	0.774	18.6	3.39	0.0200	287	75%
Mah. Wal. NGR	6.74	98.7%	0.840%	97.8%	0.00%	1.33%	0.019	10.2	6.59	6.59	1.28	30.7	5.60	0.0190	496	75%
Acetone	6.59	100%	1.00%	99.0%	0.00%	0.00%	0.020	10.2	6.52	6.52	1.35	32.4	5.92	0.00	NA	75%
Mah. Wal. Wipe Stain	7.90	60.1%	0.010%	60.1%	0.00%	39.9%	0.008	10.2	4.75	4.75	0.386	9.25	1.69	0.280	11.9	75%
Vict. Cherry Wipe Stain	8.07	60.2%	0.010%	60.1%	0.00%	39.9%	0.00005	10.2	4.85	4.85	0.00	0.056	0.010	0.00	12.2	75%
VHC Light Oak Wipe Stain	7.06	83.8%	0.010%	83.8%	0.00%	16.2%	0.0006	10.2	5.92	5.92	0.034	0.819	0.149	0.007	36.6	75%
Trad. Wal. Wipe Stain	7.91	62.9%	0.010%	62.9%	0.00%	37.1%	0.0002	10.2	4.97	4.97	0.010	0.229	0.042	0.006	13.4	75%
Classic Gunstock Wal. W	7.88	63.3%	0.010%	63.3%	0.00%	36.7%	0.011	10.2	4.99	4.99	0.557	13.4	2.44	0.353	13.6	75%
Mah. Wipe Stain	7.22	77.7%	0.010%	77.7%	0.00%	22.3%	0.010	10.2	5.61	5.61	0.550	13.2	2.41	0.173	25.1	75%
55 Sheen T/C	7.62	67.3%	0.00%	67.3%	0.00%	32.7%	0.064	10.2	5.13	5.13	3.36	80.7	14.7	1.79	15.7	75%
Catalyst	9.06	35.6%	0.00%	35.6%	0.00%	64.4%	0.002	10.2	3.23	3.23	0.070	1.67	0.306	0.138	5.01	75%
Catalyst	8.80	41.3%	0.00%	41.3%	0.00%	58.7%	0.002	10.2	3.63	3.63	0.082	1.97	0.359	0.128	6.18	75%

PM Control Efficiency: 90.0%

State Potential Emissions	Add worst case coating to all solvents	Uncontrolled	3.36	80.7	14.7	1.79
		Controlled	3.36	80.7	14.7	0.179

METHODOLOGY

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

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Pit ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Chromium	Weight % Vinyl Acetate	Weight % MEK	Chromium Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	MEK Emissions (ton/yr)	Total HAP Emissions (ton/yr)
SAP Booth (EU 225)										
Acetone	6.59	0.002	23.0	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Walnut Sap	6.71	0.033	23.0	0.891%	0.00%	0.00%	0.196	0.00	0.00	0.196
White Oak Sap	6.59	0.0003	23.0	0.002%	0.00%	0.00%	0.000004	0.00	0.00	0.00
Booth Coat	7.35	0.000	23.0	0.00%	0.017%	1.33%	0.00	0.00004	0.004	0.004
							0.196	0.00004	0.004	0.196

Total State Potential Emissions

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Caprolactum	Weight % Chromium	Weight % Cobalt	Weight % Toluene	Weight % Methanol	Weight % Glycol Ethers	Weight % Cumene	Weight % Xylene	Weight % MEK	Weight % Vinyl Acetate	Caprolactum Emissions (ton/yr)	Chromium Emissions (ton/yr)	Cobalt Emissions (ton/yr)	Toluene Emissions (ton/yr)	Methanol Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Cumene Emissions (ton/yr)	Xylene Emissions (ton/yr)	MEK Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Total HAP Emissions (ton/yr)
NGR Booth (EU 227)																								
Stain Reducer	6.49	0.008	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.101%	0.201%	2.13%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.005	0.011	0.116	0.00000	0.133
Stain Reducer	6.51	0.005	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.00
Booth Coat	7.35	0.0004	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.133%	0.017%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00004	0.0004
Med. Oak Toner	6.82	0.003	23.0	0.00%	0.00%	0.00%	0.497%	0.022%	0.015%	0.00%	0.021%	0.044%	0.00%	0.00	0.00	0.00	0.010	0.0004	0.0003	0.000	0.00	0.00	0.00000	0.012
Trad Wal. Toner	6.79	0.0001	23.0	0.00%	0.00%	0.00%	0.636%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.0003
Vict. Cherry Toner	6.83	0.0001	23.0	0.00%	0.00%	0.00%	0.531%	0.690%	0.00%	0.00%	0.007%	0.009%	0.00%	0.00	0.00	0.00	0.00	0.0004	0.0000	0.000	0.00	0.00	0.00000	0.001
Imp. Wal. NGR	6.70	0.006	23.0	0.00%	0.935%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.040	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.040
Pres. Wal. NGR	6.74	0.003	23.0	0.513%	0.623%	0.342%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.010	0.012	0.006	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.027
Trad Mah. NGR	6.76	0.002	23.0	0.835%	0.759%	0.645%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.010	0.009	0.007	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.026
Gunstock Wal. NGR	6.71	0.0003	23.0	0.212%	0.165%	0.183%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.001
Dark Cherry NGR	6.69	0.0001	23.0	0.00%	0.554%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.0002
Dark Cherry NGR	6.73	0.0006	23.0	2.19%	0.000%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.010	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.010
Hert. Cherry NGR	6.78	0.015	23.0	0.614%	1.16%	0.410%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.063	0.119	0.042	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.224
Mah. Wal. NGR	6.74	0.024	23.0	0.618%	0.118%	0.031%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.101	0.019	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.125
NGR Base	6.59	0.0004	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.00
NGR Base	6.59	0.001	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.00
Acetone	6.59	0.002	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.00
VHC Red NGR	7.22	0.00002	23.0	0.00%	0.549%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.0000	0.0000	0.000	0.00	0.00	0.00000	0.0001

Total State Potential Emissions

0.101 0.119 0.042 0.010 0.0004 0.0003 0.005 0.011 0.116 0.00004 0.224

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

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

**Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Plt ID: 037-00104
Permit Reviewer: Brian J. Pedersen
Application Date: December 20, 2002**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Vinyl Acetate	Weight % EthylBenzene	Weight % Glycol Ethers	Weight % Methanol	Weight % MEK	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Methanol Emissions (ton/yr)	MEK Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Washcoat Booth (EU 228)																				
Pre-Cat Vinyl Washcoat	7.14	0.028	23.0	1.91%	7.50%	0.078%	0.00%	0.393%	0.00%	0.033%	0.00%	0.387	1.52	0.016	0.00	0.080	0.007	0.00	0.00	2.01
Booth Coat	7.35	0.0004	23.0	0.00%	0.00%	0.00%	0.017%	0.00%	0.00%	0.00%	1.33%	0.00	0.00	0.00	0.00004	0.00	0.00	0.004	0.004	0.004
Acetone	6.59	0.002	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total State Potential Emissions

0.387 1.52 0.016 0.00004 0.080 0.007 0.004 2.01

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Naphthalene	Weight % Manganese	Weight % Cobalt	Weight % Vinyl Acetate	Weight % Ethyl Benzene	Weight % Glycol Ethers	Weight % Methanol	Weight % MEK	Weight % Toluene	Weight % Cumene	Xylene Emissions (ton/yr)	Naphthalene Emissions (ton/yr)	Manganese Emissions (ton/yr)	Cobalt Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)	MEK Emissions (ton/yr)	Toluene Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAP Emissions (ton/yr)
Wipestain Booth (EU 229)																										
Booth Coat	7.35	0.0004	23.0	0.00%	0.00%	0.00%	0.00%	0.017%	0.00%	0.00%	0.00%	1.33%	0.00%	0.00%	0.00	0.0000	0.00	0.00	0.00004	0.00	0.00	0.000	0.004	0.00	0.00	0.004
Acetone	6.59	0.002	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	0.004
Black Monocolor W/S	7.60	0.0001	23.0	0.032%	0.219%	0.00%	0.00%	0.00%	0.00%	3.01%	0.178%	0.00%	0.00%	0.016%	0.00002	0.0001	0.00	0.00	0.00	0.00	0.00145	0.0001	0.00	0.00	0.00001	0.002
Inert Mono W/S	9.37	0.001	23.0	0.146%	0.00%	0.00%	0.00%	0.00%	0.018%	1.90%	0.115%	0.00%	0.0005%	0.035%	0.002	0.0000	0.00	0.00	0.00	0.0002	0.023	0.001	0.00	0.00001	0.0004	0.027
Mah. On Walnut W/S	7.90	0.0002	23.0	0.199%	0.00%	0.001%	0.00%	0.00%	0.025%	0.011%	0.00%	0.00%	0.108%	0.046%	0.0003	0.0000	0.000002	0.00	0.00	0.00004	0.00	0.00	0.0002	0.0001	0.00	0.00
Vict. Cherry W/S	8.07	0.015	23.0	0.444%	0.00%	0.345%	0.00%	0.00%	0.083%	0.001%	0.00%	0.00%	0.216%	0.451%	0.052	0.0000	0.041	0.00	0.00	0.010	0.0001	0.00	0.00	0.025	0.053	0.181
Trad. Mah. W/S	8.10	0.002	23.0	0.916%	0.00%	0.003%	0.00%	0.00%	0.195%	0.013%	0.00%	0.00%	0.839%	0.042%	0.012	0.0000	0.00004	0.00	0.00	0.002	0.0002	0.00	0.00	0.011	0.001	0.026
Pres. Walnut W/S	7.87	0.005	23.0	0.230%	0.00%	0.002%	0.00%	0.00%	0.032%	0.017%	0.00%	0.00%	0.001%	0.459%	0.009	0.0000	0.0001	0.00	0.00	0.001	0.001	0.00	0.00	0.00	0.018	0.028
VHC Light Oak W/S	7.06	0.019	23.0	0.233%	0.00%	0.08%	0.00%	0.00%	0.017%	0.023%	0.00%	0.00%	0.008%	0.081%	0.032	0.0000	0.011	0.00	0.00	0.002	0.003	0.00	0.00	0.0012	0.011	0.061
Trad. Walnut W/S	7.91	0.0001	23.0	0.231%	0.00%	0.176%	0.00%	0.00%	0.325%	0.014%	0.00%	0.00%	0.046%	0.046%	0.0003	0.0000	0.0002	0.00	0.00	0.0004	0.00002	0.00	0.00	0.00	0.00005	0.001
Imp. Walnut W/S	7.99	0.027	23.0	0.255%	0.00%	0.313%	0.00%	0.00%	0.039%	0.057%	0.00%	0.00%	0.045%	0.056%	0.0000	0.069	0.00	0.00	0.009	0.013	0.00	0.00	0.0002	0.010	0.157	
Mahogany W/S	7.22	0.026	23.0	0.059%	0.00%	0.001%	0.00%	0.00%	0.002%	0.006%	0.00%	0.00%	0.00%	0.251%	0.011	0.0000	0.0001	0.00	0.00	0.0004	0.001	0.00	0.00	0.00	0.047	0.060
Medium Oak W/S	7.24	0.010	23.0	3.81%	0.00%	0.124%	0.00%	0.00%	0.872%	0.009%	0.00%	0.00%	0.023%	0.044%	0.285	0.0000	0.009	0.00	0.00	0.065	0.001	0.00	0.00	0.002	0.003	0.365
Medium Oak Filler	15.1	0.001	23.0	0.165%	0.00%	0.205%	0.004%	0.00%	0.036%	0.410%	0.00%	0.00%	0.00%	0.004%	0.002	0.0000	0.002	0.00004	0.00	0.0004	0.005	0.00	0.00	0.00	0.00004	0.010
Light Oak Filler	15.3	0.0001	23.0	0.200%	0.00%	0.039%	0.004%	0.00%	0.046%	0.238%	0.00%	0.00%	0.00%	0.002%	0.0002	0.0000	0.00004	0.000003	0.00	0.00004	0.0002	0.00	0.00	0.00	0.000002	0.001
Pres. Walnut Filler	14.4	0.001	23.0	0.143%	0.00%	0.007%	0.003%	0.00%	0.031%	0.019%	0.00%	0.00%	0.00%	0.006%	0.001	0.0000	0.0001	0.00003	0.00	0.0003	0.0002	0.00	0.00	0.00	0.0001	0.002
Trad. Mah. Filler	15.0	0.001	23.0	0.609%	0.00%	0.010%	0.003%	0.00%	0.141%	0.019%	0.00%	0.00%	0.473%	0.005%	0.006	0.0000	0.0001	0.00003	0.00	0.001	0.0002	0.00	0.00	0.005	0.00005	0.012
Mah. On Walnut Filler	14.0	0.003	23.0	0.141%	0.00%	0.007%	0.003%	0.00%	0.029%	0.018%	0.00%	0.00%	0.001%	0.009%	0.006	0.0000	0.0003	0.0002	0.00	0.001	0.001	0.00	0.00	0.00	0.0004	0.010
Vict. Cherry Filler	14.8	0.002	23.0	0.214%	0.00%	0.115%	0.004%	0.00%	0.048%	0.019%	0.00%	0.00%	0.072%	0.005%	0.007	0.0000	0.004	0.0001	0.00	0.002	0.001	0.00	0.00	0.002	0.0002	0.017
Classic Wal Filler	15.3	0.002	23.0	0.130%	0.00%	0.050%	0.003%	0.00%	0.030%	0.017%	0.00%	0.00%	0.001%	0.001%	0.003	0.0000	0.001	0.0001	0.00	0.001	0.0004	0.00	0.00	0.00	0.00003	0.006

Total State Potential Emissions

0.285 0.0001 0.069 0.0002 0.00004 0.065 0.023 0.001 0.004 0.025 0.053 0.365

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

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Plt ID: 037-00104
Permit Reviewer: Brian J. Pedersen
Application Date: December 20, 2002

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Phenol	Weight % Ethyl Benzene	Weight % Methanol	Weight % MEK	Weight % Vinyl Acetate	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Phenol Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Methanol Emissions (ton/yr)	MEK Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Sealer Booth (EU 230)																					
Booth Coat	7.35	0.0004	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.33%	0.017%	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.00004	0.004	
Acetone	6.59	0.002	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Cat. Vinyl Sealer	9.92	0.045	23.0	4.54%	14.3%	0.174%	0.00%	1.07%	0.00%	0.00%	0.00%	1.61	5.08	0.062	0.000	0.378	0.000	0.000	0.000	7.14	
Catalyst	9.06	0.002	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	18.5%	0.00%	0.00%	0.000	0.000	0.000	0.000	0.000	0.307	0.000	0.000	0.307	
Catalyst	8.80	0.0004	23.0	0.00%	0.00%	0.00%	2.03%	0.00%	0.00%	0.00%	0.00%	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.008	

Total State Potential Emissions 1.61 5.08 0.062 0.008 0.378 0.307 0.004 0.00004 7.14

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethyl Benzene	Weight % Methanol	Weight % MEK	Weight % Vinyl Acetate	Weight % Cumene	Weight % Phenol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Methanol Emissions (ton/yr)	MEK Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Cumene Emissions (ton/yr)	Phenol Emissions (ton/yr)	Total HAP Emissions (ton/yr)
Topcoat Booths (EU 232 and EU 233)																						
Lacquer Retarder	6.79	0.0001	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00000	0.00	0.00
55 Sheen Topcoat	7.70	0.006	23.0	3.41%	7.15%	0.056%	0.799%	4.73%	0.00%	0.001%	0.00%	0.00%	0.164	0.343	0.003	0.038	0.227	0.00	0.00	0.00007	0.00	0.775
Booth Coat	7.35	0.0004	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	1.33%	0.017%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.004	0.00004	0.00000	0.00	0.00
Acetone	6.59	0.002	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00000	0.00	0.00
55 Sheen Topcoat	7.62	0.047	23.0	10.4%	0.706%	0.127%	2.44%	0.00%	0.00%	0.00%	0.00%	0.00%	3.72	0.253	0.046	0.874	0.00	0.00	0.00	0.00000	0.00	4.89
55 Sheen Topcoat	7.62	0.073	23.0	10.3%	0.711%	0.128%	2.43%	0.00%	0.00%	0.00%	0.00%	0.00%	5.77	0.397	0.072	1.35	0.00	0.00	0.00	0.00000	0.00	7.60
Catalyst	9.06	0.002	23.0	0.00%	0.00%	0.00%	0.00%	18.5%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.406	0.00	0.00	0.00000	0.00	0.406
Catalyst	8.80	0.001	23.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.03%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00000	0.011	0.011

Total State Potential Emissions 5.77 0.397 0.072 1.35 0.406 0.004 0.00004 0.00007 0.011 7.60

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

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Pin ID: 037-00104
Permit Reviewer: Brian J. Pedersen
Application Date: December 20, 2002

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Vinyl Acetate	Weight % Toluene	Weight % Ethyl Benzene	Weight % Glycol Ethers	Weight % Methanol	Weight % MEK	Weight % MIK	Weight % Cumene	Xylene Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)	MEK Emissions (ton/yr)	MIK Emissions (ton/yr)	Cumene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Off Line Booth (EU 438)																							
White Booth Coat	7.35	0.004	2.00	0.00%	0.017%	0.00%	0.00%	0.00%	0.00%	1.33%	0.017%	0.00%	0.00000	0.00004	0.00	0.00	0.00000	0.00	0.004	0.00004	0.00	0.004	
Walnut Basecoat	7.54	0.008	2.00	0.416%	0.00%	7.32%	0.098%	0.242%	0.360%	0.833%	0.381%	0.00%	0.0021	0.00	0.037	0.0005	0.001	0.002	0.004	0.002	0.00	0.049	
VHC/Medium Oak Basecoat	7.56	0.0005	2.00	0.399%	0.00%	7.24%	0.094%	0.270%	0.401%	0.900%	0.319%	0.00%	0.0001	0.00	0.002	0.00003	0.0001	0.0001	0.0003	0.0001	0.00	0.003	
VHC/Light Oak Basecoat	7.63	0.0005	2.00	0.424%	0.00%	7.12%	0.100%	0.286%	0.424%	0.901%	0.166%	0.00%	0.0001	0.00	0.002	0.00003	0.0001	0.0001	0.0003	0.0001	0.00	0.003	
Walnut Edge Glaze	7.75	0.010	2.00	1.12%	0.00%	0.007%	0.253%	0.00%	0.00%	0.00%	0.00%	0.021%	0.007	0.00	0.00004	0.002	0.00000	0.00	0.00	0.00	0.0001	0.009	
Acetone	6.59	0.021	2.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00000	0.00	0.00	0.00	0.00	0.00	
Total State Potential Emissions													0.007	0.00004	0.037	0.002	0.001	0.002	0.004	0.002	0.0001	0.049	

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

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Pit ID: 037-00104
Permit Reviewer: Brian J. Pedersen
Application Date: December 20, 2002

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Chromium	Weight % Ethyl Benzene	Weight % Glycol Ethers	Weight % Methanol	Weight % MEK	Weight % Vinyl Acetate	Weight % Cumene	Weight % MIK	Weight % Cobalt	Weight % Manganese	Weight % Phenol	Weight % Caprolactum
Chair Finish Booth (EU 457)																		
Mineral Spirits	6.49	0.007	10.2	0.201%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.101%	0.00%	0.00%	0.00%	0.00%	0.00%
Cat. Vinyl Sealer	7.92	0.058	10.2	0.454%	14.3%	0.174%	0.00%	1.65%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Booth Coat	7.35	0.002	10.2	0.000%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.33%	0.017%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Med. Oak Toner	6.82	0.002	10.2	0.021%	0.497%	0.00%	0.00%	0.005%	0.015%	0.022%	0.044%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Med. Oak Toner	6.91	0.003	10.2	0.119%	0.581%	0.00%	0.00%	0.03%	0.078%	0.122%	0.303%	0.00%	0.00%	0.116%	0.00%	0.00%	0.00%	0.00%
Trad Wal. Toner	6.79	0.000	10.2	0.00%	0.636%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Vict. Cherry Toner	6.81	0.000	10.2	0.00%	0.451%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
#37 Honey Cherry Stain	6.74	0.002	10.2	0.034%	0.373%	0.00%	0.00%	0.008%	0.024%	0.035%	0.071%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imp. Wal. NGR	6.73	0.004	10.2	0.00%	0.00%	0.00%	0.040%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Imp. Wal. NGR	6.70	0.003	10.2	0.00%	0.00%	0.00%	0.935%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Pres. Wal. NGR	6.74	0.003	10.2	0.00%	0.00%	0.00%	0.623%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.342%	0.00%	0.00%	0.513%
Walnut Sap	6.71	0.019	10.2	0.00%	0.00%	0.00%	0.891%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Trad. Mah. NGR	6.76	0.001	10.2	0.00%	0.00%	0.00%	0.722%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.557%	0.00%	0.00%	0.835%
Gunstock Wal. NGR	6.71	0.000	10.2	0.00%	0.00%	0.00%	0.165%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.18%	0.00%	0.00%	0.212%
Dark Cherry	6.69	0.001	10.2	0.00%	0.00%	0.00%	2.19%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
IW NGR Stain	6.65	0.002	10.2	0.00%	0.00%	0.00%	0.374%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Hert. Cherry NGR	6.78	0.012	10.2	0.00%	0.00%	0.00%	1.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.410%	0.00%	0.00%	0.614%
Mah. Wal. NGR	6.74	0.019	10.2	0.00%	0.00%	0.00%	0.118%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.408%	0.00%	0.00%	0.612%
Acetone	6.59	0.020	10.2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Mah. Wal. Wipe Stain	7.90	0.008	10.2	0.199%	0.108%	0.00%	0.00%	0.025%	0.011%	0.00%	0.00%	0.00%	0.046%	0.00%	0.00%	0.00%	0.00%	0.00%
Vict. Cherry Wipe Stain	8.07	0.00005	10.2	0.444%	0.216%	0.00%	0.00%	0.083%	0.001%	0.00%	0.00%	0.00%	0.045%	0.00%	0.00%	0.345%	0.00%	0.00%
VHC Light Oak Wipe Stain	7.06	0.001	10.2	0.233%	0.008%	0.00%	0.00%	0.017%	0.023%	0.00%	0.00%	0.00%	0.081%	0.00%	0.00%	0.080%	0.00%	0.00%
Trad. Wal. Wipe Stain	7.91	0.0002	10.2	0.231%	0.001%	0.00%	0.00%	0.325%	0.014%	0.00%	0.00%	0.00%	0.046%	0.00%	0.00%	0.170%	0.00%	0.00%
Classic Gunstock Wal. W	7.88	0.011	10.2	0.233%	0.001%	0.00%	0.00%	0.033%	0.012%	0.00%	0.00%	0.00%	0.046%	0.00%	0.001%	0.125%	0.00%	0.00%
Mah. Wipe Stain	7.22	0.010	10.2	0.059%	0.0001%	0.00%	0.00%	0.002%	0.006%	0.00%	0.00%	0.00%	0.025%	0.00%	0.00%	0.001%	0.00%	0.00%
55 Sheen T/C	7.62	0.064	10.2	10.3%	0.711%	0.128%	0.00%	2.43%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Catalyst	9.06	0.002	10.2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	18.5%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Catalyst	8.80	0.002	10.2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.03%	0.00%

Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Chromium Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)	MEK Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)	Cumene Emissions (ton/yr)	MIK Emissions (ton/yr)	Cobalt Emissions (ton/yr)	Manganese Emissions (ton/yr)	Phenol Emissions (ton/yr)	Caprolactum Emissions (ton/yr)	Total HAP Emissions (ton/yr)
0.004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.002	0.00	0.00	0.00	0.00	0.00	0.006
0.093	2.937	0.036	0.00	0.340	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.41
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.008	0.0001	0.00	0.00	0.00	0.00	0.00	0.00	0.008
0.00	0.003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.004
0.001	0.005	0.00	0.00	0.00	0.001	0.001	0.003	0.00	0.00	0.001	0.00	0.00	0.00	0.00	0.012
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0004
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0001
0.00	0.002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.003
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0004
0.00	0.00	0.00	0.008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.008
0.00	0.00	0.00	0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.003	0.00	0.00	0.004	0.012
0.00	0.00	0.00	0.052	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.052
0.00	0.00	0.00	0.003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.002	0.00	0.00	0.003	0.008
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.001
0.00	0.00	0.00	0.008	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.008
0.00	0.00	0.00	0.002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.002
0.00	0.00	0.00	0.041	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.014	0.00	0.00	0.021	0.076
0.00	0.00	0.00	0.007	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.023	0.00	0.00	0.035	0.065
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.006	0.003	0.00	0.00	0.001	0.00	0.00	0.00	0.00	0.001	0.00	0.00	0.00	0.00	0.00	0.011
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0002
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.001
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.001
0.009	0.00	0.00	0.00	0.001	0.00	0.00	0.00	0.00	0.002	0.00	0.00	0.005	0.00	0.00	0.017
0.002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.001	0.00	0.00	0.00	0.00	0.00	0.003
2.263	0.156	0.028	0.00	0.531	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.98
0.00	0.00	0.00	0.00	0.00	0.00	0.159	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.159
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.018	0.00	0.018

Total State Potential Emissions **2.26 2.94 0.036 0.052 0.531 0.001 0.159 0.008 0.0001 0.002 0.001 0.023 0.005 0.018 0.035 3.41**

**Appendix A: Emission Calculations
Woodworking**

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Part 70: T 037-17504
Plt ID: 037-00104
Reviewer: Brian J. Pedersen
Date: December 20, 2002

Control Efficiency
97.8%

Pollutant	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Total Filter Area (sq. ft.)	Air to Cloth Ratio (acfm/sq. ft.)	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)
PM and PM ₁₀	0.0002357	8775.0	5.9	4.8	21.0	0.105	0.458

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

**Appendix A: Emission Calculations
Woodworking**

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Part 70: T 037-17504
Plt ID: 037-00104
Reviewer: Brian J. Pedersen
Date: December 20, 2002

Control Efficiency

99.00%

Pollutant	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Total Filter Area (sq. ft.)	Air to Cloth Ratio (acfm/sq. ft.)	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)
PM10	0.0002357	8775.0	5.1	9.0	39.6	0.090	0.396

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (sq. ft.) ((cub. ft./min.)/sq. ft.) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

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

**Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Plt ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002**

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.00

9

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.008	0.033	0.003	0.438	0.024	0.368

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See page 18 for HAPs emissions calculations.

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

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Plt ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.00210	Dichlorobenzene 0.00120	Formaldehyde 0.07500	Hexane 1.80000	Toluene 0.00340
Potential Emission in tons/yr	0.000009	0.000005	0.000329	0.007884	0.000015

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021	Total
Potential Emission in tons/yr	0.00000	0.00000	0.00001	0.00000	0.00001	0.008

Methodology is the same as page 17.

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

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

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Plt ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002

Unit ID	Heat Input Capacity
Unit 460	6.70
Unit 520	10.0
Total	16.7

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

16.7

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Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.90	7.60	0.600	100	5.50	84.0
				**see below		
Potential Emission in tons/yr	0.139	0.556	0.044	7.31	0.402	6.144

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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

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

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

See page 20 for HAPs emissions calculations.

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

Company Name: Indiana Furniture Industries and Indiana Dimension
Address City IN Zip: 1224 N. Mill Street and 13th and Vine Street
Permit Number: T 037-17504
Plt ID: 037-00104
Reviewer: Brian J. Pedersen
Application Date: December 20, 2002

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 0.00210	Dichlorobenzene 0.00120	Formaldehyde 0.07500	Hexane 1.80000	Toluene 0.00340
Potential Emission in tons/yr	0.000154	0.000088	0.005486	0.131663	0.000249

HAPs - Metals						
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021	Total
Potential Emission in tons/yr	0.00004	0.00008	0.00010	0.00003	0.00015	0.138

Methodology is the same as page 19.

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

