INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: June 18, 2013

RE: CHaSE Manufacturing, LLC/039-32954-00374

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.dot 6/13/13

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Federally Enforceable State Operating Permit
OFFICE OF AIR QUALITY

CHaSE Manufacturing, LLC
21594 Beck Drive
Elkhart, Indiana 46516

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

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

Operation Permit No. F039-32954-00374	
Issued by: Nathan C. Bell, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 18, 2013 Expiration Date: June 18, 2018

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates a stationary interior wood components manufacturing plant (wood doors).

Source Address:	21594 Beck Drive, Elkhart, Indiana 46516
General Source Phone Number:	574-546-4776
SIC Code:	2499 (Wood Products, NEC) and 2431 (Millwork)
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) One (1) miscellaneous woodworking process, identified as WW2, constructed in 1996, with a maximum throughput capacity of 22.3 pounds per hour of interior wood components, with particulate matter emissions controlled by a cyclone and baghouse (identified as D2), exhausting indoors.

(b) One (1) miscellaneous woodworking process, identified as WW1, constructed in 1996, with a maximum throughput capacity of 267 pounds per hour of interior wood components, with particulate matter emissions controlled by a cyclone and baghouse (identified as D1), exhausting indoors.

(c) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 145 pounds per hour of interior wood components, utilizing no control devices, exhausting within the building, and consisting of the following:

(1) One (1) drum sander identified as DS1,

(2) Two (2) band saws identified as BW1 and BW2,

(3) Four (4) chop saws identified as CS1 through CS4,

(4) Six (6) drill presses identified as DP1 through DP6, and

(5) Five (5) routers identified as RT1 through RT5.

(d) One (1) board bonding process, constructed in 1996, utilizing 1.45 pounds per hour of adhesive, coating 414.55 pounds per hour of interior wood components, using manual squeeze bottle flow coating.

(e) One (1) wood surface coating station, identified as SCS1, constructed in 1996, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV1.

(f) One (1) wood surface coating station, identified as SCS2, constructed in 2008, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV2.

(g) One (1) wood surface coating station, identified as SCS3, constructed in 2008, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV3.

(h) One (1) automated wood coating flat line, identified as FL1, approved for construction in 2013, with a maximum capacity of 60 units per hour, using HVLP spray application of coatings, using a bank of dry filters as control, and exhausting to stack FLSV1.

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

This source also includes the following insignificant activities:

(i) Two (2) natural gas-fired enclosed space heaters, identified as H1 and H2, with a capacity of 0.4 MMBtu/hr and 0.075 MMBtu/hr, respectively. Units H1 and H2 were constructed in 1996.

(j) Three (3) natural gas-fired enclosed space heaters, identified as H3, H4, and H5, with a combined maximum capacity of 0.2 MMBtu/hr. Units H3, H4, and H5 were constructed in 1999.

(k) Four (4) natural gas-fired enclosed space heaters, identified as H6, H7, H8, and H9, approved for construction in 2008 with maximum capacity of 0.08 MMBTU/hr, each.

(l) One (1) natural gas-fired air makeup unit, identified as AM1, approved for construction in 2013, with a maximum capacity of 3.0 MMBtu/hr .

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

This 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, F039-32954-00374, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

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

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

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

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

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

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

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

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

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

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

(a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:

(1) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

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

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

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

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

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

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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, or Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

(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 and Enforcement 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.

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

(a) All terms and conditions of permits established prior to F039-32954-00374 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 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.16 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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
Permit Administration and Support Section, 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, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.18 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) and (c) 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
Permit Administration and Support Section, 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)(1) and (c). 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)(1) and (c).

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

(c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

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

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

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

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

B.21 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.22 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 no later than 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.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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]

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) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

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

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

(4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per twelve (12) consecutive month period.

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

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

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

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 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 except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue

MC 61-53 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 that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

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

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

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

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

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, 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 and Enforcement 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.11 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.12 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.13 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall record the reasonable response steps taken.

C.14 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-8-5(a)(1) 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.15 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. Support information includes the following:

(AA) All calibration and maintenance records.

(BB) All original strip chart recordings for continuous monitoring instrumentation.

(CC) Copies of all reports required by the FESOP.

Records of required monitoring information include the following:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.

(BB) The dates analyses were performed.

(CC) The company or entity that performed the analyses.

(DD) The analytical techniques or methods used.

(EE) The results of such analyses.

(FF) The operating conditions as existing at the time of sampling or measurement.

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 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. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that 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. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, 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.17 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 applicable standards for recycling and emissions reduction.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) miscellaneous woodworking process, identified as WW2, constructed in 1996, with a maximum throughput capacity of 22.3 pounds per hour of interior wood components, with particulate matter emissions controlled by a cyclone and baghouse (identified as D2), exhausting indoors.

(b) One (1) miscellaneous woodworking process, identified as WW1, constructed in 1996, with a maximum throughput capacity of 267 pounds per hour of interior wood components, with particulate matter emissions controlled by a cyclone and baghouse (identified as D1), exhausting indoors.

(c) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 145 pounds per hour of interior wood components, utilizing no control devices, exhausting within the building, and consisting of the following:

(1) One (1) drum sander identified as DS1,

(2) Two (2) bandsaws identified as BW1 and BW2,

(3) Four (4) chop saws identified as CS1 through CS4,

(4) Six (6) drill presses identified as DP1 through DP6, and

(5) Five (5) routers identified as RT1 through RT5.

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

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

D.1.1 Preventative Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for each of the woodworking processes and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.2 Particulate Control [326 IAC 6-3-2]

In order to ensure that the woodworking processes (WW1 and WW2) are each exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the integral cyclones and baghouses (D1 and D2) shall be in operation and control emissions from woodworking processes (WW1 and WW2) at all times the woodworking processes are in operation.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) One (1) board bonding process, constructed in 1996, utilizing 1.45 pounds per hour of adhesive, coating 414.55 pounds per hour of interior wood components, using manual squeeze bottle flow coating.

(h) One (1) wood surface coating station, identified as SCS1, constructed in 1996, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV1.

(i) One (1) wood surface coating station, identified as SCS2, constructed in 2008, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV2.

(j) One (1) wood surface coating station, identified as SCS3, constructed in 2008, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV3.

(k) One (1) automated wood coating flat line, identified as FL1, approved for construction in 2013, with a maximum capacity of 60 units per hour, using HVLP spray application of coatings, using a bank of dry filters as control, and exhausting to stack FLSV1.

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

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

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

Pursuant to 326 IAC 6-3-2(d), particulate from each of the surface coating stations (SCS1, SCS2, SCS 3) and the flat line (FL1) shall be controlled by dry particulate filters and the Permittee shall operate the control devices in accordance with manufacturer's specifications.

D.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

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

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.2.3 Volatile Organic Compounds (VOC) Limit [326 IAC 2-8-4] [326 IAC 2-2]

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP) and render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2 (Prevention of Significant Deterioration (PSD))

not applicable, the total input of volatile organic compounds (VOCs) delivered to the applicators in SCS1, SCS2, SCS3, and FL1, including sealants, retardants, paints, cleaners, and thinners, shall not exceed 99.5 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 VOC emissions to less than 100 tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.2.4 Hazardous Air Pollutants (HAPs) Limits [326 IAC 2-8-4][326 IAC 2-4.1]

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP) and render the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs)) not applicable, the source shall comply with the following:

(a) The total input of combined HAPs delivered to the coating applicators in SCS1, SCS2, SCS3, and FL1, including sealants, retardants, paints, cleaners, and thinners, shall not exceed a total of 24.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The total input of each single HAP delivered to the coating applicators in SCS1, SCS2, SCS3, and FL1, including sealants, retardants, paints, cleaners, and thinners, shall not exceed 9.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per 12 consecutive month period, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) not applicable.

D.2.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for SCS1, SCS2, SCS3, and FL1 and the associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.6 Volatile Organic Compounds (VOCs) and Hazardous Air Pollutants (HAPs) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC input limitations and HAP input limitations contained in Conditions D.2.3, and D.2.4 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 and HAP 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.2.7 Particulate Matter (PM)

In order to comply with Condition D.2.1, the dry filters for particulate matter control shall be in operation at all times when units SCS1, SCS2, SCS3, and FL1 are in operation.

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

D.2.8 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 (SV1, SV2, SV3, and

FLSV1) 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 a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.9 Record Keeping Requirements

(a) To document the compliance status with Conditions D.2.3 and D.2.4, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC and HAP input limitations established in Conditions D.2.3 and D.2.4. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

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

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

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

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

(3) The cleanup solvent usage for each month.

(4) The total VOC, single HAP and total HAPs emitted for each month.

(5) The total VOC, single HAP and total HAPs emitted for each compliance period.

(b) To document the compliance status with Condition D.2.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.2.10 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.2.3 and D.2.4 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: CHaSE Manufacturing, LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
FESOP Permit No.: F039-32954-00374

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 AND ENFORCEMENT 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: CHaSE Manufacturing, LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
FESOP Permit No.: F039-32954-00374

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

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: CHaSE Manufacturing, LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
FESOP Permit No.: F039-32954-00374
Facility: Surface coating stations SCS1, SCS2, SCS3, and automated wood coating flat line, FL1.
Parameter: Total VOC Input
Limit: The total input of volatile organic compounds (VOCs) delivered to the applicators in surface coating stations SCS1, SCS2, SCS3, and automated wood coating flat line, FL1, including cleanup solvents, shall not exceed 99.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: CHaSE Manufacturing, LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
FESOP Permit No.: F039-32954-00374
Facility: Surface coating stations SCS1, SCS2, SCS3, and automated wood coating flat line, FL1.
Parameter: Worst Single HAP Input
Limit: The total input of each single HAP delivered to the applicators in surface coating stations SCS1, SCS2, SCS3, and automated wood coating flat line, FL1, including cleanup solvents, shall not exceed 9.50 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

FESOP Quarterly Report

Source Name: CHaSE Manufacturing, LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
FESOP Permit No.: F039-32954-00374
Facility: Surface coating stations SCS1, SCS2, SCS3, and automated wood coating flat line, FL1.
Parameter: Total Combined HAP Input
Limit: The total input of combined HAPs delivered to the applicators in surface coating stations SCS1, SCS2, SCS3, and automated wood coating flat line, FL1, including cleanup solvents, shall not exceed 24.50 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER:_____ YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.
☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by:_____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

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

Source Name: CHaSE Manufacturing, LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
FESOP Permit No.: F039-32954-00374

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, 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: _____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a MSOP Transitioning to a Federally Enforceable State Operating Permit (FESOP) with New Source Review (NSR)

Source Description and Location

Source Name:	**CHaSE Manufacturing, LLC**
Source Location:	**21594 Beck Drive, Elkhart, IN 46516**
County:	**Elkhart**
SIC Code:	**2499 (Wood Products, NEC) and 2431 (Millwork)**
Operation Permit No.:	**F039-32954-00374**
Permit Reviewer:	**Adam Wheat**

On March 13, 2013, the Office of Air Quality (OAQ) received an application from CHaSE Manufacturing, LLC related to the construction and operation of new emission units at furniture manufacturing and coating plant and a transition from a MSOP to a FESOP with New Source Review (NSR).

Existing Approvals

The source has been operating under previous approvals including, but not limited to the following:

(a) MSOP Renewal No. M039-26586-00374, issued September 11, 2008.

(b) Administrative Amendment No. 039-32394-00374, issued November 16, 2012; and

Due to this application, the source is transitioning from a MSOP to a FESOP.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O3	Attainment effective July 19, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011

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

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

(b) $PM_{2.5}$
Elkhart County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
Elkhart 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.

Background and Description of Permitted Emission Units

The Office of Air Quality (OAQ) has reviewed an application, submitted by CHaSE Manufacturing, LLC on March 13, 2013, relating to its transition from a Minor Source Operating Permit (MSOP) to a Federally Enforceable State Operating Permit (FESOP). This included the modification of its current surface coating booths into three surface coating stations. The source will also be adding one (1) automated wood coating flat line and one (1) natural gas-fired air makeup unit.

The source consists of the following permitted emission units:

(a) One (1) miscellaneous woodworking process, identified as WW2, constructed in 1996, with a maximum throughput capacity of 22.3 pounds per hour of interior wood components, with particulate matter emissions controlled by a cyclone and baghouse (identified as D2), exhausting indoors.

(b) One (1) miscellaneous woodworking process, identified as WW1, constructed in 1996, with a maximum throughput capacity of 267 pounds per hour of interior wood components, with particulate matter emissions controlled by a cyclone and baghouse (identified as D1), exhausting indoors.

(c) One (1) miscellaneous woodworking process, constructed in 1996, with a maximum capacity of 145 pounds per hour of interior wood components, utilizing no control devices, exhausting within the building, and consisting of the following:

(1) One (1) drum sander identified as DS1,

(2) Two (2) band saws identified as BW1 and BW2,

(3) Four (4) chop saws identified as CS1 through CS4,

(4) Six (6) drill presses identified as DP1 through DP6, and

(5) Five (5) routers identified as RT1 through RT5.

(d) One (1) board bonding process, constructed in 1996, utilizing 1.45 pounds per hour of adhesive, coating 414.55 pounds per hour of interior wood components, using manual squeeze bottle flow coating.

(e) Two (2) natural gas-fired enclosed space heaters, identified as H1 and H2, with a capacity of 0.4 MMBtu/hr and 0.075 MMBtu/hr, respectively. Units H1 and H2 were constructed in 1996.

(f) Three (3) natural gas-fired enclosed space heaters, identified as H3, H4, and H5, with a combined maximum capacity of 0.2 MMBtu/hr. Units H3, H4, and H5 were constructed in 1999.

(g) Four (4) natural gas-fired enclosed space heaters, identified as H6, H7, H8, and H9, approved for construction in 2008 with maximum capacity of 0.08 MMBTU/hr, each.

The following existing units shown in strikethrough text have been modified, with the modified descriptions shown in bold text:

~~(h) One (1) surface coating process, identified as B1, constructed in 1996, with a maximum capacity of 138.41 pounds per hour of van decorative interior trim, with particulate matter emissions controlled by dry filters and exhausting to stack E1.~~

~~(i) Two (2) surface coating booths, identified as B2 and B3, approved for construction in 2008, each with a maximum capacity of 138.41 pounds per hour of van decorative interior trim, with particulate matter emissions controlled by dry filters and exhausting to stacks E2 and E3 respectively.~~

(h) One (1) wood surface coating station, identified as SCS1, constructed in 1996, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV1.

(i) One (1) wood surface coating station, identified as SCS2, constructed in 2008, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV2.

(j) One (1) wood surface coating station, identified as SCS3, constructed in 2008, approved for modification in 2013, with a maximum capacity of 40 units per hour, using HVLP spray application of coatings, using dry filters as control, and exhausting to stack SV3.

The following is a list of the new emission units and pollution control devices:

(k) One (1) automated wood coating flat line, identified as FL1, approved for construction in 2013, with a maximum capacity of 60 units per hour, using HVLP spray application of coatings, using a bank of dry filters as control, and exhausting to stack FLSV1.

(l) One (1) natural gas-fired air makeup unit, identified as AM1, approved for construction in 2013, with a maximum capacity of 3.0 MMBtu/hr .

"Integral Part of the Process" Determination

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 (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 were 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 from the woodworking operations were calculated after consideration of the controls for purposes of determining permit level and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) applicability. However, for purposes of determining the applicability of Prevention of Significant Deterioration (PSD) applicability, potential particulate matter emissions from the woodworking operations were calculated before consideration of the baghouse controls.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source after consideration of integral woodworking controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	54.53
PM10[(1)]	54.50
PM2.5	54.45
SO_2	0.01
NO_x	1.72
VOC	596.98
CO	1.44
GHGs as CO_2e	2,107

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

HAPs	Potential To Emit (tons/year)
Xylene	103.94
Toluene	41.94
Formaldehyde	0.18
Ethylbenzene	18.55
Hexane	3.1E-02
TOTAL HAPs	**164.65**

(a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of VOCs is greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are each less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a Federally Enforceable State Operating Permit (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.

(b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is greater than ten (10) tons per year and the PTE of a combination of HAPs is greater than twenty-five (25) tons per year. Therefore, the source would have been subject to the provisions of 326 IAC 2-7. However,

the source will be issued a FESOP (326 IAC 2-8), because the source will limit emissions of HAPs to less than the Title V major source threshold levels.

(c) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year.

PTE of the Entire Source After Issuance of the FESOP

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

	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)									
Process/ Emission Unit	PM	PM10*	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO_2e**	Total HAPs	Worst Single HAP
Controlled Woodworking	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uncontrolled Woodworking	2.73	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Board Bonding	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	6.3E-4	0.001 (Formaldehyde)
Surface Coating	0.20	0.20	0.20	0.00	0.00	99.5	0.00	0.00	24.5	9.5
Natural-Gas Fired Combustion	0.003	0.13	0.13	0.01	1.72	0.09	1.44	2,107	0.032	0.031 (Hexane)
Unpaved Roads (Fugitive Emissions)	0.21	0.05	0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	**3.99**	**3.96**	**3.91**	**0.01**	**1.72**	**99.63**	**1.44**	**2,107**	**24.53**	**9.50**
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA

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".
**The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

(a) FESOP Status and PSD Minor Status
This existing source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is limited to less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

(1) In order to comply with the requirements of 326 IAC 2-8-4 (FESOP) and render the requirements of 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (Prevention of Significant

Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs)) not applicable, the Permittee shall comply with the following:

(a) The total input of volatile organic compounds (VOCs) delivered to the applicators in SCS1, SCS2, SCS3, and FL1, including sealants, retardants, paints, cleaners, and thinners, shall not exceed 99.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(b) The total input of each single HAP delivered to the coating applicators in SCS1, SCS2, SCS3, and FL1, including sealants, retardants, paints, cleaners, and thinners, shall not exceed 9.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month;

(c) The total input of combined HAPs delivered to the coating applicators in SCS1, SCS2, SCS3, and FL1, including sealants, retardants, paints, cleaners, and thinners, shall not exceed a total of 24.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits, combined with the potential to emit HAPs from all other emission units at this source, shall limit the source-wide total potential to emit of any single HAP to less than ten (10) tons per 12 consecutive month period, and total HAPs to less than twenty-five (25) tons per 12 consecutive month period, and shall render 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) not applicable.

Compliance with these limits, 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 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.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ, are not included in the permit, since this source has taken a limit to be a minor source for HAPs.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Plywood and Composite Wood Products, Subpart DDDD are not included in the permit for the woodworking operation, because this facility does not manufacture plywood or composite wood and not a major source of HAP.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Wood Building Products, 40 CFR 63, Subpart QQQQ (326 IAC 20-79), are not included in this permit because the facility is not a major source of HAP and furniture is not defined under 40 CFR 63.4781 as building products.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Metal Furniture, 40 CFR 63, Subpart RRRR (326 IAC 20-78), are not included

in this permit because the facility does not manufacture metal furniture and not a major source of HAP.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD (326 IAC 20-95), are not included in this permit because the facility is not a major source of HAP.

(g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63, Subpart HHHHHH, are not included in this permit because since this source does not perform paint stripping using chemical strippers that contain methylene chloride in the removal of dried paint, does not perform spray application of coatings to motor vehicles or mobile equipments, and does not perform spray application of coating that contains chromium, lead, manganese, nickel, or cadmium to a plastic and/or metal substrates.

(h) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers Area Sources, 40 CFR 63.11193 Subpart JJJJJJ, are not included for this proposed revision, since the natural gas-fired heaters and air make-up unit are not industrial, commercial, or institutional boilers.

(i) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Preserving Area Sources, Subpart QQQQQQ are not included in the permit for the woodworking operation, because this facility does not perform wood preserving as defined in §63.11433.

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

Compliance Assurance Monitoring (CAM)

(k) 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 - Entire Source

The following state rules are applicable to the source:

(a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.

(c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The unlimited potential to emit of HAPs from the new and modified units is greater than ten (10) tons per year for any single HAP and/or greater than twenty-five (25) tons per year of a combination of HAPs. However, the source shall limit the potential to emit of HAPs from the new and modified units to 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, the source is not subject to the requirements of 326 IAC 2-4.1. See PTE of the Entire Source After Issuance of the FESOP Section above.

(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.

(g) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to 326 IAC 6-5, because the source does not have a potential fugitive particulate matter emission of twenty-five (25) tons per year or more.

(h) 326 IAC 6.5 PM Limitations Except Lake County
This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

(i) 326 IAC 6.8 PM Limitations for Lake County
This source is not subject to 326 IAC 6.5 because it is not located in Lake County.

(j) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.

(k) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

State Rule Applicability - Individual Sources

Surface Coating Operation

(a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(15), the surface coating stations (SCS1, SCS2, SCS3) and the automated flat line (FL1) are each subject to the requirements of 326 IAC 6-3, since they each have the potential to use equal to or greater than five (5) gallons per day of surface coatings. Pursuant to 326 IAC 6-3-2(d)(1), the surface coating stations and automated flat line shall be controlled by dry particulate filters, and the Permittee shall operate the filters in accordance with manufacturer's specifications.

(b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The unlimited VOC potential emissions from each of the surface coating stations (SCS1, SCS2, SCS3) and the automated flat line (FL1) is greater than twenty-five (25) tons per year. However,

each of the surface coating stations (SCS1, SCS2, SCS3) and the automated flat line (FL1) are subject to the requirements of 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating).

(c) 326 IAC 8-2-9 (Miscellaneous Metal and Plastic Coating Operations)
This source does not coat any metal surfaces. Therefore, the requirements of 326 IAC 8-2-9 are not applicable.

(d) 326 IAC 8-2-10 (Flat Wood Panels; Manufacturing Operations)
This source does not coat any flat wood panels that are considered printed panels, natural finish hardwood plywood panels, or hardboard paneling with Class II finishes. Therefore, the requirements of 326 IAC 8-2-10 are not applicable.

(e) 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)
Pursuant to 326 IAC 8-2-1(a)(4), each of the surface coating stations (SCS1, SCS2, SCS3) and automated flat line (FL1) are subject to 326 IAC 8-2-12, because each of these facilities was constructed after July 1, 1990, has potential VOC emissions before controls are greater than fifteen (15) pounds per day, and apply surface coatings to wood furnishings as defined in 326 IAC 8-2-12(a).

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

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

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

Each of the surface coating stations (SCS1, SCS2, SCS3) and automated flat line (FL1) utilizes HVLP spray application. Therefore, the surface coating processes comply with this rule.

(f) 326 IAC 8-11-3 (VOC Rules: Wood Furniture Coatings)
The requirements of 326 IAC 8-11-3 are not applicable to this source, since this source is not located in Lake, Porter, Clark, or Floyd County.

<u>Woodworking Operation</u>

(g) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the requirements of 326 IAC 6-3-2 are not applicable to the woodworking operation, since potential particulate emissions (after integral woodworking controls) is less than five hundred fifty-one thousandths (0.551) pound per hour.

In order to ensure that the woodworking operation is exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the baghouse shall be in operation and control particulate emissions from the woodworking operation at all times the woodworking operation is in operation.

Insignificant Activities

(h) 326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating)
The natural gas-fired heaters and air make-up unit are not sources of indirect heating. Therefore, the requirements of 326 IAC 6-2-1 do not apply to the units.

(i) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)
Each of the natural gas-fired heaters and the air make-up unit at this source are exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight. In addition, pursuant to 326 IAC 6-3-1(b)(14), each of the natural gas-fired heaters and air make-up unit at this source are also exempt from the requirements of 326 IAC 6-3, because they each have potential particulate emissions of less than five hundred fifty one thousandths (0.551) pound per hour.

(j) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
Pursuant to 326 IAC 7-1.1-1, the natural gas-fired heaters and air make-up unit are each not subject to the requirements of 326 IAC 7-1, since each has unlimited sulfur dioxide (SO_2) emissions less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

(k) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The natural gas-fired heaters and air make-up unit are each not subject to the requirements of 326 IAC 8-1-6, since each has unlimited VOC potential emissions of less than twenty-five (25) tons per year.

Compliance Determination, Monitoring and Testing Requirements

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

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

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
Surface Coating Operations (SV1, SV2, SV3, FLSV1) Dry filters	Integrity and Particulate Loading Inspections	Daily	Normal or Abnormal	Response Steps
	Overspray Observations	Weekly	Presence of overspray	
	Stack Inspections	Monthly	Noticeable change or presence of overspray on rooftop or on ground nearby	

These monitoring conditions are necessary because dry filters for the surface coating operations (SCS1, SCS2, SCS3, and FL1) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

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 March 13, 2013.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Review and FESOP No. F039-32954-00374. The staff recommends to the Commissioner that this New Source Review and FESOP be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Adam Wheat 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)233-8397 or toll free at 1-800-451-6027 extension 3-8397.

(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.in.gov/idem

Appendix A: Emissions Calculation Summary
Emission Summary

Company Name: CHaSE Manufacturing LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
Permit No.: F039-32954-00374
Reviewer: Adam Wheat

Unlimited PTE before Integral Woodworking Controls (tons/year)**

Emission Unit Groups	**PM** (tons/yr)	**PM-10** (tons/yr)	**PM2.5** (tons/yr)	**SO2** (tons/yr)	**NOx** (tons/yr)	**VOC** (tons/yr)	**CO** (tons/yr)	**GHGs as CO2e** (tons/yr)	**Total HAPs** (tons/yr)	**Worst Case Single HAP** (tons/yr)	
Woodworking with control devices	83.80	83.80	83.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Woodworking without control devices	2.73	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Board Bonding	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	6.3E-04	6.3E-04	Formaldehyde
Surface Coating	50.75	50.75	50.75	0.00	0.00	596.85	0.00	0.00	164.61	103.94	Xylene
Natural Gas-Fired Combustion	0.003	0.13	0.13	0.010	1.72	0.09	1.441	2107	3.2E-02	3.1E-02	Hexane
Fugitive Emissions											
Unpaved Roads	0.21	0.05	0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Total	**137.49**	**137.46**	**137.41**	**0.01**	**1.72**	**596.98**	**1.44**	**2107**	**164.65**	**103.94**	**Xylene**

Unlimited PTE after Integral Woodworking Controls (tons/year)**

Emission Unit Groups	**PM** (tons/yr)	**PM-10** (tons/yr)	**PM2.5** (tons/yr)	**SO2** (tons/yr)	**NOx** (tons/yr)	**VOC** (tons/yr)	**CO** (tons/yr)	**GHGs as CO2e** (tons/yr)	**Total HAPs** (tons/yr)	**Worst Case Single HAP** (tons/yr)	
Woodworking with control devices	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Woodworking without control devices	2.73	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Board Bonding	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	6.3E-04	6.3E-04	Formaldehyde
Surface Coating	50.75	50.75	50.75	0.00	0.00	596.85	0.00	0.00	164.61	103.94	Xylene
Natural Gas-Fired Combustion	0.003	0.13	0.13	0.010	1.72	0.09	1.441	2,107	3.2E-02	3.1E-02	Hexane
Fugitive Emissions											
Unpaved Roads	0.21	0.05	0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Total	**54.53**	**54.50**	**54.45**	**0.01**	**1.72**	**596.98**	**1.44**	**2107**	**164.65**	**103.94**	**Xylene**

Limited/Controlled Emission Rates

Emission Unit Groups	**PM** (tons/yr)	**PM-10** (tons/yr)	**PM2.5** (tons/yr)	**SO2** (tons/yr)	**NOx** (tons/yr)	**VOC**[a] (tons/yr)	**CO** (tons/yr)	**GHGs as CO2e** (tons/yr)	**Total HAPs**[b] (tons/yr)	**Worst Case Single HAP**[c] (tons/yr)	
Woodworking with control devices	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Woodworking without control devices	2.73	2.73	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Board Bonding	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	6.3E-04	6.3E-04	Formaldehyde
*Surface Coating	0.20	0.20	0.20	0.00	0.00	99.50	0.00	0.00	24.50	9.50	All HAPs
Natural Gas-Fired Combustion	0.003	0.13	0.13	0.010	1.72	0.09	1.44	2107	3.2E-02	3.1E-02	Hexane
Fugitive Emissions											
Unpaved Roads	0.21	0.05	0.005	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Total	**3.99**	**3.96**	**3.91**	**0.01**	**1.72**	**99.63**	**1.44**	**2107**	**24.53**	**9.50**	

* Particulte Emissions from wood working operations are limited by 326 IAC 6-3-2. The dry filters required by 326 IAC 6-3-2(d) control particulate emissions from the surface coating operations.
a = The combined VOC emissions from the surface coating operation shall not exceed 99.5 tons per twelve (12) consecutive month period.
b = The combined worst-case single HAP emissions from the surface coating operation (SCS1, SCS2, SCS3, FL1) shall not exceed 9.5 tons per twelve (12) consecutive month
c = The total combined HAP emissions from the surface coating operation shall not exceed 24.5 tons per twelve (12) consecutive month period.
**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 (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 were 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 from the woodworking operations were calculated after consideration of the controls for purposes of determining permit level and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) applicability. However, for purposes of determining the applicability of Prevention of Significant Deterioration (PSD) applicability, potential particulate matter emissions from the woodworking operations were calculated before consideration of the

Appendix A: Emission Calculations
Controlled Woodworking Operations - WW1 and WW2

Company Name: CHaSE Manufacturing LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 4651(
Permit No.: F039-32954-00374
Reviewer: Adam Wheat

Emission Unit Description	Emission Unit ID	Control Device Description	Control Device ID	Control Device Filter Area (ft2)	Air to Cloth Ratio	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	PM Emission Rate before Controls (lb/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
Miscellaneous Woodworking	WW1	Honeyville Cyclone/ Bagfilter	D1	1250	12	99.0%	0.001328	15,000	17.07	74.79	0.171	0.748
Omega Mitre Saw	WW2	Jet DC-1200	D2	30	40	99.0%	0.002000	1,200	2.06	9.01	0.021	0.090
								TOTALS	**19.13**	**83.80**	**0.191**	**0.84**

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

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

Appendix A: Emissions Calculations
Uncontrolled Woodworking Equipment - UWW

Company Name: CHaSE Manufacturing LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
Permit No.: F039-32954-00374
Reviewer: Adam Wheat

Shaping/Grinding/Sanding

Process/Operation	Description	ID	Surface Thickness Removed (in)	Surface Width Removed (in)	Surface Distance (in/hr)	Material Loss (in^3/hr)	Material Density (lb/in^3)	Material Loss (lb/hr)
Sand Rite Drum Sander	Drum Sander	DS1	0.0625	1.500	10.0	0.938	0.023	0.022
Estimated Emissions (lb/hr)								**0.022**
Estimated Emissions (tons/yr)								**0.095**

METHODOLOGY
Material Loss (in^3/hr) = Surface Thickness (in) X Surface Width (in) X Surface Distance (in/hr)
Material Density (lbs/in^3) = [Southern Pine Density 40 lb/ft^3] * [ft3/1748 in^3]
Estimated Emissions (lb/hr) = Material Loss (in^3/hr) X Material Density (lb/in^3)
Estimated Emissions (tons/yr) = Material Loss (in^3/hr) X 8,760 (hrs/yr) X 1/2,000 (lbs/ton)

Cutting

Process/Operation	Description	ID	Material Thickness (in)	Cutting Surface Thickness (in)	Process rate (in/hr)	Material Loss (in^3/hr)	Material Density (lb/in^3)	Material Loss (lb/hr)
Jet Bandsaw	Vertical Bandsaw	BW1	2	0.0625	5.0	0.625	0.023	0.014
Black/Decker Chop Saw	Chop Saw	CS1	2	0.125	6.0	1.500	0.023	0.035
Dewalt Chop Saw	Chop Saw	CS2	2	0.125	6.0	1.500	0.023	0.035
Delta Bandsaw	Vertical Bandsaw	BW2	2	0.0625	5.0	0.625	0.023	0.014
Delta Chop Saw	Chop Saw	CS3	2	0.125	6.0	1.500	0.023	0.035
Dewalt Chop Saw	Chop Saw	CS4	2	0.125	6.0	1.500	0.023	0.035
Estimated Emissions (lb/hr)								**0.168**
Estimated Emissions (tons/yr)								**0.735**

METHODOLOGY
Same as Shaping/Grinding/Sanding Table

Drilling

Process/Operation	Description	ID	Material Thickness (in)	Drilling Area (in^2)	Drill rate (holes/hr)	Material Loss (in^3/hr)	Material Density (lb/in^3)	Material Loss (lb/hr)
Delta Drill Press	Drill Press	DP1	2	0.050	5.00	0.5	0.023	0.012
Craftsman Drill Press	Drill Press	DP2	2	0.050	5.00	0.5	0.023	0.012
Jet Drill Press	Drill Press	DP3	2	0.050	5.00	0.5	0.023	0.012
Delta Drill Press	Drill Press	DP4	2	0.050	5.00	0.5	0.023	0.012
Duracraft Drill Press	Drill Press	DP5	2	0.050	5.00	0.5	0.023	0.012
Doucet Drill Press	Drill Press	DP6	2	0.050	5.00	0.5	0.023	0.012
Estimated Emissions (lb/hr)								**0.069**
Estimated Emissions (tons/yr)								**0.304**

METHODOLOGY
Material Loss (in^3/hr) = Material Thickness (in) X Drilling Area (in^2) X Process rate (holes/hr)
Other equations the same as above.

Routing

Process/Operation	Description	ID	Routing Thickness (in)	Routing Bit Diameter (in)	Routing Length (in)	Material Loss (in^3/hr)	Material Density (lb/in^3)	Material Loss (lb/hr)
Castle Router	Router	RT1	0.5	0.375	24.00	4.5	0.023	0.104
Rockwell Shaper/Router	Router	RT2	0.5	0.375	12.00	2.25	0.023	0.052
Craftsman Router	Router	RT3	0.5	0.375	12.00	2.25	0.023	0.052
SCMI Router	Router	RT4	0.5	0.375	12.00	2.25	0.023	0.052
Castle Router	Router	RT5	0.5	0.375	24.00	4.5	0.023	0.104
Estimated Emissions (lb/hr)								**0.365**
Estimated Emissions (tons/yr)								**1.597**

Methodology
Material Loss (in^3/hr) = Routing Thickness (in) X Routing Bit Diameter (in) X Routing Length (in)
Other equations the same as above.

Total Emission Losses (PM/PM10) - Lb/Hr							**0.624**
Total Emission Losses (PM/PM10) - TPY							**2.731**

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
Board Bonding Process (BB1)

Company Name: CHaSE Manufacturing LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
Permit No.: F039-32954-00374
Reviewer: Adam Wheat

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water & Exempt	Weight % Organics	Volume % Water & Exempt	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Material Usage (lb/hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Board Bonding Process																	
Titebond II Wood Glue	9.17	52.00%	51.45%	0.55%	56.57%	42.82%	0.0073	21.63	1.45	0.12	0.05	0.01	0.19	0.03	0.00	0.12	100%
Potential Emissions												**0.01**	**0.19**	**0.03**	**0.00**		

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

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Formaldehyde	Weight % Methanol	Weight % Toluene	Weight % Xylene	Formaldehyde Emissions (ton/yr)	Methanol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total Emissions (ton/yr)
Board Bonding Process												
Titebond II Wood Glue	9.17	0.0073	21.63	0.01%	0.00%	0.00%	0.00%	0.001	0.000	0.000	0.000	0.001
Potential Emissions								**0.001**	**0.000**	**0.000**	**0.000**	**0.001**

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

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

Company Name: CHaSE Manufacturing LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
Permit No.: F039-32954-00374
Reviewer: Adam Wheat

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
Surface Coating Station 1 (SCS1)															
HS510W000 Neutral Stain	6.94	91.0%	1.7%	89.3%	0.0%	9.00%	0.1259	40.000	6.20	6.20	31.21	749.04	136.70	3.44	75%
0987 Retarder	7.90	100.0%	0.1%	99.9%	0.0%	0.00%	0.0060	40.000	7.89	7.89	1.89	45.46	8.30	0.00	75%
Acrastrip Cleaner	8.60	100.0%	80.0%	20.0%	80.0%	0.00%	0.0004	40.000	8.60	1.72	0.03	0.66	0.12	0.00	100%
								Total PTE	8.60	7.89	33.13	795.16	145.12	3.44	
Surface Coating Station 2 (SCS2)															
Care Seal Precat Sealer	7.48	82.0%	15.8%	66.2%	0.0%	18.00%	0.1259	40.000	4.95	4.95	24.93	598.40	109.21	7.42	75%
309 HAPs Free Catalyst	7.02	92.0%	7.3%	84.7%	0.0%	8.00%	0.0033	40.000	5.95	5.95	0.78	18.83	3.44	0.08	75%
Acrastrip Cleaner	8.60	100.0%	80.0%	20.0%	80.0%	0.00%	0.0004	40.000	8.60	1.72	0.03	0.66	0.12	0.00	100%
								Total PTE	8.60	5.95	25.75	617.89	112.77	7.51	
Surface Coating Station 3 (SCS3)															
Innovat Clear Topcoat	8.22	57.0%	8.0%	49.0%	0.0%	43.00%	0.1259	40.000	4.03	4.03	20.28	486.82	88.84	19.49	75%
309 Haps Free Catalyst	7.02	92.0%	7.3%	84.7%	0.0%	8.00%	0.0033	40.000	5.95	5.95	0.78	18.84	3.44	0.08	75%
Acrastrip Cleaner	8.60	100.0%	80.0%	20.0%	80.0%	0.00%	0.0004	40.000	8.60	1.72	0.03	0.66	0.12	0.00	100%
								Total PTE	8.60	5.95	21.10	506.31	92.40	19.57	
Flat Line 1 (FL1)															
Ultra Hide Precat Primer	9.12	76.0%	17.2%	58.8%	0.0%	24.00%	0.1321	60.000	5.36	5.36	42.51	1020.26	186.20	19.00	75%
DT5406000 Thinner	6.93	100.0%	50.0%	50.0%	0.0%	0.00%	0.0661	60.000	3.47	3.47	13.74	329.81	60.19	0.00	75%
Acrastrip Cleaner	8.60	100.0%	80.0%	20.0%	80.0%	0.00%	0.0004	60.000	8.60	1.72	0.04	0.99	0.18	0.00	100%
								Total PTE	8.60	5.36	56.29	1351.06	246.57	19.00	
OR															
White Precat Satin	8.63	73.0%	19.0%	54.0%	0.0%	27.00%	0.1321	60.000	4.66	4.66	36.94	886.65	161.81	20.22	75%
DT5406000 Thinner	6.93	100.0%	50.0%	50.0%	0.0%	0.00%	0.0661	60.000	3.47	3.47	13.74	329.81	60.19	0.00	75%
Acrastrip Cleaner	8.60	100.0%	80.0%	20.0%	80.0%	0.00%	0.0004	60.000	8.60	1.72	0.04	0.99	0.18	0.00	100%
								Total PTE	8.60	5.36	50.73	1217.45	222.18	20.22	
								Worst Case PTE for FL1	8.60	5.36	56.29	1351.06	246.57	20.22	

PM Control Efficiency 99.60%

Total Potentional to Emit

	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)
Total Uncontrolled	**136.3**	**3270**	**596.9**	**50.7**
Total Limited/Controlled	**136.3**	**3270**	**<99.5**	**0.20**

METHODOLOGY

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

Appendix A: Emission Calculations
HAP Emission Calculations
From Surface Coating Operations

Company Name: CHaSE Manufacturing LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
Permit No.: F039-32954-00374
Reviewer: Adam Wheat

SCS1	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethylbenzene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Total Emissions (tons/yr)
HS510W000 Neutral Stain	6.94	0.12590	40.000	4.00%	0.00%	0.00%	0.60%	6.12	0.00	0.00	0.92	7.04
0987 Retarder	7.90	0.00600	40.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Acrastrip Cleaner	8.60	0.00040	40.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
							Total PTE	**6.12**	**0.00**	**0.00**	**0.92**	

SCS2	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethylbenzene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Total Emissions (tons/yr)
Care Seal Precat Sealer	7.48	0.12590	40.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
309 HAPs Free Catalyst	7.02	0.00330	40.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Acrastrip Cleaner	8.60	0.00040	40.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
							Total PTE	**0.00**	**0.00**	**0.00**	**0.00**	

SCS3	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethylbenzene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Total Emissions (tons/yr)
Innovat Clear Topcoat	8.22	0.12590	40.000	16.00%	0.00%	0.10%	3.00%	29.01	0.00	0.18	5.44	34.63
309 Haps Free Catalyst	7.02	0.00330	40.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Acrastrip Cleaner	8.60	0.00040	40.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
							Total PTE	**29.01**	**0.00**	**0.18**	**5.44**	

Flat Line 1	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Ethylbenzene	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Total Emissions (tons/yr)
Ultra Hide Precat Primer	9.12	0.13210	60.000	17.00%	0.00%	0.00%	3.00%	53.82	0.00	0.00	9.50	63.32
White Precat Satin	8.63	0.13210	60.000	5.00%	14.00%	0.00%	0.90%	14.98	41.94	0.00	2.70	59.62
DT5406000 Thinner	6.93	0.06610	60.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
Acrastrip Cleaner	8.60	0.00040	60.000	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
							Total PTE	**68.80**	**41.94**	**0.00**	**12.19**	

	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)
Source Wide "Worst Case" Individual HAP	**103.94**	**41.94**	**0.18**	**18.55**

Total HAPs (tons/yr) **164.61**

METHODOLOGY

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

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

Company Name: CHaSE Manufacturing LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
Permit No.: F039-32954-00374
Reviewer: Adam Wheat

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Emission Units:
0.40	3.50	One (1) space heater @ 0.4 MMBtu/hr (ID: H1)
0.075	0.66	One (1) space heater @ 0.075 MMBtu/hr (ID: H2)
0.20	1.75	Three (3) space heaters @ 0.2 MMBtu/hr (ID:H3,H4,H5), combined
0.32	2.80	Four (4) space heaters @ 0.08 MMBtu/hr (ID:H6,H7,H8,H9), each
3.00	26.28	One (1) air makeup unit @ 3.0 MMBtu/hr (ID:AM1)
4.00	34.31	

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	7.60	0.60	100 **see below	5.5	84
Potential Emission in tons/yr	0.003	0.130	0.130	0.010	1.716	0.094	1.44

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	HAPs - Organics				
	Benzene	Dichlorobenzer	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential Emission in tons/yr	3.60E-05	2.06E-05	1.29E-03	3.09E-02	5.83E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	8.58E-06	1.89E-05	2.40E-05	6.52E-06	3.60E-05
				Combined Total	**0.03**

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

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000	2.3	2.2
Potential Emission in tons/yr	2,059	0.0	0.0
Summed Potential Emissions in tons/yr	2,059		
CO2e Total in tons/yr	2,107		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP

Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: CHaSE Manufacturing LLC
Source Address: 21594 Beck Drive, Elkhart, Indiana 46516
Permit No.: F039-32954-00374
Reviewer: Adam Wheat

Unpaved Roads at Industrial Site
The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	4.0	1.0	4.0	4.5	18.0	250	0.047	0.2	69.1
Vehicle (leaving plant) (one-way trip)	4.0	1.0	4.0	4.5	18.0	250	0.047	0.2	69.1
		Totals	**8.0**		**36.0**			**0.4**	**138.3**

Average Vehicle Weight Per Trip = 4.5 tons/trip
Average Miles Per Trip = 0.05 miles/trip

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

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	4.5	4.5	4.5	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365] (Equation 2 from AP-42 13.2.2)
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	3.10	0.79	0.08	lb/mile
Mitigated Emission Factor, Eext =	2.04	0.52	0.05	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.11	0.03	0.00	0.07	0.02	0.00
Vehicle (leaving plant) (one-way trip)	0.11	0.03	0.00	0.07	0.02	0.00
Totals	**0.21**	**0.05**	**0.01**	**0.14**	**0.04**	**0.00**

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

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PTE = Potential to Emit

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Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Phil Scott
CHaSE Manufacturing, LLC
21594 Beck Drive
Elkhart, IN 46516

DATE: June 18, 2013

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

SUBJECT: Final Decision
Federally Enforceable State Operating Permit (FESOP)
039-32954-00374

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Zack Nickell, Responsible Official
Doug Elliott, D & B Environmental Services, Inc.
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

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Governor

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Commissioner

June 18, 2013

TO: Elkhart Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: CHaSE Manufacturing, LLC
Permit Number: 039-32954-00374

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	PWAY 6/18/2013 CHaSE Manufacturing LLC 039-32954-00374 (final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

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1		Phil Scott CHaSE Manufacturing LLC 21594 Beck Dr Elkhart IN 46516 (Source CAATS)									
2		Zack Nickell President CHaSE Manufacturing LLC 21594 Beck Dr Elkhart IN 46516 *(RO CAATS)*									
3		Elkhart City Council and Mayors Office 229 South Second Street Elkhart IN 46516 *(Local Official)*									
4		Elkhart Public Library 300 S 2nd St Elkhart IN 46516-3184 *(Library)*									
5		Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 *(Health Department)*									
6		Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 *(Local Official)*									
7		Mr. Doug Elliott D & B Environmental Services, Inc. 401 Lincoln Way West Osceola IN 46561 *(Consultant)*									
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