INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: December 22, 2008

RE: Jasper Chair Company, Inc / 037-24423-00005

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

Notice of Decision: Approval - Effective Immediately

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

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

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

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

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

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

Enclosures
FNPER.dot12/03/07

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Federally Enforceable State Operating Permit Renewal
OFFICE OF AIR QUALITY

Jasper Chair Company, Inc.
534 East 8th Street
Jasper, Indiana 47546

(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. 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 2-8 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.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F037-24423-00005	
Issued by: Alfred C. Dumaual Alfred C. Dumaual, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: December 22, 2008 Expiration Date: December 22, 2018

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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 through A.3 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 2-8-3(b)]

The Permittee owns and operates a stationary woodworking and finishing facility.

Source Address:	534 East 8th Street, Jasper, Indiana 47546
Mailing Address:	534 East 8th Street, Jasper, Indiana 47546
General Source Phone Number:	1-812-482-5239
SIC Code:	2511, 2522
County Location:	Dubois
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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

(a) One (1) woodworking operation for wood product processing, that includes the following; grinders, sanders, saws, planers and routers of various types and models, using a baghouse dust collector as a control, constructed in 1986, and exhausting to stack 003.

(b) One (1) wood fired boiler with coal as a back-up fuel, with a maximum capacity of 18.3 million British thermal units (MMBtu) per hour, installed in 1980, and exhausting to stack 001.

(c) Six (6) spray booths, identified as A, B, C, D, E and F.

Each booth is equipped with one (1) HVLP spray gun for wood furniture coating, at a maximum capacity of 70 units per hour, with dry filters for overspray control, constructed in 1986, and exhausting through stacks 002A, 002B, 002C, 002D, 002E, and 002F.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

(a) Natural gas fired combustion source with heat input equal to or less than ten million (10,000,000) Btu per hour.

(1) One (1) natural gas fired boiler (used as a back-up to the wood fired boiler), constructed on December 31, 1992 and rated at 9.9 MMBtu/hr.

(b) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons and dispensing less than or equal to 230,000 gallons per month.

(c) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100 F) or;

(2) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20 C (68 F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(d) Closed loop heating and cooling systems.

(e) Infrared cure equipment.

(f) Operations using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs.

(g) Water based adhesives that are less than or equal to 5 percent by volume of VOCs excluding HAPs.

(h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(i) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or a trim recovery device such as a bag filter or cyclone.

(j) Paved or unpaved roads and parking lots with public access [326 IAC 6-4].

(k) Equipment used to collect any material that might be released during a malfunction, process upset, or spill clean up, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(l) Blowdown for any of the following: sight glass; boiler; compressors; and cooling tower.

(m) Two (2) storage tanks containing with a maximum storage capacity of 3,000 gallons of VOC and HAP containing material, constructed in 1994, with the exemption limit for VOC of 15 pounds per day and the exemption limit for HAPs of 1 ton per year [2-7-1(21)(A)(iv)] [2-7-1(21)(C)(i)].

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F037-24423-00005, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6] [IC 13-17-12]

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

B.5 Severability [326 IAC 2-8-4(4)]

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 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(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 no later than July 1 of each year to:

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

(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 2-8-4(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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

(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 except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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, and Southwest Regional Office 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: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

Southwest Regional Office phone: (812) 380-2305; fax: (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
MC 61-53 IGCN 1003
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 2-8-4(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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-3(c)(6) 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 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) 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.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

(a) All terms and conditions of permits established prior to F037-24423-00005 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(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
MC 61-53 IGCN 1003
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating 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 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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 2-8-8(a)]

(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 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(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 2-8-3. 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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) 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 approval required by 326 IAC 2-8-11.1 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
MC 61-53 IGCN 1003
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 2-8-15(b) through (d). 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 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(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 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(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 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) 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 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][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 FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

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

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][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) 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 Advanced Source Modification Approval [326 IAC 2-8-4(11)] [326 IAC 2-1.1-9]

(a) The requirements to obtain a permit modification under 326 IAC 2-8-11.1 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

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

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

C.5 Fugitive Dust Emissions [326 IAC 6-4]

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

C.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
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers

and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

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

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

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

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

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

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any

monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(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 or ninety (90) days of initial start-up, whichever is later. 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
MC 61-53 IGCN 1003
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision 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 2-8-4(3)][326 IAC 2-8-5(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 2-8-4][326 IAC 2-8-5(a)(1)]

C.13 Risk Management Plan [326 IAC 2-8-4] [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.14 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal

or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance or ninety (90) days of initial start-up, whichever is later.

C.17 General Reporting Requirements [326 IAC 2-8-4(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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(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
MC 61-53 IGCN 1003
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 an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.18 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 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) woodworking operation for wood product processing, that includes the following; grinders, sanders, saws, planers and routers of various types and models, using a baghouse dust collector as a control, constructed in 1986, and exhausting to stack 003.

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

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

D.1.1 Particulate Matter [326 IAC 6.5-4-15]

Pursuant to 326 IAC 6.5-4-15 (Jasper Chair Company, Inc.), the PM emissions from the woodworking operation shall be limited to 0.7 tons per year. Therefore, the requirements of 326 IAC 2-7 (Title V) and 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply.

D.1.2 FESOP Limit [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP) the particulate matter PM10 and PM2.5 emissions are less than 100 tons per year. Pursuant to 326 IAC 6.5-4-15, the particulate matter emissions for the woodworking operation are limited to 0.7 tons per year.

Compliance with these limits will keep source wide PM10 and PM2.5 emissions below 100 tons per year. Therefore, the requirements of 326 IAC 2-7 (Title V) and 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the woodworking operation and the baghouse dust collector.

Compliance Determination Requirements

D.1.4 Particulate Matter (PM)

In order to comply with D.1.1, the baghouse for PM control shall be in operation and control emissions from the woodworking operation at all times that the woodworking operation is in operation.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.5 Particulate Control

(a) In order to comply with Conditions D1.1 and D.1.2, the baghouse dust collector for particulate control shall be in operation and control emissions from the woodworking operation and sanding machine at all times that these processes 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.

D.1.6 Visible Emissions Notations

(a) Visible emission notations from the central return air baghouse 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.1.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the woodworking operation and the sanding machine. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. All defective bags shall be replaced.

D.1.8 Broken or Failed Bag Detection

(a) For a single compartment baghouses 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 emissions unit. 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 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 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.5 and D.1.6 the Permittee shall maintain records of the results of the inspections required under Condition D.1.5 and D.1.6 and the dates the vents are redirected.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) wood fired boiler with coal as a back-up fuel, with a maximum capacity of 18.3 million British thermal units (MMBtu) per hour, installed in 1980, and exhausting to stack 001.

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

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

D.2.1 Particulate Matter [326 IAC 6.5-4-15]

Pursuant to 326 IAC 6.5-4-15(Jasper Chair Company, Inc.), the PM emissions from the wood fired boiler with coal as a back-up fuel rated at 18.3 MMBtu per hour shall be limited to 15.77 tons per year (3.6 pounds per hour) and 0.6 pound per MMBtu of heat input. This limit will be gauged by a wood usage limit of 4927 tons per year (Appendix A, page 5). The equivalent coal usage s as follows:

$$\frac{15.77 \text{ tons / year}}{4927 \text{ tons wood / year}} \; / \; \frac{38.69 \text{ tons /year}}{4824 \text{ tons coal / year}} = \frac{0.40 \text{ ton coal}}{\text{ton wood}}$$

Therefore, 1 ton of wood is equivalent to 0.40 tons of coal. Therefore, the requirements of 326 IAC 2-7 (Title V) and 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply.

D.2.2 FESOP Limit [326 IAC 2-8]

Pursuant to 326 IAC 2-8 (FESOP) the particulate matter PM10 and PM2.5 emissions are less than 100 tons per year. Pursuant to 326 IAC 6.5-4-15, the particulate matter emissions from the wood fired boiler with coal as a back-up fuel shall be limited to 15.77 tons per year. Compliance with these limits will keep source wide PM10 and PM2.5 emissions below 100 tons per year. Therefore, the requirements of 326 IAC 2-7 (Title V) and 326 IAC 2-2 (Prevention of Significant Deterioration) do not apply.

D.2.3 Sulfur Dioxide (SO_2) [326 IAC 6.5-4-15]

Pursuant to 326 IAC 6.5-4-15, the SO_2 emissions from the wood fired boiler with coal as a back-up fuel shall not exceed six (6.0) pounds per million Btu heat input while combusting coal. This limit will be gauged by a coal usage limit of 4824 tons of coal per year (Appendix A, page 7). The equivalent wood usage is as follows:

$$\frac{98.99 \text{ tons / year}}{4824 \text{ tons wood year}} \; / \; \frac{0.99 \text{ tons /year}}{4927 \text{ tons coal / year}} = \frac{102.12 \text{ ton wood}}{\text{ton coal}}$$

Therefore, 1 ton of coal is equivalent to 102.12 tons of wood.

D.2.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the wood fired boiler with coal as a back-up fuel.

Compliance Determination Requirements

D.2.5 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 6.5-4-15] [326 IAC 2-7]

Pursuant to 326 IAC 7-2, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed (6.0) pounds per million Btu heat input from boiler while combusting coal. Compliance shall be determined utilizing one of the following options:

(a) Providing vendor analysis of coal delivered, if accompanied by a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(3). The certification shall include:

(1) The name of the coal supplier; and

(2) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the coal was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); and

(3) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(4) The methods used to determine the properties of the coal; or

(b) Sampling and analyzing the coal by using one of the following procedures:

(1) Minimum Coal Sampling Requirements and Analysis Methods:

(A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;

(B) Coal shall be sampled at least one (1) time per day;

(C) Minimum sample size shall be five hundred (500) grams;

(D) Samples shall be composited and analyzed at the end of each calendar quarter;

(E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or

(2) Sample and analyze the coal pursuant to 326 IAC 3-7-3; or

(c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]

A determination of noncompliance pursuant to any of the methods specified in (a), (b), or (c) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the wood fired boiler with coal as a back-up fuel stack exhaust 001 shall be performed once per day during normal daylight operations while combusting fuel oil. 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.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.1 and D.2.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the PM and SO_2 emission limits established in Condition D.2.1 and D.2.3.

(1) Calendar dates covered in the compliance determination period; and;

(2) Actual coal usage since last compliance determination period; and;

(3) Sulfur content, heat content, and ash content; and;

(4) Sulfur dioxide emission rates; and;

(5) Vendor analysis of coal and coal supplier certification.

(b) To document compliance with Condition D.2.6, the Permittee shall maintain records of visible emission notations of the boiler stack 001 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

Pursuant to 326 IAC 7-2-1(c) and to document compliance with Condition D.2.1 and D.2.3, the Permittee shall submit a report to the IDEM, OAQ within thirty (30) days after the end of each calendar quarter containing the 30-day rolling weighted average SO_2 emission rate in pounds per

MMBtu, and the daily average sulfur content, coal heat content, weighting factor, and SO_2 emission rate in pounds per MMBtu. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) Six (6) spray booths, identified as A, B, C, D, E and F.

Each booth is equipped with one (1) HVLP spray gun for wood furniture coating, at a maximum capacity of 70 units per hour, with dry filters for overspray control, constructed in 1986, and exhausting through stacks 002A, 002B, 002C, 002D, 002E, and 002F.

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

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

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coatings, applied to wood furniture and cabinets in the surface coating booths B1 and B2, and in the glue and putty area GPA1 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.3.2 Hazardous Air Pollutants [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the Permittee shall comply with the following:

(a) An input of any single HAP to the six (6) spray booths identified as A, B, C, D, E and F shall be less than 7.02 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The input of any combination of HAPs to the six (6) spray booths identified as A, B, C, D, E and F shall be less than 20.55 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these limitations in conjunction with HAP emission limits for other emission units at this source renders 326 IAC 2-7 not applicable.

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the VOC input, including coatings, dilution solvents and cleaning solvents, to paint booths B-1 through B-5 shall be less than 84.42 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC from the entire source to less than 100 tons per twelve (12) consecutive month period and renders 326 IAC 2-2 and 326 IAC 2-7 not applicable.

D.3.4 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6-1-2(a) PM emissions from the six (6) spray booths (A, B, C, D, E and F) shall be limited to less than 0.03 grains per dry standard cubic foot of air.

D.3.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this - Preventive Maintenance Plan, of this permit, is required for the Six (6) spray booths, identified as A, B, C, D, E and F with dry filters for overspray control.

Compliance Determination Requirements

D.3.6 Volatile Organic Compounds (VOC) and HAPs [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC usage limit contained in Condition D.3.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ**,** reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.3.7 Particulate Matter (PM)

In order to comply with D.3.3, the dry filters for PM control shall be in proper placement at all times when the six (6) spray booths (identified as A, B, C, D, E and F) are in operation.

D.3.8 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters from the six (6) spray booth stacks while one or more of the booths are in operation. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks 002A, 002B, 002C, 002D, 002E, and 002F while one or more of the surface coating 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 stack 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 Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.3.9 Record Keeping Requirements

(a) To document compliance with Conditions D.3.1, and D.3.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC content and usage limits and the HAP content and usage limits established in Conditions D.3.1 and D.3.2

(1) The VOC and HAP (single and combined) content of each coating material and solvent used.

(2) The amount of coating material and solvent less water used on monthly basis.

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.

(3) The cleanup solvent usage for each month.

(4) The total VOC and total single and combined HAP input for each month.

(5) The total VOC and total single and combined HAP input for each compliance period.

(b) To document compliance with Conditions D.3.5, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Natural gas fired combustion source with heat input equal to or less than ten million (10,000,000) Btu per hour.

(1) One (1) natural gas fired boiler (used as a back-up to the wood fired boiler), constructed on December 31, 1992 and rated at 9.9 MMBtu/hr.

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

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

D.4.1 Particulate Matter [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units which have 10 MMBtu/hr or less and which began operation after September 21, 1983, shall in no case exceed 0.6 lb/MMBtu heat input. Therefore, the PM emissions from the 9.9 MMBtu/hr boiler shall be limited to 0.6 pounds per MMBtu heat input.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Jasper Chair Company, Inc.
Source Address: 534 East 8th Street, Jasper, Indiana 47546
Mailing Address: 534 East 8th Street, Jasper, Indiana 47546
FESOP Permit No.: F037-24423-00005

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

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

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

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Jasper Chair Company, Inc.
Source Address: 534 East 8th Street, Jasper, Indiana 47546
Mailing Address: 534 East 8th Street, Jasper, Indiana 47546
FESOP Permit No.: F037-24423-00005

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), 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 Describe:
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

FESOP Quarterly Report

Source Name: Jasper Chair Company, Inc.
Source Address: 534 East 8th Street, Jasper, Indiana 47546
Mailing Address: 534 East 8th Street, Jasper, Indiana 47546
FESOP Permit No.: F037-24423-00005
Facility: One (1) wood fired boiler with coal as a back-up fuel
Parameter: Wood and coal limit
Limit: The source shall limit input to the one (1) wood fired boiler of wood to 4927 tons per 12 consecutive month period. For the purposes of calculating equivalent coal usage from wood, based on PM emissions, the following conversion factor shall be utilized: 1 ton of wood = 0.40 tons of coal

OR

The source shall limit input to the one (1) wood fired boiler of coal to 4824 tons per 12 consecutive month period. For the purposes of calculating equivalent wood usage from coal, based on SO_2 emissions, the following conversion factor shall be utilized: 1 ton of coal = 102.12 tons of wood

YEAR:_____

Month	Wood Usage (tons/month)	Equivalent Coal Usage (tons/month)	Coal Usage (tons/month)	Equivalent Wood Usage (tons/month)

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Jasper Chair Company, Inc.
Source Address: 534 East 8th Street, Jasper, Indiana 47546
Mailing Address: 534 East 8th Street, Jasper, Indiana 47546
FESOP Permit No.: F037-24423-00005
Facility: Six (6) spray booths (A, B, C, D, E and F)
Parameter: VOC
Limit: VOC emissions not to exceed 84.42 tons per twelve (12) consecutive month period rolled on a monthly basis.

YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	VOC Usage This Month	VOC Usage Previous 11 Months	VOC Usage 12 Month Total
Month 1			
Month 2			
Month 3			

□ No deviation occurred in this quarter.

□ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

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

FESOP Quarterly Report

Source Name: Jasper Chair Company, Inc.
Source Address: 534 East 8th Street, Jasper, Indiana 47546
Mailing Address: 534 East 8th Street, Jasper, Indiana 47546
FESOP Permit No.: F037-24423-00005
Facility: Six (6) spray booths (A, B, C, D, E and F)
Parameter: Single HAP and total HAP
Limit: Single HAP emissions not to exceed 7.02 tons per twelve (12) consecutive month period and total HAP emissions not to exceed 20.55 tons per twelve (12) consecutive month period.

YEAR:_____

Month	Column 1		Column 2		Column 1 + Column 2	
	Single HAP This Month	Total HAPs This Month	Single HAP Previous 11 Months	Total HAPs Previous 11 Months	Single HAP 12 Month Total	Total HAPs 12 Month Total
Month 1						
Month 2						
Month 3						

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Jasper Chair Company, Inc.
Source Address: 534 East 8th Street, Jasper, Indiana 47546
Mailing Address: 534 East 8th Street, Jasper, Indiana 47546
FESOP Permit No.: F037-24423-00005

Months: _____ **to** _____ **Year:** _____

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. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does 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 ANo deviations occurred this reporting period@.

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ 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:	

Page 2 of 2

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 Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	**Jasper Chair Company, Inc.**
Source Location:	**534 East 8th St., Jasper, IN 47546**
County:	**Dubois**
SIC Code:	**2511; 2522**
Permit Renewal No.:	**F 037-24423-00005**
Permit Reviewer:	**Sarah Conner, Ph. D.**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Jasper Chair Company, Inc. relating to the operation of an existing woodworking and finishing facility.

History

On March 08, 2007, Jasper Chair Company, Inc. submitted an application to the OAQ requesting to renew its operating permit. Jasper Chair Company, Inc**.** was issued a FESOP Renewal 037-14130-00005 on March 14, 2002.

Permitted Emission Units and Pollution Control Equipment

(a) One (1) woodworking operation for wood product processing, that includes the following; grinders, sanders, saws, planers and routers of various types and models, using a baghouse dust collector as a control, constructed in 1986, and exhausting to stack 003.

(b) One (1) wood fired boiler with coal as a back-up fuel, with a maximum capacity of 18.3 million British thermal units (MMBtu) per hour, installed in 1980, and exhausting to stack 001.

(c) Six (6) spray booths, identified as A, B, C, D, E and F.

Each booth is equipped with one (1) HVLP spray gun for wood furniture coating, at a maximum capacity of 70 units per hour, with dry filters for overspray control, constructed in 1986, and exhausting through stacks 002A, 002B, 002C, 002D, 002E, and 002F.

Insignificant Activities

Insignificant activities 326 IAC 2-7-1(21) consisting of the following:

(a) Natural gas fired combustion source with heat input equal to or less than ten million (10,000,000) Btu per hour.

(1) One (1) natural gas fired boiler (used as a back-up to the wood fired boiler), constructed on December 31, 1992 and rated at 9.9 MMBtu/hr [326 IAC 6-2-4].

(b) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons and dispensing less than or equal to 230,000 gallons per month.

(c) Cleaners and solvents characterized as follows:

(1) having a vapor pressure equal to or less than 2kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100° F) or;

(2) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20° C (68° F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(d) Closed loop heating and cooling systems.

(e) Infrared cure equipment.

(f) Operations using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs.

(g) Water based adhesives that are less than or equal to 5 percent by volume of VOCs excluding HAPs.

(h) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(i) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or a trim recovery device such as a bag filter or cyclone.

(j) Paved or unpaved roads and parking lots with public access [326 IAC 6-4].

(k) Equipment used to collect any material that might be released during a malfunction, process upset, or spill clean up, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(l) Blowdown for any of the following: sight glass; boiler; compressors; and cooling tower.

(m) Two (2) storage tanks containing with a maximum storage capacity of 3,000 gallons of VOC and HAP containing material, constructed in 1994, with the exemption limit for VOC of 15 pounds per day and the exemption limit for HAPs of 1 ton per year [2-7-1(21)(A)(iv)] [2-7-1(21)(C)(i)].

Existing Approvals

The source has been operating under FESOP No. (037-14130-00005), issued on March 14, 2002.

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 in this FESOP Renewal.

(a) The FESOP limit [326 IAC 2-8-4]

The previous FESOP limits have been modified to account for additional VOC emissions and HAP emissions from two (2) storage tanks and HAP emissions from the wood and coal fired boiler. The previous limit of VOC emissions from the surface coating operations was 86.46 tons/yr, whereas the new limit is 84.42 tons/yr. The previous limit for single HAP emissions from surface coating was less than 10 tons/year, whereas the

new limit is 7.02 tons/yr. The previous limit of total HAP emissions from the surface coating operations was less than 25 tons/yr, whereas the new limit is 20.55 tons/yr.

Enforcement Issue

IDEM is aware that the FESOP renewal application was received late on March 3, 2007. Pursuant to 326 IAC 2-8-3(h) the permit renewal application is to be submitted to IDEM OAQ nine (9) months prior to the expiration date of the existing permit, therefore this application was late as of June 15, 2006.

(a) IDEM is reviewing this matter and will take appropriate action.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, potential emissions for particulate matter were calculated after consideration of the controls.

The one (1) woodworking operation for wood product processing, that includes the following; grinders, sanders, saws, planers and routers of various types and models, which uses a baghouse dust collector as a control and exhausts to stack 003, are subject to this order.

County Attainment Status

The source is located in Dubois County

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.
[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM2.5.	

(a) Ozone Standards

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

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

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

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

(b) PM2.5

Dubois County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. On May 8th, 2008, U.S. EPA promulgated specific New Source Review rules for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

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

(d) Fugitive Emissions
This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, however, there is an applicable New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	133.24
PM_{10}	81.92
$PM_{2.5}$	81.92
SO_2	130.99
VOC	377.82
CO	51.73
NO_x	43.61

HAPs	tons/year
Toluene	72.71
Xylene	57.20
MIBK	15.30
Hydrogen Chloride	3.83
Phenol	3.29
Hydrogen Fluoride	0.48
Formaldehyde	0.35
Benzene	0.34
Acrolein	0.32
Styrene	0.15
Manganese	0.13
Arsenic	0.08
Lead	0.04
Cyanide	0.01
Cadmium	0.01
All other single HAPs	negligible
Total	**155.35**

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

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10, SO_2 and VOC are equal to or greater than 100 tons per year. However, the source has agreed to comply with the SIP limit defined in 326 IAC 6.5-4-15 for particulate matter PM10 which will keep their potential to emit particulate matter PM10 less than 100 tons per year. The source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit their SO_2 and VOC emissions to less than Title V levels, therefore the source will be issued a FESOP.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.

(c) 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 and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. However, the source has agreed to limit their single HAP emissions and total HAP emissions below Title V limits. Therefore, the source will be issued a FESOP.

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

Potential to Emit After Issuance

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

	Potential To Emit (tons/year)							
Process/ Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO**	**NO_x**	**HAPs (combined and single)**
*Surface Coating	30.42	30.42	30.42	-	84.42	-	-	20.55 and 7.02
Woodworking operation	0.7**	0.7**	0.7**	-	-	-	-	-
Coal-Wood fired Boiler	15.77**	15.77**	15.77**	98.99*	1.50	23.65	19.31	3.27 and 2.89
Paved and Unpaved Roads	0.51	0.13	0.13	-	-	-	-	-
Insignificant Activities	0.08	0.33	0.33	0.03	13.70	3.64	4.34	1.08 and 0.08
Total Emissions	**47.48**	**47.35**	**47.35**	**<100**	**<100**	**27.29**	**23.65**	**<25.0 and <10.0**

*The source has agreed to limit their SO_2, VOC, single HAP and total HAPs emissions to below Title V levels, so that they will remain a FESOP.
**The source has agreed to comply with the SIP limit defined in 326 IAC 6.5-4-15 for particulate matter PM_{10}.

Federal Rule Applicability

(a) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not included in this permit. This source is operating as a FESOP. Therefore, the requirements of 40 CFR 64, Compliance Assurance Monitoring, are not applicable to this source.

(b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, 40 CFR Part 63) included in this permit renewal.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for National Emission Standards for Wood Furniture Manufacturing Operations, Subpart JJ are not included in the permit for the six (6) spray booths. Construction of these units commenced prior to December 7, 1995, in addition the source has taken a limit of less than ten (10) tons per year of a single HAP and twenty-five (25) tons per year for any combination of HAPs, therefore the source is not considered a major source of HAPs.

(e) The requirements of 40 CFR 63, Subpart DDDD (National Emission Standards for Hazardous Air Pollutants from Plywood and Composite Wood Products) are not included in this permit for this source, because this source is does not manufacture plywood or composite wood products.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products (NESHAP), Subpart QQQQ, 40 CFR Part 63.4680, are not included in the permit for this source. This source does not coat wood building products.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

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

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

This source would be a major stationary source, under PSD (326 IAC 2-2), because the potential to emit VOC is above 250 tons per year; however the source has limited their total VOC emissions to below 100 tons per year and the potential to emit of other attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

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

The source elected to limit any single HAP from the entire source to less than ten (10) tons per year and to limit a combination of HAPs from the entire source to less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.

326 IAC 2-8 (FESOP)

(a) The particulate matter emissions are limited to 0.7 tons per year for the woodworking operation and to 15.77 tons per year for the coal and wood fired boiler pursuant to 326 IAC 6.5-4-15. Compliance with these limits keeps source wide PM10 and PM2.5 emissions below 100 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

(b) Pursuant to 326 IAC 6.5-4-15, the SO_2 emissions from the wood fired boiler with coal as a back-up fuel shall not exceed six (6.0) pounds per million Btu heat input while combusting coal. This limit will be gauged by a coal usage limit of 4824 tons of coal per year. Compliance with these limits will keep source wide SO_2 emissions below 100 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

(c) The VOC emissions from the six (6) spray booths identified as A, B, C, D, E and F shall not exceed 84.42 tons per year per twelve (12) month consecutive month period, rolled on a monthly basis, which limits the source wide VOC emissions to below 100 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

(d) The single HAP emissions from the six (6) spray booths shall not exceed 7.02 tons per year per per twelve (12) month consecutive month period, rolled on a monthly basis. Compliance with this limit will keep the source wide single HAP emisisons below 10 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

In addition the total combined HAP emissions from from the six (6) spray booths shall not exceed 20.55 tons per year per per twelve (12) month consecutive month period, rolled on a monthly basis. Compliance with this limit will keep the source wide combined HAP emisisons below 25 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.

326 IAC 5-1 (Opacity Limitations)

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

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

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

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

326 IAC 2-4.1-1 is not applicable to the surface coating operations because the units were constructed prior to the applicability date of July 27, 1997.

326 IAC 6-4 (Fugitive Dust Emissions)

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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations

The source is located in one of the counties listed in 326 IAC 6-5-1(a) it is in Dubois County, and is in Bainbridge Township. This source has potential fugitive particulate matter emissions less than twenty-five (25) tons per year, therefore the requirements of 326 IAC 6-5-1 do not apply.

326 IAC 8-1-6 (Volatile Organic Compounds: New Facilities: BACT)

The source was constructed in 1986; however, because this source is subject to another provision of Article 8 (8-2-12), the requirements of 326 IAC 8-1-6 do not apply.

326 IAC 8-4 (Petroleum Sources)

This source is located in Dubois County, and is not one of the types of operations regulated by 326 IAC 8-4. Therefore, the requirements of 326 IAC 8-4 do not apply.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This source is located in Dubois County. The facilities at this source commenced operation after January 1, 1980. Therefore, the requirements of 326 IAC 8-6 do not apply.

326 IAC 8-11 (Wood Furniture Coating)

The source is not located in Lake, Porter, Clark or Floyd Counties. Therefore, the requirements of 326 IAC 8-11 do not apply.

326 IAC 9-1 (Carbon Monoxide Emission Limitations)

This source does not include ferrous metal smelting, petroleum refining or refuse incineration. Therefore, the requirements in 326 IAC 9-1-2 and 326 IAC 9-1 do not apply.

326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties)

This source is not located in Clark or Floyd County. Therefore, the requirements of 326 IAC 10-1 do not apply.

State Rule Applicability – Individual Facilities

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

The six (6) spray booths are limited to keep source wide emissions to less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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

The woodworking operations are not subject to 326 IAC 6-3-2, Particulate Emission Limitations for Manufacturing Processes, because they are subject to 326 IAC 6.5-4-15 which is more stringent than 362 IAC 6-3-2.

326 IAC 6.5-4-15 (Jasper Chair Company, Inc.)

Pursuant to 326 IAC 6.5-4-15, the PM emissions from the woodworking operation shall be limited to 0.7 tons per year.

Pursuant to 326 IAC 6.5-4-15, the PM emissions from the one (1) wood fired boiler with coal as a back-up fuel, rated at 18.3 MMBtu per hour shall be limited to 15.77 tons per year (3.6 pounds per hour) and 0.6 pound per MMBtu of heat input. This limit will be gauged by a wood usage limit of 4927 tons per year (Appendix A, page 5). The equivalent coal usage s as follows:

$$\frac{\text{15.77 tons / year}}{\text{4927 tons wood / year}} \;/\; \frac{\text{38.69 tons /year}}{\text{4824 tons coal / year}} = \frac{\text{0.40 ton coal}}{\text{ton wood}}$$

Therefore, 1 ton of wood is equivalent to 0.40 tons of coal.

Pursuant to 326 IAC 6.5-4-15, the SO_2 emissions from the boiler shall not exceed six (6.0) pounds per million Btu heat input while combusting coal. This limit will be gauged by a coal usage limit of 4824 tons of coal per year (Appendix A, page 7). The equivalent wood usage is as follows:

$$\frac{\text{98.99 tons / year}}{\text{4824 tons wood year}} \;/\; \frac{\text{0.99 tons /year}}{\text{4927 tons coal / year}} = \frac{\text{102.12 ton wood}}{\text{ton coal}}$$

Therefore, 1 ton of coal is equivalent to 102.12 tons of wood.

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

Pursuant to 326 IAC 6-2-4(a) (Particulate Matter Emission Limitations for Sources of Indirect Heating), indirect heating units which have 10 MMBtu/hr or less and which began operation after September 21, 1983, shall in no case exceed 0.6 lb/MMBtu heat input.

This limitation is based on the following equation:

$Pt = 1.09/Q^{0.26}$

where: Pt = maximum allowable particulate matter (PM) emitted per MMBtu heat input
Q = total source max. indirect heater input = 9.9 MMBtu/hr

$Pt = 1.09/9.9^{0.26} = 0.60$ lbs PM/MMBtu

Therefore, the PM emissions from the one (1) natural gas fired boiler (used as a back-up to the wood fired boiler), constructed on December 31, 1992, rated at 9.9 MMBtu per hour heat input shall be limited to 0.6 pounds per MMBtu heat input.

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

Pursuant 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and/or wood components (booths A, B, C, D, E and F) 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. The six (6) spray booths use HVLP spray application; therefore, they are in compliance with this rule.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

(a) The woodworking operation has applicable compliance determination conditions as specified below:

(1) Daily visible emissions notations of the woodworking operation stack exhaust 003 shall be performed 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 startup 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.

(2) An inspection shall be performed each calender quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

(3) For single compartment filters, controlling emissions from a process operated continuously, a failed unit and 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).

(4) For single compartment filters, 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 emission unit shall be shut down no later than the completion of the processing of the material in the emission unit. 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 pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air filtration, leaks, dust traces or triboflows.

These monitoring conditions are necessary because the baghouse for the woodworking operation must operate properly to ensure compliance with 326 IAC 6.5-4-15 (Jasper Chair Company, Inc.) and 326 IAC 2-8 (FESOP).

(b) The wood fired boiler with coal as a back-up fuel has applicable compliance monitoring conditions as specified below:

(1) Visible emissions notations of the wood fired boiler with coal as a back-up fuel operation stack exhaust 001 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 startup 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.

These monitoring conditions are necessary because the wood fired boiler with coal as a back-up fuel must operate properly to ensure compliance with 326 IAC 6.5-4-15 (Jasper Chair Company, Inc.) and 326 IAC 2-8 (FESOP).

(c) The dry filters used for control in the six (6) spray booths, identified as A, B, C, D, E and F have applicable compliance monitoring conditions as specified below:

(1) 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 002A, 002B, 002C, 002D, 002E, and 002F while one or more of the booths exhausting to that stack 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.

(2) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emission, or when evidence of overspray emission is observed, the Permittee shall take reasonable 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.

These monitoring conditions are necessary because the dry filters for the six (6) spray booths, identified as A, B, C, D, E and F must operate properly to ensure compliance with 326 IAC 2-8 (FESOP).

Recommendation

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

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

An application for the purposes of this review was received on March 08, 2007.

Conclusion

The operation of this woodworking and finishing facility shall be subject to the conditions of the attached FESOP Renewal No. 037-24423-00005.

Appendix A: Emission Calculations

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Uncontrolled Potential Emissions (tons/year)

	Emissions Generating Activity						
Pollutant	Surface Coating	**Woodworking Operation	Wood fired Boiler	Coal fired Boiler	Insignificant Activities	Paved and Unpaved Roads	***TOTAL**
PM	30.42	51.04**	32.06*	51.19	0.08	0.51	133.24
PM10	30.42	51.04**	30.22*	22.35	0.33	0.13	81.92
PM2.5	30.42	51.04**	26.21*	22.35	0.33	0.13	81.92
SO2	-	-	2.00	130.96	0.03	-	130.99
NOx	-	-	39.28	23.93	4.34	-	43.61
VOC	360.75	-	3.13	0.16	13.94	-	377.82
CO	-	-	48.09	19.15	3.64	-	51.73
total HAPs	149.83	-	2.81	4.44	1.08	-	155.35
worst case single HAP	72.71 (Toluene)	-	1.52 (Hydrogen Chloride)	3.83 (Hydrogen Chloride)	0.08 (Hexane)	-	76.62

* Total based on the worst case emissions from either wood or coal combustion
**After baghouse as integral to the process
Total emissions based on rated capacity at 8,760 hours/year

Limited Emissions (tons/year)

	Emissions Generating Activity					
Pollutant	Surface Coating	Woodworking Operation	Coal-Wood fired*** Boiler	Insignificant Activities	Paved and Unpaved Roads	***TOTAL
PM	30.42	0.7****	15.77****	0.08	0.51	47.48
PM10	30.42	0.7****	15.77****	0.33	0.13	47.35
PM2.5	30.42	0.7****	15.77****	0.33	0.13	47.35
SO2	-	-	98.99****	0.03	-	99.02
NOx	-	-	19.31	4.34	-	23.65
VOC	<84.42	-	1.54	13.94	-	<100.00
CO	-	-	23.65	3.64	-	27.29
total HAPs	<20.55	-	3.35	1.08	-	<25.00
worst case single HAP	<7.02 (Toluene)	-	2.89 (Hydrogen Chloride)	0.08 (Hexane)	-	<10.00

***Total based on the worst case emissions from either wood or coal combustion, or the SIP limit
****Per SIP limit as defined in 326 IAC 6.5-4-15
Total emissions based on rated capacity at 8,760 hours/year, after control

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

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Booth A																
Basecoat	8.2	66.21%	0.0%	66.2%	0.0%	22.00%	0.03400	70.000	5.43	5.43	12.92	310.12	56.60	7.22	24.68	75%
Booth B																
Topcoat	7.86	64.03%	0.0%	64.0%	0.0%	28.00%	0.03400	70.000	5.03	5.03	11.98	287.47	52.46	7.37	17.97	75%
Booth C																
Hi Solids	7.7	74.85%	0.0%	74.9%	0.0%	18.00%	0.03400	70.000	5.76	5.76	13.72	329.21	60.08	5.05	32.02	75%
Booth D																
Topcoat	7.9	64.88%	0.0%	64.9%	0.0%	29.00%	0.03400	70.000	5.13	5.13	12.20	292.77	53.43	7.23	17.67	75%
Booth E																
Stain	7.4	81.56%	0.0%	81.6%	0.0%	11.50%	0.03400	70.000	6.04	6.04	14.36	344.74	62.92	3.56	52.48	75%
Booth F																
Thinner	7.22	100.00%	0.0%	100.0%	0.0%	0.00%	0.03400	70.000	7.22	7.22	17.18	412.41	75.26	0.00	N/A	75%
State Potential Emissions			**Add worst case coating to all solvents**								**82.36**	**1976.72**	**360.75**	**30.42**		

Controlled Potential Emissions

Control Efficiency % PM	Controlled PM tons/yr
99.80%	**0.06**

Total Controlled Potential Emissions:

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: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % MIBK	Weight % Phenol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	MIBK Emissions (ton/yr)	Phenol Emissions (ton/yr)
Booth A													
Basecoat	8.2	0.034000	70.00	13.77%	13.67%	0.00%	13.46%	0.00%	11.77	11.69	0.00	11.51	0.00
Booth B													
Topcoat	7.86	0.034000	70.00	0.00%	6.00%	0.80%	1.00%	0.00%	0.00	4.92	0.66	0.82	0.00
Booth C													
Hi Solids	7.7	0.034000	70.00	27.38%	13.64%	0.32%	3.71%	0.00%	21.98	10.95	0.26	2.98	0.00
Booth D													
Topcoat	7.9	0.034000	70.00	0.00%	0.00%	0.00%	0.00%	4.00%	0.00	0.00	0.00	0.00	3.29
Booth E													
Stain	7.4	0.034000	70.00	30.40%	0.00%	0.54%	0.00%	0.00%	23.45	0.00	0.42	0.00	0.00
Booth F													
Thinner	7.22	0.034000	70.00	0.00%	60.00%	0.00%	0.00%	0.00%	0.00	45.16	0.00	0.00	0.00
Total State Potential Emissions									**57.20**	**72.71**	**1.33**	**15.30**	**3.29**

METHODOLOGY

Total HAPs **149.83**

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: Process Particulate Emissions

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Uncontrolled Potential Emissions (tons/year)						
A. Baghouses						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft²)	Total Filter Area (ft²)	Control Efficiency	Total (tons/yr)
Woodworking	1	0.01000	11.0	12,360	99.90%	51043.27
Total Emissions Based on Rated Capacity at 8,760 Hours/Year						**51043.27**

Controlled Potential Emissions (tons/year)						
A. Baghouses						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Air Flow (acfm/ft²)	Total Filter Area (ft²)	Control Efficiency	Total (tons/yr)
Woodworking	1	0.01000	11.0	12,360	99.90%	51.04
Total Emissions Based on Rated Capacity at 8,760 Hours/Year and source controls						**51.04***

Methodology:
State Potential (uncontrolled):
Baghouse (tons/yr) = No. Units * Loading (grains/acf) * Air/Cloth Ratio (acfm/ft²) * Filter Area (ft²) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control E
Federal Potential (controlled):
Baghouse (tons/yr) = No. Units * Loading (grains/acf) * Air/Cloth Ratio (acfm/ft²) * Filter Area (ft²) * 1 lb/7,000 grains * 60 min/hr * 8760 hr/yr * 1 ton/2,000 lbs * 1/(1-Control E

*In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, potential emissions for particulate matter were calculated after consideration of the controls.

Appendix A: Emissions Calculations
External Combustion Boiler
Wood Waste Combustion
Dry Wood

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Maximum Heat Input Capacity (MMBtu/hr)	18.3
Maximum Wood Usage (tons/yr)	10019.3

	Pollutant						
	PM*	**PM10***	**PM2.5***	**SO2**	**NOx**	**VOC**	**CO****
Emission Factor in lb/MMBtu	0.4	0.377	0.327	0.025	0.49	0.039	0.6
Potential Emissions in tons/yr	32.06	30.22	26.21	2.00	39.28	3.13	48.09

Limited Annual Wood Usage (tons/yr)	4927
Limited Annual Wood Heat Input (MMBtu/yr)	78832

	Pollutant						
	PM*	**PM10***	**PM2.5***	**SO2**	**NOx**	**VOC**	**CO****
Emission Factor in lb/MMBtu	0.4	0.377	0.327	0.025	0.49	0.039	0.6
Limited Emissions in tons/yr	15.77	14.86	12.89	0.99	19.31	1.54	23.65

Wet wood is considered to be greater than or equal to 20% moisture content. Dry wood is considered to be less than 20% moisture content.
The moisture content of wood for this boiler is 7%, so the emission factors used are for Dry wood. Based on AP-42, the heating value of dry wood is approximately 8,000 Btu/lb of dry wood.

*The PM10 and PM2.5 emission factors include the condensible PM emission factor of 0.017 lb/MMBtu, measured by EPA Method 202 (or equivalent) and the appropriate filterable PM emission factor, measured by EPA Method 5 (or equivalent). The PM emission factor is filterable PM measured by EPA Method 5 (or equivalent).
**The CO emission factor is for stokers and dutch ovens/fuel cells.

Methodology

Maximum Wood Usage (tons/yr) = [Maximum Heat Input Capacity (MMBtu/hr)] * [1/Higher Heating Value of wood fuel (Btu/lb)] * [1000000 Btu/MMBtu] * [1 ton/2000 lbs] * [8760 hours/year]
Potential Emissions (tons/yr) = [Maximum Heat Input Capacity (MMBtu/hr)] * [Emission Factor (lb/MMBtu)] * [8760 hours/year] * [1 ton/2000 lbs]
Limited Heat Input (MMBtu/yr) = [Limited Wood Usage (tons/yr)] * [Higher Heating Value of wood fuel (Btu/lb)] * [MMBtu/1000000 Btu] * [2000 lbs/1 ton]
Limited Emissions (tons/yr) = [Limited Heat Input (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] * [1 ton/2000 lbs]

Emission Factors are from AP-42 Chapter 1.6 (9/03), SCCs #1-0X-009-YY where X = 1 for utilities, 2 for industrial, and 3 for commercial/institutional; Y = 01 for bark-fired boilers, 02 for bark and wet wood-fired boilers, 03 for wet wood-fired boilers, and 08 for dry wood-fired boilers

Appendix A: HAPs Emissions Calculations
External Combustion Boiler
Wood Waste Combustion
Dry Wood

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Maximum Heat Input Capacity (MMBtu/hr)	18.3
Maximum Wood Usage (tons/yr)	10019.3

	HAPs						
	Acrolein	Benzene	Formaldehyde	Styrene	Manganese	Hydrogen Chloride	
Emission Factor in lb/MMBtu	4.0E-03	4.2E-03	4.4E-03	1.9E-03	1.6E-03	1.90E-02	Total
Potential Emission in tons/yr	0.32	0.34	0.35	0.15	0.13	1.52	2.8134

Limited Annual Wood Usage (tons/yr)	4927
Limited Annual Wood Heat Input (MMBtu/yr)	78832

	HAPs						
	Acrolein	Benzene	Formaldehyde	Styrene	Manganese	Hydrogen Chloride	
Emission Factor in lb/MMBtu	4.0E-03	4.2E-03	4.4E-03	1.9E-03	1.6E-03	1.90E-02	Total
Limited Emissions in tons/yr	0.16	0.17	0.17	0.07	0.06	0.75	1.3835

Methodology is same as previous page
The highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1 Tables 1.6-3 and 1.6-4

Appendix A: Emissions Calculations
Coal Fired Boiler

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Heat Input Capacity MMBtu/hr	Heat Content of Coal Btu/lb of Coal	Maximum Coal Usage tons/year		Weight % Sulfur in Fuel
18.3	12,559	6,382	S =	1.08 %

	Pollutant							HAPs								
Emission Factor in lb/ton	PM* 16.0	PM10* 7.005	PM2.5* 7.005	SO2 41.0 *(38S)*	NOx 7.5	VOC 0.05	CO 6.00	Hydrogen Chloride 1.2	Hydrogen Fluoride 0.15	Arsenic 2.59E-02	Cadmium 2.06E-03	Lead 1.27E-02	Formaldehyde 3.52E-03	Benzene 1.30E-03	Cyanide 2.50E-03	**Total**
Potential Emissions burning coal, tons/yr	51.19	22.35	22.35	130.96	23.93	0.16	19.15	3.83	0.48	0.083	0.007	0.041	0.011	0.004	0.008	**4.44**

Heat Input Capacity MMBtu/hr	Heat Content of Coal Btu/lb of Coal	Limted Coal Usage tons/year		Weight % Sulfur in Fuel
18.3	12,559	4,824	S =	1.08 %

	Pollutant							HAPs								
Emission Factor in lb/ton	PM* 16.0	PM10* 7.005	PM2.5* 7.005	SO2 41.0 *(38S)*	NOx 7.5	VOC 0.05	CO 6.00	Hydrogen Chloride 1.2	Hydrogen Fluoride 0.15	Arsenic 2.59E-02	Cadmium 2.06E-03	Lead 1.27E-02	Formaldehyde 3.52E-03	Benzene 1.30E-03	Cyanide 2.50E-03	**Total**
Limited Emissions burning coal, tons/yr	38.69	16.90	16.90	98.99	18.09	0.12	14.47	2.89	0.36	0.062	0.005	0.031	0.008	0.003	0.006	**3.35**

Methodology

*The PM emission factor is filterable PM only. The PM10 emission factor is filterable and condensable PM10 combined. PM10 = PM2.5
**PM is limited by 326 IAC 6.5-4-15 for this facility.
Emission Factors from AP-42, Chapter 1.1 for industrial overfeed stoker SCC 1-02-002-05/25 (Supplement E, 9/98)
VOC emission factor is from AP-42 Table 1.1-19 (Total non-methane organic carbon).
HAP emission factors for 8 worst HAPs are from AP-42 Table 1.1-15, Table 1.1-17 (converted from lbs/10^12 Btu to lbs/ton), and Table 1.1-18

Maximum Coal Usage (tons/yr) = [Maximum Heat Input Capacity (MMBtu/hr)] * [1/Higher Heating Value of coal (Btu/lb)] * [1000000 Btu/MMBtu] * [1 ton/2000 lbs] * [8760 hours/year]
Potential Emissions (tons/yr) = [Maximum Coal Usage (tons/yr)] * [Emission Factor (lb/ton)] * [1 ton/2000 lbs]
Limited Emissions (tons/yr) = [Limited Coal Usage (tons/yr)] * [Emission Factor (lb/ton)] * [1 ton/2000 lbs]

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	65.0	1.0	65.0	2.0	130.0	120	0.023	1.5	539.2
Vehicle (leaving plant) (one-way trip)	65.0	1.0	65.0	2.0	130.0	120	0.023	1.5	539.2
			0.0		0.0		0.000	0.0	0.0
			0.0		0.0		0.000	0.0	0.0
		Total	**130.0**		**260.0**			**3.0**	**1078.4**

Average Vehicle Weight Per Trip = 2.0 tons/trip
Average Miles Per Trip = 0.02 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL/2)^0.65 * (W/3)^1.5 - C] (Equation 1 from AP-42 13.2.1)

	PM	PM10	
where k =	0.082	0.016	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	2.0	2.0	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
sL =	0.6	0.6	g/m^2 = Ubitiguous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)]
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	
Unmitigated Emission Factor, Ef =	0.02	0.00	lb/mile
Mitigated Emission Factor, Eext =	0.02	0.00	lb/mile

Process	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.00	0.00
Vehicle (leaving plant) (one-way trip)	0.00	0.00
	0.00	0.00
	0.00	0.00
	0.010	**0.002**

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PTE = Potential to Emit

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Unpaved Roads at Industrial Site

The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (12/2003).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	6.0	1.0	6.0	20.0	120.0	300	0.057	0.3	124.4
Vehicle (leaving plant) (one-way trip)	6.0	1.0	6.0	20.0	120.0	300	0.057	0.3	124.4
			0.0		0.0		0.000	0.0	0.0
			0.0		0.0		0.000	0.0	0.0
		Total	**12.0**		**240.0**			**0.7**	**248.9**

Average Vehicle Weight Per Trip = 20.0 tons/trip
Average Miles Per Trip = 0.06 miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	
where k =	4.9	1.5	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-3 Sand/Gravel Processing Plant Road)
a =	0.7	0.9	= constant (AP-42 Table 13.2.2-2)
W =	20.0	20.0	tons = average vehicle weight (provided by source)
b =	0.45	0.45	= constant (AP-42 Table 13.2.2-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365]
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	
Unmitigated Emission Factor, Ef =	6.06	1.54	lb/mile
Mitigated Emission Factor, Eext =	3.98	1.02	lb/mile

Process	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.25	0.06
Vehicle (leaving plant) (one-way trip)	0.25	0.06
	0.00	0.00
	0.00	0.00
	0.496	**0.126**

Methodology

Total Weight driven per day (ton/day)	= [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip)	= [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day)	= [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip)	= SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip)	= SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr)	= (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr)	= (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Controlled PTE (tons/yr)	= (Mitigated PTE (tons/yr)) * (1 - Dust Control Efficiency)

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PTE = Potential to Emit

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

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
9.9	86.7

Inlcudes one (1) 9.9 MMBtu/hr boiler, constructed on December 31, 1992 (back-up for the wood fired boiler)

	Pollutant						
	PM*	PM10*	PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.082	0.33	0.33	0.026	4.34	0.24	3.64

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

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

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Heat Input Capacity MMBtu/hr	MMCF/yr
9.9	86.7

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMc	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/	9.1E-05	5.2E-05	0.003	0.078	1.5E-04

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	
Emission Factor in lb/MMc	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	Total
Potential Emission in tons/	2.2E-05	4.8E-05	6.1E-05	1.6E-05	9.1E-05	0.082

Methodology is same as previous page

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: Emission Calculations
Insignificant Activities Emission Calculations

Company Name: Jasper Chair Company
Company Address: 534 East 8th St., Jasper, IN 47546
Permit Number: 037-24423-00005
Reviewer: Sarah Conner, Ph. D.
Date: 10/29/08

Potential Insignificant Activities Calculations

The emissions were calculated assuming exemption levels for the criteria pollutants 326 IAC 2-1.
These calculations were done using a 15 pound per day limit for VOCs.
These calculations are only for the activities that have emitted pollutants that have been limited for this FESOP.
The following activities were submitted as insignificant and the following emissions were assumed:

Potential Emissions

Insignificant Activity	VOC (ton/yr)	
A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons and dispensing less than or equal to 230,000 gallons per month	2.74	
Cleaners and solvents characterized as follows: A) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.3 psi measured at 38 degrees C (100 F) or; B) having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at	2.74	
Operations using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs	2.74	
Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs	2.74	
		HAPs (tons/yr
Two (2) tanks each with a storage capacity of 3,000 gallons and a combined annual throughput of 8,563 gallons per year	2.74	1.00
Total Insignificant Activity Emissions (ton/yr)	**13.7**	**1.00**