



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: January 8, 2009

RE: JELD-WEN / 113-26693-00047

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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Mr. Tim Griewank
JELD-WEN
P.O. Box 259
Ligonier, IN 46767

January 8, 2009

Re: 113-26693-00047
First Significant Revision to
F113-23388-00047

Dear Mr. Griewank:

JELD-WEN was issued a Federally Enforceable State Operating Permit (FESOP) (Renewal) No. F113-23388-00047 on September 14, 2007 for a stationary polystyrene insulated fiberglass and steel door manufacturing facility located at 200 Gerber Street, Ligonier, Indiana 46767. On June 24, 2008, the Office of Air Quality (OAQ) received an application from the source requesting to shut down the existing regenerative thermal oxidizer (RTO), which controls VOC emissions from the Expandable Polystyrene (EPS) block molding operation, identified as P006 during periods of downtime when polystyrene bead is not being actively molded that occur during the months of November, December, January, February, and March. In addition, the source has requested to remove the fiberglass door groove forming system, identified as P008 and the glaze application area, identified as P007 from the source. JELD-WEN has also requested that IDEM revise the potential to emit calculations for the roll coating operation (P003), surface coating operation (P001), woodworking operation (P003), and truck load out operation. Finally, JELD-WEN has requested to revise the primary SIC code from 3442 to 2431. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Brian Williams, of my staff, at 317-234-5375 or 1-800-451-6027, and ask for extension 4-5375.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/BMW

cc: File - Noble County

JELD-WEN
Ligonier, Indiana
Permit Reviewer: Brian Williams

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FESOP SPR No. 113-26693-00047

Noble County Health Department
U.S. EPA, Region V
Air Compliance Section
IDEM Northern Regional Office
Compliance Data Section
Technical Support and Modeling
Permits Administrative and Development
Billing, Licensing and Training Section



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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY

JELD-WEN
200 Gerber Street
Ligonier, Indiana 46767

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provision 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.

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.

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.

Operation Permit No: 113-23388-00047	
Original signed by Matt Stuckey for Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: September 14, 2007 Expiration Date: September 14, 2017

First Significant Permit Revision No: 113-26693-00047	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: January 8, 2009 Expiration Date: September 14, 2017

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Stratospheric Ozone Protection

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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 an insulated fiberglass and steel door manufacturing facility.

Source Address:	200 Gerber Street, Ligonier, Indiana 46767
Mailing Address:	P.O. Box 259, Ligonier, Indiana 46767
General Source Phone Number:	(260) 894-7111
SIC Code:	2431, 3086, and 3442
Source Location Status:	Noble
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD; Minor Source, Section 112 of the Clean Air Act

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) surface coating operation, identified as P001, consisting of the following:
 - (1) One (1) surface coating spray booth, identified as Door Edge Paint Booth, constructed in 1978, utilizing a HVLP spray application system, coating a maximum of 175 door edges per hour, using dry filters for particulate matter control, and exhausting to one (1) stack, identified as E1.
 - (2) One (1) surface coating touch-up spray booth, identified as Door Touch-up Booth, constructed in 1990, utilizing an air atomized spray application system, coating a maximum of 175 door edges per hour, using dry filters for particulate matter control, and exhausting to one (1) stack, identified as E2.
- (b) One (1) solvent wiping operation, identified as P002, utilizing a solvent based cleaning solution to hand wipe a maximum of 175 doors per hour and exhausting to general ventilation.
- (c) One (1) roll coating operation, identified as P003, consisting of the following:
 - (1) Two (2) roll coating units, identified as Adhesive Roll Coater 1 and Adhesive Roll Coater 2, constructed in 1978 and 1993, respectively, coating a maximum of 175 doors per hour on a daily average, and exhausting to two (2) stacks, identified as E3 and E4, utilizing solvent for roller cleaning.

- (d) One (1) core burning operation, identified as P004, consisting of the following:
- (1) Two (2) core burn units, identified as Core Burn Unit 1 and Core Burn Unit 2, constructed in 1981 and 1997, respectively, for processing a maximum of 175 doors per hour on a daily average (equivalent to a maximum of 525 pounds of polystyrene sheets per hour), with particulate matter controlled by dry filters with an overall control efficiency of 95%, and exhausting to two (2) stacks, identified as E5 and E6.
- (e) One (1) woodworking operation, identified as P005, utilizing a baghouse, identified as dust collector DC7, for particulate matter control with a control efficiency of 99.9%, and exhausting to one (1) stack, identified as DC7, consisting of the following:
- (1) One (1) table saw (M1).
 - (2) One (1) Miter saw (M2).
 - (3) One (1) rail machine (M4).
 - (4) One (1) Lockstile machine (M6).
 - (5) One (1) Hingestile machine (M7).
 - (6) One (1) tilting table saw (M9).
 - (7) One (1) planer (M13).
 - (8) One (1) beltsander (M14).
 - (9) One (1) lock block boring machine (M15), controlled by baghouse DC7 when boring wood materials and controlled by a cyclone, identified as CYC1, which vents to atmosphere, when boring polystyrene lock blocks.
 - (10) One (1) stile and rail machine (M16).
 - (11) One (1) Alterna door sizer (M17).
- (f) One (1) expandable polystyrene (EPS) block molding operation, identified as P006, consisting of the following:
- (1) One (1) batch polystyrene beads pre-expander system, constructed in 1997, including one (1) pre-expander machine and six (6) steel pipe frame supported polyester storage bags for aging newly pre-expanded bead, capable of processing a maximum average of 1,200 pounds per hour of polystyrene beads, containing a maximum average of 7% pentane by weight, two (2) steel pipe frame supported polyester storage bags for holding reground bead, and the mix metering bags.
 - (2) One (1) block molding press, constructed in 1997, for molding pre-expanded polystyrene bead to the desired block size, utilizing steam to heat the preexpanded beads.
 - (3) One (1) block conditioning room, constructed in 1997.

- (4) One (1) pentane emissions collection system, constructed in 1997 and modified in 2006, connected to a 12,000 standard cubic feet per minute (scfm) regenerative thermal oxidizer (RTO). The collection system consists of:
 - (i) Ductwork conveying process emissions and ventilation air from two permanent total enclosures, one enclosure containing the bead aging bags, and one enclosure containing the block conditioning room.
 - (ii) Ductwork conveying block molder bead filling pneumatic transfer air and pre-expander pneumatic transfer air.
- (5) One (1) regenerative thermal oxidizer (RTO), constructed in 2006, equipped with a burner rated at 2.785 million British thermal units per hour, using a mixture of pentane-laden process and ventilation air and natural gas as combustion fuel, and exhausting to one (1) stack, identified as 97-1.
- (g) One (1) fiberglass door assembly operation, with a maximum design production rate of 175 doors per hour, using wood products from the woodworking operation (P005) and adhesive coated door skins from the roll coating operation (P003).

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, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
 - (1) One (1) boiler, identified as P009, constructed in 2006, equipped with a natural gas burner rated at 5 million British thermal units per hour, for producing steam used in bead expansion.
- (b) Closed loop heating and cooling systems.
- (c) Noncontact cooling tower systems with either of the following:
 - (1) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (d) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (e) One (1) polystyrene block cutting operation, consisting of two (2) hot wire cutting lines, identified as Wire Cutting Lines 1 and 2, each constructed in 1997, used for cutting of polystyrene blocks, each with a maximum throughput rate of 30 blocks per hour, and exhausting to general ventilation.
- (f) Paved or unpaved roads and parking lots with public access.
- (g) Conveyors as follows:
 - (1) Enclosed systems for conveying plastic raw materials and plastic finished goods.
- (h) Other activities or categories not previously identified:
 - (1) Woodworking waste collection, transfer, and disposal activities identified as Truck load out.

(2) Polystyrene Scrap Grinding in an enclosed grinder with negligible emissions.

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) for 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, F113-23388-00047, 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]

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 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.9 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.10 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.11 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, for the source as described in 326 IAC 1-6-3. At a minimum, the PMPs shall include:
- (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 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

- (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 F113-23388-00047 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] [IC13-30-3-1]

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 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

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

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

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

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

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. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
- (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) The 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. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;

(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 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.3 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

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

All required notifications shall be submitted to:

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

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

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

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

Compliance Monitoring Requirements [326 IAC 2-8-4] [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. 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 source modification shall be implemented when operation begins.

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no often less than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 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.13 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.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval 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 ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 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.16 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;
 - (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.17 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.18 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.

C.19 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) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

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

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

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

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) surface coating operation, identified as P001, consisting of the following:
 - (1) One (1) surface coating spray booth, identified as Door Edge Paint Booth, constructed in 1978, utilizing a HVLP spray application system, coating a maximum of 175 door edges per hour, using dry filters for particulate matter control, and exhausting to one (1) stack, identified as E1.
 - (2) One (1) surface coating touch-up spray booth, identified as Door Touch-up Booth, constructed in 1990, utilizing an air atomized spray application system, coating a maximum of 175 door edges per hour, using dry filters for particulate matter control, and exhausting to one (1) stack, identified as E2.
- (b) One (1) solvent wiping operation, identified as P002, utilizing a solvent based cleaning solution to hand wipe a maximum of 175 doors per hour and exhausting to general ventilation; and
- (c) One (1) roll coating operation, identified as P003, consisting of the following:
 - (1) Two (2) roll coating units, identified as Adhesive Roll Coater 1 and Adhesive Roll Coater 2, constructed in 1978 and 1993, respectively, coating a maximum of 175 doors per hour on a daily average, and exhausting to two (2) stacks, identified as E3 and E4, utilizing solvent for roller cleaning.

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

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

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating operation (P001) shall be controlled by a dry particulate filter, or an equivalent control device, at all times that the surface coating emission unit is in operation, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.2 Volatile Organic Compounds (VOCs) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal door frames in roll coating operation, identified as P003, shall be limited to 3.0 pounds of VOC per gallon of coating less water delivered to the applicator for all coatings and coating application systems.
- (b) Solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.1.3 Volatile Organic Compounds (VOCs) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to the wood doors in P001 and P003 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.

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC content limitation contained in Condition D.1.2 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.

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2]

Compliance with the VOC content limits in Condition D.1.2 shall be determined pursuant to 326 IAC 8-1-2(a)(7), using a volume weighted average of coatings on a daily basis. This volume weighted average shall be determined by the following equation:

$$A = \frac{\sum_{i=1}^n (C_i \times U_i)}{\sum_{i=1}^n U_i}$$

where: A is the volume weighted average in pounds VOC per gallon less water and exempt solvents as applied;
C is the VOC content of the coating *i* in pounds VOC per gallon less water and exempt solvents as applied;
U is the usage rate of the coating *i* in gallons per day less water and exempt solvents as applied; and
n is the number of coatings being averaged

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

D.1.6 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (E1 and E2) while one or more of the booths are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with

Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the 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.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limit established in Condition D.1.2.
 - (1) The VOC content of each coating material and solvent used less water.
 - (2) The amount of each coating material and solvent used on a daily 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 volume weighted average VOC content of the coatings used for each day;
 - (4) The daily cleanup solvent usage; and
 - (5) The total VOC usage for each day;
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly overspray observations, and daily and monthly inspections.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

FACILITY OPERATION CONDITIONS

RESERVED

SECTION D.3

FACILITY OPERATION CONDITIONS

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

- (f) One (1) expandable polystyrene (EPS) block molding operation, identified as P006, consisting of the following:
- (1) One (1) batch polystyrene beads pre-expander system, constructed in 1997, including one (1) pre-expander machine and six (6) steel pipe frame supported polyester storage bags for aging newly pre-expanded bead, capable of processing a maximum average of 1,200 pounds per hour of polystyrene beads, containing a maximum average of 7% pentane by weight, two (2) steel pipe frame supported polyester storage bags for holding reground bead, and the mix metering bags.
 - (2) One (1) block molding press, constructed in 1997, for molding pre-expanded polystyrene bead to the desired block size, utilizing steam to heat the preexpanded beads.
 - (3) One (1) block conditioning room, constructed in 1997.
 - (4) One (1) pentane emissions collection system, constructed in 1997 and modified in 2006, connected to a 12,000 standard cubic feet per minute (scfm) regenerative thermal oxidizer (RTO). The collection system consists of:
 - (i) Ductwork conveying process emissions and ventilation air from two permanent total enclosures, one enclosure containing the bead aging bags, and one enclosure containing the block conditioning room;
 - (ii) Ductwork conveying block molder bead filling pneumatic transfer air and pre-expander pneumatic transfer air.
 - (5) One (1) regenerative thermal oxidizer (RTO), constructed in 2006, equipped with a burner rated at 2.785 million British thermal units per hour, using a mixture of pentane-laden process and ventilation air and natural gas as combustion fuel, and exhausting to one (1) stack, identified as 97-1.

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

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

D.3.1 Volatile Organic Compound (VOC) Emission Limitations [326 IAC 2-8-4] [326 IAC 2-2]

The total potential to emit VOC from the expandable polystyrene (EPS) block molding operation, identified as P006, shall not exceed 34.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per twelve (12) consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

D.3.2 New Facilities, General Reduction Requirements [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements) and Significant Permit Revision (SPR) 113-22426-00047, issued on April 21, 2006, the source shall install and

maintain the Best Available Control Technology (BACT) for the one (1) expandable polystyrene block molding operation (P006) as described below.

- (a) VOC (as pentane) emissions from the expandable polystyrene (EPS) block molding operation, identified as P006 in Section D.3 (f)(1), (2) and (3), shall be captured by the pentane emissions collection system and ducted to one (1) regenerative thermal oxidizer (RTO). The pentane emissions collection system and RTO shall achieve an overall VOC control efficiency of 78%.
- (b) The pentane emissions collection system will include two (2) permanent total enclosures that meet the definition in 40 CFR 51, Appendix M, Method 204, each vented to the RTO, to capture VOC (as pentane) emitted from the EPS block molding operation at:
 - (1) The bead aging bags, and
 - (2) The block conditioning room.
- (c) Pursuant to 326 IAC 8-1-2(a)(2), the RTO is not required to be operated only when polystyrene bead is not being actively molded in the Expandable Polystyrene (EPS) block molding operation during the months of November, December, January, February, and March.

Compliance Determination Requirements

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

In order to comply with Conditions D.3.1 and D.3.2, the pentane emissions collection system and RTO shall be in operation at all times the one (1) expandable polystyrene block molding operation is in operation; except as specified in Condition D.3.2(c).

D.3.4 Volatile Organic Compound (VOC) Emissions

Compliance with the VOC emission limitations contained in Condition D.3.1 shall be determined for each month using the quarterly reporting form located at the end of this permit. Compliance shall be based on the VOC emitted for the previous month added to the total VOC emitted for the previous 11 months, so as to arrive at the total VOC emitted for the most recent 12 consecutive month period.

- (a) When polystyrene bead is being actively molded in the EPS system and when polystyrene bead is not being actively molded in the EPS system during the months of April, May, June, July, August, September, and October the VOC emitted during a given time period shall be determined from the "as supplied" manufacturer's data sheets for the VOC content of the polystyrene beads (assuming 100% of the VOC is emitted during use), the polystyrene bead usage for that time period, and the overall VOC control efficiency from most recent valid stack test determined pursuant to Condition D.3.5, using the following equation:

$$VOC_{w/EPS} = \sum_{k=1}^o [f_{voc} \times U \times (1-CEF)]$$

Where:

$VOC_{w/EPS}$ = controlled VOC emissions during normal operations when polystyrene bead is being actively molded in the EPS system and when polystyrene bead is not being actively molded in the EPS system during the months of April, May, June, July, August, September, and October

o = total number of periods of normal operation

k = each specific period of normal operation

f_{voc} = the VOC content of the polystyrene beads used (fraction by weight)

U = the polystyrene bead usage by weight
CEF = the overall control efficiency determined pursuant to Condition D.3.5

- (b) When polystyrene bead is not being actively molded in the EPS system during the months of November, December, January, February, and March, the VOC emitted shall be determined using the following equation:

$$\text{VOC}_{w/o \text{ EPS}} = \sum_{i=1}^m [U \times f_{\text{voc}} \times (55/100)] - \sum_{j=1}^n [(-0.00001t^4) + 0.0024t^3 - 0.2715t^2 + 16.969t]$$

Where:

$\text{VOC}_{w/o \text{ EPS}}$ = VOC emissions when polystyrene bead is not being actively molded in the EPS system during the months of November, December, January, February, and March

m = total number of EPS and RTO shutdowns per month

i = each specific EPS and RTO shutdown period

U = the polystyrene bead usage by weight (if the polystyrene bead usage for the day prior to the shutdown exceeds the polystyrene bead usage on the day of the shutdown, the source shall use the average polystyrene bead usage from the day prior to the shutdown and the day of the shutdown)

f_{voc} = the VOC content of the polystyrene beads used (fraction by weight)

n = total number of EPS shutdowns per month

j = each specific EPS shutdown period

t = hours elapsed between last polystyrene bead expansion and RTO shutdown

- (c) Total VOC emissions for each compliance period shall be determined using the following equation:

$$\text{Total VOC Emissions} = (\text{VOC}_{w \text{ EPS}}) + (\text{VOC}_{w/o \text{ EPS}})$$

IDEM, OAQ reserves the authority to determine compliance using methods contained in 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

D.3.5 Testing Requirements [326 IAC 3-6] [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

- (a) The Permittee shall perform compliance testing on the pentane emissions collection system and RTO every five (5) years from the date of the last stack test. The following shall be conducted in order to demonstrate compliance with Conditions D.3.1 and D.3.2:
- (1) The Permittee shall demonstrate compliance for the two permanent total enclosures using methods specified in 40 CFR 51, Appendix M, Method 204, or other methods as specified by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

The enclosure differential pressure measured during enclosure capture verification testing shall be recorded.
 - (2) The Permittee shall perform VOC testing on the pentane emissions collection system and RTO, utilizing methods as approved by the Commissioner, to determine the overall VOC control efficiency. The overall VOC control efficiency for the pentane emissions collection system and RTO will be determined from a weighted average of two control efficiency tests conducted during the same 24 hour bead expansion and aging cycle:
 - (A) The Permittee shall perform VOC testing on the pentane emissions collection system and RTO exhaust during operation of the pre-expander and block molder.

- (B) The Permittee shall perform VOC testing on the pentane emissions collection system and RTO exhaust during the bead and block aging period when pre-expansion and block molding are not conducted.

The weighted average VOC control efficiency used for compliance demonstration will be determined from the following equation:

$$CEF = \left[\frac{\left(T_{pa} * t_a * \frac{CapEF_a}{100\%} * \frac{DesEF_a}{100\%} \right) + \left(T_{pb} * t_b * \frac{CapEF_b}{100\%} * \frac{DesEF_b}{100\%} \right)}{\left(T_{pa} * t_a + T_{pb} * t_b \right)} \right] * 100\%$$

$$CapEF_a = (VOC_a / T_{pa}) * 100\%$$

$$DesEF_a = (1 - (VOC_{ca} / VOC_a)) * 100\%$$

$$CapEF_b = (VOC_b / T_{pb}) * 100\%$$

$$DesEF_b = (1 - (VOC_{cb} / VOC_b)) * 100\%$$

- Where
- CEF = Weighted average VOC control efficiency (%)
 - T_{pa} = Total pentane available to lose in the process during the pre-expansion and molding operations (lbs/hr)
 - t_a = Average time (in hours) that the pre-expansion and molding operations are in operation
 - CapEF_a = Capture efficiency during the pre-expansion and molding operations (%)
 - VOC_a = VOC capture rate (before RTO) during pre-expansion and molding operations (lbs/hr)
 - DesEF_a = Destruction efficiency during the pre-expansion and molding operations (%)
 - VOC_{ca} = VOC controlled emission rate (after RTO) during the pre-expander and block molder (lbs/hr)
 - T_{pb} = Total pentane available to lose in the process during the pre-expansion and molding shutdown (lbs/hr)
 - t_b = Average time (in hours) that the pre-expansion and molding operations are shutdown
 - CapEF_b = Capture efficiency during the pre-expansion and molding shutdown (%)
 - VOC_b = VOC capture rate (before RTO) during pre-expansion and molding shutdown (lbs/hr)
 - DesEF_b = Destruction efficiency during the pre-expansion and molding shutdown (%)
 - VOC_{cb} = VOC controlled emission rate (after RTO) during the pre-expander and block molder shutdown (lbs/hr)

The operating temperature of the RTO shall be measured during VOC testing and an average operating temperature for the RTO shall be determined. Testing shall be conducted in accordance with Section C - Performance Testing.

- (b) The test required in (a)(2) shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

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

D.3.6 Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature. The output of this system shall be recorded as a three (3) hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the three (3) hour average temperature of the thermal oxidizer is below 1500°F. A three (3) hour average temperature that is below 1500°F is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) The Permittee shall determine the three (3) hour average temperature from the most recent valid stack test that demonstrates compliance with limits in conditions D.3.1, as approved by IDEM.
- (c) On and after the date the approved stack test results are available, the Permittee shall take appropriate response steps in accordance with Section C - Response to Excursions or Exceedances whenever the three (3) hour average temperature of the thermal oxidizer is below the three (3) hour average temperature as observed during the compliant stack test. A three (3) hour average temperature that is below the three (3) hour average temperature as observed during the compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.3.7 Parametric Monitoring

- (a) The Permittee shall determine fan amperage or duct pressure from the most recent valid stack test that demonstrates compliance with limits in Condition D.3.1, as approved by IDEM.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer is in operation. When for any one reading, the duct pressure or fan amperage is outside the normal range as established in most recent compliant stack test, the Permittee shall take reasonable response steps in accordance with Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit. A reading that is outside the range as established in the most recent compliant stack test is not a deviation from this permit. Failure to take response steps in accordance with 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.3.8 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.3.1.
 - (1) The pounds of polystyrene beads used on a monthly basis;
 - (2) The VOC content of the polystyrene beads used (fraction by weight);
- (b) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (4) below during the months of November, December,

January, February, and March. Records maintained for (1) through (4) shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.3.1.

- (1) The pounds of polystyrene beads used on a daily basis;
 - (2) The time the polystyrene bead expansion stops for each specific EPS shutdown period;
 - (3) The time the RTO shutdown commences for each specific RTO shutdown period; and
 - (4) The time the RTO reaches operational temperature for each specific startup period.
- (c) To document compliance with Conditions D.3.3, D.3.6, and D.3.7, the Permittee shall maintain records of the following operational parameters for the pentane emissions collection system and RTO:
- (1) Data verifying that the permanent total enclosure meet the design criteria of EPA Method 204; or capture efficiency for those processes that are located in an enclosure unable to meet the design criteria of EPA Method 204;
 - (2) Data used to develop the overall control efficiency for the pentane emissions collection system and RTO;
 - (3) The continuous temperature records (on a three (3) hour average basis) for the thermal oxidizer and the three (3) hour average temperature used to demonstrate compliance during the most recent compliant stack test.
 - (4) Daily records of the duct pressure or fan amperage. The Permittee shall include in its daily record when the duct pressure or fan amperage are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.9 Reporting Requirements

A quarterly summary of the information to document compliance with the VOC emission limit in Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.4

FACILITY OPERATION CONDITIONS

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

- (g) One (1) core burning operation, identified as P004, consisting of the following:
- (1) Two (2) core burn units, identified as Core Burn Unit 1 and Core Burn Unit 2, constructed in 1981 and 1997, respectively, for processing a maximum of 175 doors per hour on a daily average (equivalent to a maximum of 525 pounds of polystyrene sheets per hour), with particulate matter controlled by dry filters with an overall control efficiency of 95%, and exhausting to two (2) stacks, identified as E5 and E6.
- (h) One (1) polystyrene block cutting operation, consisting of two (2) hot wire cutting lines, identified as Wire Cutting Lines 1 and 2, each constructed in 1997, used for cutting of polystyrene blocks, each with a maximum throughput rate of 30 blocks per hour, and exhausting to general ventilation.
- (i) One (1) fiberglass door assembly operation, with a maximum design production rate of 175 doors per hour, using wood products from the woodworking operation (P005) and adhesive coated door skins from the roll coating operation (P003).

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

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

D.4.1 Particulate Matter (PM) [326 IAC 6-3-2(e)]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) the allowable PM rate for each of the two (2) core burn units (Core Burn Unit 1 and Core Burn Unit 2) shall each not exceed 1.67 pounds per hour when operating at a process weight rate of 525 pounds of polystyrene sheets per hour.

The pounds per hour limitations were calculated with the following equation:

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

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

Compliance Determination Requirements

D.4.2 Particulate Matter (PM)

In order to comply with Condition D.4.1, the dry filters controlling particulate from Core Burn Unit 1 shall be in operation at all times that Core Burn Unit 1 is in operation, and the dry filters for controlling particulate from Core Burn Unit 2 shall be in operation at all times that Core Burn Unit 2 is in operation.

D.4.4 Testing Requirements

- (a) The Permittee shall perform PM and PM10 emission testing on one of the two (2) units of the core burning operation (P004), utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration, with each subsequent test performed on the unit not tested in the most recent prior performance test conducted. PM-10 includes filterable and condensable PM-10.

- (b) The Permittee shall determine the average volume loss of the cores associated with the core burning operation and the average volume loss for the wire cutting operation. The Permittee shall then calculate the emission factors for the wire cutting operation using the following equation:

$$EF_x = \left(\frac{V_x}{V_{core}} \right) * EF_{core}$$

where: EF_x = the emission factor for the hot wire cutting operation.
 V_x = the volume loss for the hot wire cutting operation.
 V_{core} = the volume loss associated with the core burning operation.
 EF_{core} = the emission factor for the core burning operation determined by the source test.

Testing shall be conducted in accordance with Section C - Performance Testing.

SECTION D.5

FACILITY OPERATION CONDITIONS

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

Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.

- (1) One (1) boiler, identified as P009, constructed in 2006, equipped with a natural gas burner rated at 5 million British thermal units per hour, for producing steam used in bead expansion.

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

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

D.5.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2]

Pursuant to 326 IAC 6-2-4 (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 1983, shall in no case exceed 0.6 lb/MMBtu heat input.

Therefore, the PM emissions from the natural gas fired boiler rated at 5 MMBtu per hour heat input 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: JELD-WEN
Source Address: 200 Gerber Street, Ligonier, Indiana 46767
Mailing Address: P.O. Box 259, Ligonier, Indiana 46767
FESOP No.: F113-23388-00047

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: JELD-WEN
Source Address: 200 Gerber Street, Ligonier, Indiana 46767
Mailing Address: P.O. Box 259, Ligonier, Indiana 46767
FESOP No.: F113-23388-00047

This form consists of 2 pages

Page 1 of 2

<input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none">• 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

Quarterly Report

Source Name: JELD-WEN
Source Address: 200 Gerber Street, Ligonier, IN 46767
Mailing Address: P.O. Box 259, Ligonier, IN 46767
FESOP Permit No.: F113-23388-00047
Facility: Expandable Polystyrene Block Molding Operation (P006)
Parameter: VOC emissions
Limit: Shall not exceed 34.0 tons VOC per twelve (12) consecutive month period, with compliance determined at the end of each month

See Condition D.3.4 for Compliance Determination Equations

Quarter: _____ Year: _____

Month	(1) Tons VOC This Month	(2) Tons VOC Past 11 Months	(1) + (2) Rolling Total VOC Emissions (Tons)

- 9 No deviation occurred in this month.
- 9 Deviation/s occurred in this month.
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: JELD-WEN
Source Address: 200 Gerber Street, Ligonier, IN 46767
Mailing Address: P.O. Box 259, Ligonier, IN 46767
FESOP No.: F113-23388-00047

Months: _____ to _____ Year: _____

Page 1 of 2

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 "No 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:

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 Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Description and Location

Source Name:	JELD-WEN
Source Location:	200 Gerber Street, Ligonier, Indiana 46767
County:	Noble
SIC Code:	2431, 3086, and 3442
Operation Permit No.:	F 113-23388-00047
Operation Permit Issuance Date:	September 14, 2007
Significant Permit Revision No.:	113-26693-00047
Permit Reviewer:	Brian Williams

On June 24, 2008, the Office of Air Quality (OAQ) has received an application from JELD-WEN related to a modification to an existing stationary polystyrene insulated fiberglass and steel door manufacturing facility.

Existing Approvals

The source was issued FESOP Renewal No. 113-23388-00047 on September 14, 2007. The source has since received the following approval:

- (a) Administrative Amendment No. 113-25666-00047, issued on January 18, 2008.

County Attainment Status

The source is located in Noble County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	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. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

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

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

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Status of the Existing Source

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

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)								
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Surface Coating Operation (P001)	1.0	1.0	1.0	0.0	0.0	17.4	0.0	0.0	0.0
Solvent Wiping (P002)	0.0	0.0	0.0	0.0	0.0	10.1	0.0	0.0	0.0
Adhesive Roll Coaters 1 & 2 (P003)	0.0	0.0	0.0	0.0	0.0	5.5	0.0	negl.	negl.
Core Embosser (P004)	7.13	7.13	7.13	0.0	0.0	23.54	0.0	3.0	2.8 (styrene)
Woodworking (P005)	34.4	34.4	34.4	0.0	0.0	0.0	0.0	0.0	0.0
Truck Load Out	1.50	1.50	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expandable Polystyrene Block Molding Operation (P006)	0.0	0.0	0.0	0.0	0.0	19.0	0.0	0.0	0.0
Polystyrene Block Cutting Operation	0.02	0.02	0.2	0.0	0.0	0.3	0.0	0.042	0.04 (styrene)
Glaze Application (P007)	0.0	0.0	0.0	0.0	0.0	16.9	0.0	0.3	0.15 (methanol)
Door Groove System (P008)	2.1	2.1	2.1	0.0	0.0	2.2	0.0	0.3	0.26 (styrene)
Natural Gas Combustion (RTO and P009)	0.3	0.3	0.3	0.02	3.3	0.19	2.86	negl.	negl.
Total PTE of Entire Source	46.45	46.45	46.45	0.02	3.3	95.13	2.86	3.6	3.1 (styrene)
Title V Major Source Thresholds	NA	100	-	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA
negl. = negligible These emissions are based upon FESOP Renewal No: 113-23388-00047.									

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the unlimited potential to emit HAPs are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by JELD-WEN on June 24, 2008, requesting to shut down the existing regenerative thermal oxidizer (RTO), which controls VOC emissions from the Expandable Polystyrene (EPS) block molding operation, identified as P006 during periods of downtime when polystyrene bead is not being actively molded. Due to the declining emission rate and low concentration of VOC emissions during these periods of downtime, the cost of operating the RTO is disproportionate to the cost of control during normal operations.

This request is in accordance with 326 IAC 8-1-2(a)(2) (Compliance Methods), which provides the source the option to not operate the RTO during the months of November, December, January, February, and March.

However, even with this operational flexibility, the entire source will continue to limit VOC emissions to less than 100 tons per twelve (12) consecutive month period, rendering the requirements of 326 IAC 2-7 not applicable. This revision will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 or 326 IAC 2-3.

In summary:

Operating Scenario	April to October	November to March
Active Molding in EPS System	RTO shall be in operation at all times	RTO shall be in operation at all times
No Active Molding in EPS System	RTO shall be in operation at all times	RTO not required to operate

In addition, the source has requested to remove the fiberglass door groove forming system, identified as P008 and the glaze application area, identified as P007 from the source.

The source has also requested that IDEM revise the potential to emit calculations for the roll coating operation (P003), surface coating operation (P001), woodworking operation (P003), and truck load out operation (see Appendix A for more details). No changes to the permit were made based on the revisions to the calculations.

The source is currently assigned the SIC code 3442 for metal door manufacturers. However, the majority of the doors manufactured at this source are wood framed doors with a metal skin laid over the wood. According to the definition of SIC Code 3442, sources that primarily manufacture metal covered wood doors should be classified in Industry 2431. Only 10 percent of the doors manufactured at the source have a metal frame as described in the definition of SIC Code 3442. Therefore, SIC Code 2431 more accurately reflects the primary activity performed at this source. The source also performs styrofoam expansion activities described in SIC code 3086.

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-8.11.1. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	PTE of Proposed Revision (tons/year)								
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Expandable Polystyrene Block Molding Operation (P006) (Before Revision)	0.0	0.0	0.0	0.0	0.0	19.0	0.0	0.0	0.0
Expandable Polystyrene Block Molding Operation (P006) (After Revision)	0.0	0.0	0.0	0.0	0.0	34.0	0.0	0.0	0.0
Total PTE of Proposed Revision	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0	0.0
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

This FESOP is being revised through a FESOP Significant Permit Revision pursuant to 326 IAC 2-8-11.1(g)(2) because it involves adjustment to the existing source-wide emissions limitations to maintain the FESOP status of the source (see PTE of the Entire Source After The Issuance of the FESOP Revision Section).

PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the potential to emit of the entire source (reflecting adjustment of existing limits), with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)								
	PM	PM10 ²	PM2.5 ¹	SO ₂	NOx	VOC	CO	Total HAPs	Worst Single HAP
Surface Coating Operation (P001)	4.0 0.86	4.0 0.86	4.0 0.86	0.0	0.0	17.4 12.1	0.0	0.0	0.0
Solvent Wiping (P002)	0.0	0.0	0.0	0.0	0.0	10.1	0.0	0.0	0.0
Adhesive Roll Coaters 1 & 2 (P003)	0.0	0.0	0.0	0.0	0.0	5.5 15.1	0.0	negl.	negl.
Core Embosser(P004) ³	7.13 7.31	7.13 9.0	7.13 9.0	0.0	0.0	23.54	0.0	3.0	2.8 (styrene)
Woodworking (P005) ⁴	34.4 1.84	34.4 1.84	34.4 1.84	0.0	0.0	0.0	0.0	0.0	0.0
Truck Load Out	1.50 1.84	1.50 1.84	0.0 1.84	0.0	0.0	0.0	0.0	0.0	0.0
Expandable Polystyrene Block Molding Operation (P006)	0.0	0.0	0.0	0.0	0.0	19.0 34.0	0.0	0.0	0.0
Polystyrene Block Cutting Operation	0.02	0.02	0.02	0.0	0.0	0.3	0.0	0.042	0.04 (styrene)
Glaze Application (P007)	0.0	0.0	0.0	0.0	0.0	16.9	0.0	0.3	0.15 (methanol)
Door Groove System (P008)	2.1	2.1	2.1	0.0	0.0	2.2	0.0	0.3	0.26 (styrene)
Natural Gas Combustion (RTO and P009)	0.3	0.3	0.3	0.02	3.3	0.19	2.86	negl.	negl.
Total PTE of Entire Source	46.45 12.17	46.45 15.84	46.45 15.84	0.02	3.3	95.13 95.33	2.86	3.6 3.042	3.1 2.84 (styrene)
Title V Major Source Thresholds	NA	100	-	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
¹ PM10 = PM2.5
² Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
³ Limited PM emissions from the Core Embosser (P004) based on 326 IAC 6-3-2 allowable emissions of 1.67 lbs/hr (equivalent to 7.31 tons per year).
⁴ 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 table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)								
	PM	PM10 ²	PM2.5 ¹	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Surface Coating Operation (P001)	0.86	0.86	0.86	0.0	0.0	12.1	0.0	0.0	0.0
Solvent Wiping (P002)	0.0	0.0	0.0	0.0	0.0	10.1	0.0	0.0	0.0
Adhesive Roll Coaters 1 & 2 (P003)	0.0	0.0	0.0	0.0	0.0	15.1	0.0	negl.	negl.
Core Embosser (P004) ³	7.31	9.0	9.0	0.0	0.0	23.54	0.0	3.0	2.8 (styrene)
Woodworking (P005) ⁴	1.84	1.84	1.84	0.0	0.0	0.0	0.0	0.0	0.0
Truck Load Out	1.84	1.84	1.84	0.0	0.0	0.0	0.0	0.0	0.0
Expandable Polystyrene Block Molding Operation (P006)	0.0	0.0	0.0	0.0	0.0	34.0	0.0	0.0	0.0
Polystyrene Block Cutting Operation	0.02	0.02	0.02	0.0	0.0	0.3	0.0	0.042	0.04 (styrene)
Natural Gas Combustion (RTO and P009)	0.3	0.3	0.3	0.02	3.3	0.19	2.86	negl.	negl.
Total PTE of Entire Source	12.17	15.84	15.84	0.02	3.3	95.33	2.86	3.042	2.84 (styrene)
Title V Major Source Thresholds	NA	100	-	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA

negl. = negligible

¹ PM10 = PM2.5

² Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

³ Limited PM emissions from the Core Embosser (P004) based on 326 IAC 6-3-2 allowable emissions of 1.67 lbs/hr (equivalent to 7.31 tons per year).

⁴ 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.

(a) FESOP Status

This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following (Note: this revision required a modification to the existing VOC limits):

- (1) The total potential to emit VOC from the expandable polystyrene (EPS) block molding operation, identified as P006, shall not exceed 34.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per twelve (12) consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

(b) PSD Minor Source

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-8-4 (FESOP)
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor

status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the source is less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (d) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (e) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

Compliance Determination, Monitoring and Testing Requirements

The existing compliance requirements will not change because of this revision. The source shall continue to comply with the applicable requirements and permit conditions as contained in FESOP Renewal No. 113-23388-00047 on September 14, 2007.

Proposed Changes

- (a) The following changes listed below are due to the proposed revision. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:
 - (1) Section A.1 has been revised to indicate the new primary SIC Code is 2431.
 - (2) The VOC emission limit in Condition D.3.1 has been increased to allow for periods when polystyrene bead is not actively being molded in the Expandable Polystyrene (EPS) block molding operation.
 - (3) Condition D.3.2 has been revised to include a new requirement that allows the non-operation of the RTO when polystyrene bead is not being actively molded in the EPS during the months of November, December, January, February, and March.

- (4) The compliance determination equation in Condition D.3.5 has been revised to account for the VOC emissions from the Expandable Polystyrene (EPS) block molding operation.
- (5) Condition D.3.8 (Record Keeping Requirements) (original Condition D.3.9) has been revised to include new requirements to document compliance with Condition D.3.1.
- (6) All references to the fiberglass door groove forming system (P008) and the glaze application area (P007) have been removed from the permit.
- (7) The FESOP Quarterly Reports have been revised to reflect the increased VOC emission limit in Condition D.3.1.

...
A.1 General Information [326 IAC 2-8-3(b)]

... SIC Code: **2431, 3086, and 3442**

...
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:

- ...
- (g) One (1) fiberglass door assembly operation, with a maximum design production rate of 175 doors per hour, using wood products from the woodworking operation (P005) and adhesive coated door skins from the roll coating operation (P003); ~~consisting of the following:~~
 - (1) ~~One (1) fiberglass door groove forming system, identified as P008, constructed in 2002, forming grooves in the door cores via heat, and exhausting to general ventilation.~~
 - (2) ~~One (1) glaze application area, identified as P007, constructed in 2002, applying glaze to the door fiberglass skin, and exhausting to general ventilation.~~

...
D.3.1 Volatile Organic Compound (VOC) Emission Limitations [326 IAC 2-8-4] [326 IAC 2-2]

~~In order to satisfy 326 IAC 2-8-4 (FESOP) and to render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable, VOC emissions from the expandable polystyrene (EPS) block molding operation, identified as P006, shall not exceed 19 tons per. This will limit the source-wide emissions of VOCs to less than 100 tons per twelve (12) consecutive month period with compliance determined at the end of each month.~~

The total potential to emit VOC from the expandable polystyrene (EPS) block molding operation, identified as P006, shall not exceed 34.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per twelve (12) consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), not applicable.

D.3.2 New Facilities, General Reduction Requirements [326 IAC 8-1-6]

- ...
- (c) **Pursuant to 326 IAC 8-1-2(a)(2), the RTO is not required to be operated only when polystyrene bead is not being actively molded in the Expandable Polystyrene (EPS) block molding operation during the months of November, December, January, February, and March.**

~~D.3.3 Particulate [326 IAC 6-2-4]~~

~~Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) the particulate matter emissions from the natural gas-fired steam boiler (P009) shall not exceed 0.6~~

~~pounds per million British thermal unit.~~

D.3.43 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 2-8-4] [326 IAC 2-2]

In order to comply with Condition D.3.1 and D.3.2, the pentane emissions collection system and RTO shall be in operation at all times the one (1) expandable polystyrene block molding operation is in operation; **except as specified in Condition D.3.2(c).**

D.3.54 Volatile Organic Compound (VOC) Emissions

Compliance with the VOC emission limitations contained in Condition D.3.1 shall be determined for each month using the quarterly reporting form located at the end of this permit. Compliance shall be based on the VOC emitted for the previous month added to the total VOC emitted for the previous 11 months, so as to arrive at the total VOC emitted for the most recent 12 consecutive month period.

- (a) **When polystyrene bead is being actively molded in the EPS system and when polystyrene bead is not being actively molded in the EPS system during the months of April, May, June, July, August, September, and October** ~~the~~ VOC emitted during a given time period shall be determined from the “as supplied” manufacturer’s data sheets for the VOC content of the polystyrene beads (assuming 100% of the VOC is emitted during use), the polystyrene bead usage for that time period, and the overall VOC control efficiency from most recent valid stack test determined pursuant to Condition D.3.75, using the following equation:

$$\text{VOC Emissions} = f_{\text{VOC}} * U * (1 - \text{CEF})$$

~~where~~ f_{VOC} = The VOC content of the polystyrene beads used (fraction by weight);
 U = The polystyrene bead usage by weight; and
 CEF = The overall control efficiency determined pursuant to Condition D.3.6.

$$\text{VOC}_{\text{w/EPs}} = \sum_{k=1}^o [f_{\text{VOC}} \times U \times (1 - \text{CEF})]$$

Where:

$\text{VOC}_{\text{w/EPs}}$ = controlled VOC emissions during normal operations when polystyrene bead is being actively molded in the EPS system and when polystyrene bead is not being actively molded in the EPS system during the months of April, May, June, July, August, September, and October

o = total number of periods of normal operation

k = each specific period of normal operation

f_{VOC} = the VOC content of the polystyrene beads used (fraction by weight)

U = the polystyrene bead usage by weight

CEF = the overall control efficiency determined pursuant to Condition D.3.5

- (b) **When polystyrene bead is not being actively molded in the EPS system during the months of November, December, January, February, and March, the VOC emitted shall be determined using the following equation:**

$$\text{VOC}_{\text{w/o EPs}} = \sum_{i=1}^m [U \times f_{\text{VOC}} \times (55/100)] - \sum_{j=1}^n [(-0.00001t^4) + 0.0024t^3 - 0.2715t^2 + 16.969t]$$

Where:

$\text{VOC}_{\text{w/o EPs}}$ = VOC emissions when polystyrene bead is not being actively molded in the EPS system during the months of November, December, January, February, and March

m = total number of EPS and RTO shutdowns per month

i = each specific EPS and RTO shutdown period

U = the polystyrene bead usage by weight (if the polystyrene bead usage for the day prior to the shutdown exceeds the polystyrene bead usage on the day of the shutdown, the source shall use the average polystyrene bead usage from the day prior to the shutdown and the day of the shutdown)

f_{voc} = the VOC content of the polystyrene beads used (fraction by weight)

n = total number of EPS shutdowns per month

j = each specific EPS shutdown period

t = hours elapsed between last polystyrene bead expansion and RTO shutdown

- (c) Total VOC emissions for each compliance period shall be determined using the following equation:**

$$\text{Total VOC Emissions} = (\text{VOC}_{\text{w EPS}}) + (\text{VOC}_{\text{wo EPS}})$$

...

D.3.65 Testing Requirements [326 IAC 3-6] [326 IAC 2-8-5(a)(1),(4)] [326 IAC 2-1.1-11]

...

D.3.76 Thermal Oxidizer Temperature

...

D.3.87 Parametric Monitoring

...

D.3.98 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.3.1.
- (1) The pounds of polystyrene beads used on a monthly basis;
 - (2) The VOC content of the polystyrene beads used (fraction by weight);
- (b) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (4) below during the months of November, December, January, February, and March. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.3.1.
- (1) The pounds of polystyrene beads used on a daily basis;
 - (2) The time the polystyrene bead expansion stops for each specific EPS shutdown period;
 - (3) The time the RTO shutdown commences for each specific RTO shutdown period; and
 - (4) The time the RTO reaches operational temperature for each specific startup period.
- (bc) To document compliance with Conditions D.3.43, D.3.76, and D.3.87, the Permittee shall maintain records of the following operational parameters for the pentane emissions collection system and RTO:
- (1) Data verifying that the permanent total enclosure meet the design criteria of EPA Method 204; or capture efficiency for those processes that are located in an enclosure unable to meet the design criteria of EPA Method 204;

- (2) Data used to develop the overall control efficiency for the pentane emissions collection system and RTO;
 - (3) The continuous temperature records (on a three (3) hour average basis) for the thermal oxidizer and the three (3) hour average temperature used to demonstrate compliance during the most recent compliant stack test.
 - (4) Daily records of the duct pressure or fan amperage. **The Permittee shall include in its daily record when the duct pressure or fan amperage are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).**
- (ed) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.409 Reporting Requirements

A quarterly summary of the information to document compliance with the VOC emission limit in Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.4 FACILITY OPERATION CONDITIONS

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

- ...
- (i) One (1) fiberglass door assembly operation, with a maximum design production rate of 175 doors per hour, using wood products from the woodworking operation (P005) and adhesive coated door skins from the roll coating operation (P003), ~~consisting of the following:~~
 - (1) ~~One (1) fiberglass door groove forming system, identified as P008, constructed in 2002, forming grooves in the door cores via heat, and exhausting to general ventilation; and~~
 - (2) ~~One (1) glaze application area, identified as P007, constructed in 2002, applying glaze to the door fiberglass skin, and exhausting to general ventilation.~~
- ...

Source Name: JELD-WEN
Source Address: 200 Gerber Street, Ligonier, IN 46767
Mailing Address: P.O. Box 259, Ligonier, IN 46767
FESOP Permit No.: F113-23388-00047
Facility: Expandable Polystyrene Block Molding Operation (P006)
Parameter: VOC emissions
Limit: ~~Less than 19.0~~ **Shall not exceed 34.0** tons VOC per twelve (12) consecutive month period, with compliance determined at the end of each month

See Condition D.3.4 for Compliance Determination Equations

$$\text{VOC Emissions} = f_{\text{VOC}} * U * (1 - \text{CEF})$$

where f_{VOC} = VOC content of beads (fraction by weight)
 U = polystyrene bead usage
 CEF = overall control efficiency determined pursuant to Condition D.3.7

- (b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:
- (1) 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. Therefore, the requirements found in Section D.2 are no longer applicable and have been removed from the permit. This section will be marked as reserved.
 - (2) Condition D.3.3 (Particulate) has been removed from the permit since it was identical to Condition D.5.1 (Particulate Emission Limitations for Sources of Indirect Heating). The source shall continue to comply with Condition D.5.1 (see changes above).
 - (3) Condition D.3.8(b)(4)– Record Keeping Requirements for Parametric Monitoring (original Condition D.3.9) is revised to clarify that the Permittee needs to make a record of some sort every day. The intent of Record Keeping Requirements for Parametric Monitoring is that the Permittee needs to make a record of some sort every day. If Parametric Monitoring were not done on a particular day, the Permittee needs to specify the reason why the observation was not done. An example of this record would be "the unit was not operating" (see changes above).
 - (4) The allowable PM rate for the two (2) core burn units in Condition D.4.1(a) was incorrectly calculated. The correct allowable PM rate is 1.67 pounds per hour when operating at a process weight rate of 525 pounds per hour.
 - (5) Pursuant to 326 IAC 6-3-1(b)(14) manufacturing processes with potential emissions less than five hundred fifty one thousandths (0.551) pound per hour are exempt from the requirements of 326 IAC 6-3-2 ((Particulate Emission Limitations for Manufacturing Processes). As a result, Condition D.4.1(b) has been removed because the potential particulate emissions from the hot wire cutting lines are less than five hundred fifty one thousandths (0.551) pound per hour.
 - (6) Condition D.4.2 has been removed from the permit since the source does not need to limit PM10 emissions from the two (2) core burn units and two (2) hot wire cutting lines to render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable.

SECTION D.2

FACILITY OPERATION CONDITIONS

Reserved

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

- ~~(e) One (1) woodworking operation, identified as P005, utilizing a baghouse, identified as dust collector DC7, for particulate matter control with a control efficiency of 99.9%, and exhausting to one (1) stack, identified as DC7, consisting of the following:~~
- ~~(1) One (1) table saw (M1).~~
 - ~~(2) One (1) Miter saw (M2).~~
 - ~~(3) One (1) rail machine (M4).~~

- (4) One (1) Lockstile machine (M6).
- (5) One (1) Hingestile machine (M7).
- (6) One (1) tilting table saw (M9).
- (7) One (1) planer (M13).
- (8) One (1) beltsander (M14).
- (9) One (1) lock block boring machine (M15), controlled by baghouse DC7 when boring wood materials and controlled by a cyclone, identified as CYC1, which vents to atmosphere, when boring polystyrene lock blocks.
- (10) One (1) stile and rail machine (M16).
- (11) One (1) Alterna door sizer (M17).

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

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

~~D.2.1 Particulate Emission Limitations [326 IAC 2-8-4] [326 IAC 2-2]~~

- ~~(a) Particulate matter (PM) emissions from the woodworking operation (P005) shall not exceed 7.85 pounds per hour. This limit is required to limit the source-wide emissions of PM to less than 250 tons per 12 consecutive month period. Compliance with this limit will render the requirements of 326 IAC 2-2 (PSD) not applicable.~~
- ~~(b) Particulate matter with a diameter less than ten (10) micrometers (PM10) emissions from the woodworking operation (P005) shall not exceed 7.85 pounds per hour. This limit is required to limit the source-wide emissions of PM₁₀ to less than 100 tons per 12 consecutive month period. Compliance with this limit will satisfy 326 IAC 2-8-4 (FESOP) and render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.~~

~~D.2.2 Particulate Matter (PM) [326 IAC 6-3-2]~~

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable PM emission rate from the woodworking operation (P005) shall not exceed 7.85 pounds per hour when operating at a process weight rate of 5,268 pounds per hour.~~

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

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

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

~~Compliance Determination Requirements~~

~~D.2.3 Particulate~~

~~In order to comply with Condition D.2.1 and D.2.2, the baghouse for PM and PM10 control shall be in operation at all times that the woodworking operation (P005) is in operation.~~

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

~~D.2.4 Visible Emissions Notations~~

- ~~(a) Daily visible emission notations of the woodworking process stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.~~

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

~~D.2.5 Parametric Monitoring~~

~~The Permittee shall record the pressure drop across the baghouse used in conjunction with the woodworking process, at least once per day when the woodworking process is in operation. Unless operated under conditions for which the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances, the pressure drop across the baghouse shall be maintained within the range of 0.0 and 2.5 inches of water or a range established during the latest stack test. If a pressure drop reading is observed outside of the above mentioned range for any one reading, 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.~~

~~The instrument used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.~~

~~D.2.6 Broken or Failed Bag Detection [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

- ~~(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).~~
- ~~(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. 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).~~
- ~~(c) 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.~~

~~Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature,~~

~~flow rate, air infiltration, leaks, dust traces or triboflows.
Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]~~

~~D.2.7 Record Keeping Requirements~~

- ~~(a) To document compliance with Condition D.2.4, the Permittee shall maintain a daily record of visible emission notations of the woodworking operation stack 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, (i.e. the process did not operate that day).~~
- ~~(b) To document compliance with Condition D.2.5, the Permittee shall maintain a daily record of the pressure drop across the baghouse controlling the woodworking operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading, (i.e. 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.4.1 Particulate Matter (PM) [326 IAC 6-3-2(e)]~~

~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes):~~

- ~~(a) the allowable PM rate for each of the two (2) core burn units (Core Burn Unit 1 and Core Burn Unit 2) shall each not exceed 1.637 pounds per hour when operating at a process weight rate of 525 pounds of polystyrene sheets per hour;~~
- ~~(b) the allowable PM rate for each of the two (2) hot wire cutting lines (Wire Cutting Lines 1 and 2) shall each not exceed 7.06 pounds per hour when operating at a process weight rate of 4500 pounds of polystyrene block per hour; and~~
- ~~(c) the allowable PM rate from the door groove forming system (P008) shall not exceed 1.72 pounds per hour when operating at a process weight rate of 546 pounds of polystyrene sheets per hour.~~

...

~~D.4.2 Particulate Emission Limit~~

~~The source will limit PM_{1.0} emissions as shown below:~~

- ~~(a) the allowable PM_{1.0} rate for each of the two (2) core burn units (Core Burn Unit 1 and Core Burn Unit 2) shall each not exceed 1.63 pounds per hour;~~
- ~~(b) the allowable PM_{1.0} rate for each of the two (2) hot wire cutting lines (Wire Cutting Lines 1 and 2) shall each not exceed 7.06 pounds per hour; and~~
- ~~(c) the allowable PM_{1.0} rate from the door groove forming system (P008) shall not exceed 1.72 pounds per hour.~~

~~D.4.32 Particulate Matter (PM)~~

~~In order to comply with Condition D.4.1(a), the dry filters controlling particulate from Core Burn Unit 1 shall be in operation at all times that Core Burn Unit 1 is in operation, and the dry filters for controlling particulate from Core Burn Unit 2 shall be in operation at all times that Core Burn Unit 2 is in operation.~~

~~D.4.43 Testing Requirements~~

...

- ~~(b) The Permittee shall determine the average volume loss of the cores associated with the core burning operation and the average volume loss for the wire cutting operation; and the~~

~~groove forming system~~. The Permittee shall then calculate the emission factors for the wire cutting operation ~~and the groove forming system~~ using the following equation:

$$EF_x = \left(\frac{V_x}{V_{core}} \right) * EF_{core}$$

- where:
- EF_x = the emission factor for ~~either the hot wire cutting operation or the groove forming system~~.
 - V_x = the volume loss for ~~either the hot wire cutting operation or the groove forming system~~.
 - V_{core} = the volume loss associated with the core burning operation.
 - EF_{core} = the emission factor for the core burning operation determined by the source test.

...

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on June 24, 2008.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Revision No. 113-26693-00047. The staff recommends to the Commissioner that this FESOP Significant Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brian Williams at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) (234-5375) or toll free at 1-800-451-6027 extension (4-5375).
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations
Surface Coating VOC / HAP Estimated PTE Emissions

Company Name: JELD-WEN
Address City IN Zip: 200 Gerber Street, Ligonier, IN 46767
FESOP: 113-26693-00047
Reviewer: Brian Williams

Emissions Unit: P001
Stack ID: E1 & E2

Raw Material ⁽¹⁾		Annual PTE Usage ^(a) in Gallons	Raw Material Components ⁽¹⁾		Estimated PTE Emissions			
Product	Density (lbs/gal)		Name	Amount in Product (lbs/gal)	VOC ^(b) (tons/yr)	VOC ^(c) (lbs/yr)	HAP ^(d) (tons/yr)	HAP ^(e) (lbs/yr)
Edge Paint	11.90	14,716.80	Total VOC	1.51	11.1	22,222.37		
Touch-up Paint	9.86	392.448	Total VOC	5.15	1.0	2021.11		
Total					12.1	24,243.48	0.0E+00	0.00

Notes:

- (a) Annual PTE usage (gal/yr) = (Maximum units produced [doors/hr]) x (product usage [gals/door]) x (maximum hours of operation [hr/yr])
 Maximum units produced (doors/hr) = 280 (2)
 Edge Paint Usage (gal/door) = 0.006 (2)
 Touch-up Paint Usage (gal/door) = 0.00016 (2)
 Maximum hours of operation (hr/yr) = 8,760 (2)
- (b) Annual VOC PTE emissions (tons/yr) = (VOC content [lbs/gal]) x (annual PTE usage [gals/yr]) / (2000 lbs/ton)
- (c) Annual VOC PTE emissions (lbs/yr) = (Annual VOC PTE emissions [tons/yr]) x (2000 lbs/ton)
- (d) Annual HAP PTE emissions (tons/yr) = (HAP content [lbs/gal]) x (annual PTE usage [gals/yr]) / (2000 lbs/ton)
- (e) Annual HAP PTE emissions (lbs/yr) = (Annual HAP PTE emissions [tons/yr]) x (2000 lbs/ton)

References:

- (1) From Vendor MSDS, Product Information Sheets, or conversations with vendors. Worst case product information used.
 (2) Provided by JELD-WEN Exterior Door - Ligonier.

Appendix A: Emissions Calculations
Surface Coating TSP / PM10 Estimated PTE Emissions

Company Name: JELD-WEN
Address City IN Zip: 200 Gerber Street, Ligonier, IN 46767
FESOP: 113-26693-00047
Reviewer: Brian Williams

Emissions Unit: P001
Stack ID: E1 & E2

Raw Material ⁽¹⁾		Annual PTE Usage ^(a) in Gallons	Raw Material Components ⁽¹⁾		Estimated PTE Emissions	
Product	Density (lbs/gal)		Name	Amount in Product	PM/PM ₁₀ ^(b) (tons/yr)	PM/PM ₁₀ ^(c) (lbs/yr)
Edge Paint	11.9	14,716.80	Solids %	54.67	1.7E+01	33,510.23
Touch-Up Paint	9.86	392.448	Solids %	47.76	4.6E-01	924.05
Total					17.2	34,434.28
Controlled					0.86	

Notes:

(a) Annual PTE usage (gal/yr) = (Maximum units produced [doors/hr]) x (product usage [gals/door]) x (maximum hours of operation [hr/yr])

Maximum Doors (units/hr) = 280 (2)

Edge Paint Usage (gal/door) = 0.006 (2)

Touch-up Paint Usage (gal/door) = 0.00016 (2)

Maximum hours of operation (hr/yr) = 8,760 (2)

Filter Efficiency = 95% (3)

Edge Paint Booth Transfer Efficiency = 65% (4)

Touch-up Paint Booth Transfer Efficiency = 50% (5)

(b) Annual PM/PM₁₀ PTE emissions (lbs/yr) = (Annual PM/PM₁₀ PTE emissions [tons/yr]) x (2000 lbs/ton)

(c) Annual PM/PM₁₀ PTE emissions (tons/yr) = (Density [lbs/gal]) x (Solids % content [wt%]) x (annual PTE usage [gals/yr]) x (1 - transfer efficiency [%]) x (1-filter efficiency [%])/(2000 lbs/ton)

References:

(1) From Vendor MSDS, Product Information Sheets, or conversations with vendors. Worst case product information used.

(2) Provided by JELD-WEN Exterior Door - Ligonier.

(3) Estimate based on filters used at similar JELD-WEN facilities.

(4) Average transfer efficiency for hand held, air assisted sprayers per Grayso and API.

(5) Average transfer efficiency for hand held, air assisted sprayers per Grayso and API.

Appendix A: Emissions Calculations
 Roll Coating VOC / HAP Estimated PTE Emissions

Company Name: JELD-WEN
Address City IN Zip: 200 Gerber Street, Ligonier, IN 46767
FESOP: 113-26693-00047
Reviewer: Brian Williams

Emissions Unit: P003
Stack ID: E3 & E4

Raw Material ⁽¹⁾			Annual PTE Usage ^{(a) (b)} in Gallons	Raw Material Components ⁽¹⁾		Estimated PTE Emissions			
Product	Product #	Density (lbs/gal)		Name	Amount in Product (lbs/gal)	VOC ^{(c) (g)} (tons/yr)	VOC ^(d) (lbs/yr)	HAP ^(e) (tons/yr)	HAP ^(f) (lbs/yr)
Adhesive	Various	10.55	160,903.68	Total VOC	1.80E-04	0.10	200.00		
				MDI	1.80E-04			1.4E-02	28.96
Dibasic Ester	DBE	9.11	3285.0	Total VOC	9.11	15.0	29,926.35		
				Total		15.1	30,126.35	1.4E-02	28.96

Notes:

- (a) Annual PTE usage (gal/yr) = (Maximum units produced [doors/hr]) x (product usage [gals/door]) x (maximum hours of operation [hr/yr])
 - Maximum Doors (units/hr) = 280 (2)
 - Adhesive Product Usage (gal/door) = 0.0656 (2)
 - Maximum hours of operation (hr/yr) = 8,760 (2)
- (b) Annual PTE usage (gal/yr) = (Maximum cleanings per day) x (product usage [gals/cleaning]) x (maximum days per year) x (# of applicators)
 - Maximum Cleanings per day = 3.0 (2)
 - Solvent Product Usage (gal/cleaning) = 1.5 (2)
 - Maximum days of operation (days/yr) = 365 (2)
 - # of applicators = 2.0 (2)
- (c) Annual VOC PTE emissions (tons/yr) = (VOC content [lbs/gal]) x (annual PTE usage [gals/yr]) / (2000 lbs/ton)
- (d) Annual VOC PTE emissions (lbs/yr) = (Annual VOC PTE emissions [tons/yr]) x (2000 lbs/ton)
- (e) Annual HAP PTE emissions (tons/yr) = (HAP content [lbs/gal]) x (annual PTE usage [gals/yr]) / (2000 lbs/ton)
- (f) Annual HAP PTE emissions (lbs/yr) = (Annual HAP PTE emissions [tons/yr]) x (2000 lbs/ton)
- (g) The potential to emit VOC from the adhesive operation is 0.01 tons/yr. However, the source has requested that IDEM assume the potential to emit VOC is 0.1 tons/yr to be more conservative.

References:

- (1) From Vendor MSDS, Product Information Sheets, or conversations with vendors. Worst case product information used.
- (2) Provided by JELD-WEN Exterior Door - Ligonier.

**Appendix A: Emission Calculations
Woodworking Potential to Emit PM/PM10**

Company Name: JELD-WEN
Address City IN Zip: 200 Gerber Street, Ligonier, IN 46767
FESOP: 113-26693-00047
Reviewer: Brian Williams

Process	Maximum Capacity (doors/yr)	Waste (tons/yr)	Throughput (tons/yr)	Collection Efficiency %	Unlimited Potential to Emit PM/PM10 (lbs/hr)*	Unlimited Potential to Emit PM/PM10 (tons/yr)**
Woodworking (P005)	2452800	1839.6	1841.4	99.90%	0.42	1.84

Methodology

Throughput (tons/yr) = Waste (tons/yr) / Collection Efficiency %
 Unlimited Potential to Emit PM/PM10 (lbs/hr) = Unlimited PTE PM/PM10 (tons/yr) * 2000 (lbs/ton) / 8760 (hrs/yr)
 Unlimited Potential to Emit PM/PM10 (tons/yr) = Throughput (tons/yr) - Waste (tons/yr)
 *PM2.5 = PM10

**In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garretson 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
 Truck Load Out/Dumpster TSP / PM₁₀ PTE Emissions

Company Name: JELD-WEN
Address City IN Zip: 200 Gerber Street, Ligonier, IN 46767
FESOP: 113-26693-00047
Reviewer: Brian Williams

Equipment	Pollutant	Emission Factor ⁽¹⁾ (lbs/ton)	Waste ⁽²⁾ (tons/yr)	Estimated PTE Emissions	
				Short-term ^(a) (lbs/hr)	Long-term ^(b) (tons/yr)
Truck Load Out/Dumpster	PM / PM ₁₀	2.0	1,839.6	0.42	1.84

Notes:

(a) Short-term (lbs/hr) = (Waste [tons/yr] x (emission factor [lbs/ton]) / (annual hours of operation [hours/yr])

Annual hours of operation (hrs/yr) = 8,760 (3)

(b) Long-term Emissions (tons/yr) = (Waste [tons/yr] x (emissions factor [lbs/ton]) / (2000 [lbs/ton])

References:

- (1) Emission Factor from AP-42 Table 10.4.1 Woodworking Waste Collection Operations (2/80).
- (2) Provided by JELD-WEN, average waste hauled off-site.
- (3) Provided by JELD-WEN Exterior Door - Ligonier.