



We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr. Governor

Thomas W. Easterly Commissioner

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

TO: Interested Parties / Applicant

DATE: May 25, 2010

RE: Ideal Doors / 043-28705-00062

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 filina:

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

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

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

> Enclosures FNPER.dot12/03/07



#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

IDEM

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr. Governor

Thomas W. Easterly Commissioner

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

# New Source Construction and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

#### Ideal Doors 890 Central Court New Albany, Indiana 47150

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

The Permittee must comply with all conditions of this permit. Noncompliance with any 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.: F043-28705-00062				
Issued by:	Issuance Date: May 25, 2010			
Alfred C. Dumaual, Ph. D., Section Chief Permits Branch Office of Air Quality	Expiration Date:  May 25, 2015			

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Permit Reviewer: Anne-Marie C. Hart

#### **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 architectural wood doors manufacturing operation.

Source Address: 890 Central Court, New Albany, Indiana 47150

General Source Phone Number: (800) 626-6271

SIC Code: 2431 County Location: Floyd

Source Location Status: Nonattainment for PM2.5 standard

Attainment for all other criteria pollutants

Source Status: Federally Enforceable State Operating Permit Program

Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

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

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

- (a) One (1) open front spray booth, identified as U-SB68, constructed after January 1, 1990, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control and equipped with a HVLP application system. This unit will be eliminated and replaced by U-SBI137 in 2010.
- (b) One (1) open front spray booth, identified as U-SB69, constructed after February 1, 2002, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, equipped with a HVLP application system, and exhausting to stack S-SBI69.
- (c) One (1) open front spray booth, identified as U-SB70, constructed after January 1, 1986, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, a HVLP application system, and exhausting to stack S-SBI70.
- (d) One (1) open front spray booth, identified as U-SBI137, approved for construction in 2010, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, equipped with a High Volume Low Pressure (HVLP) spray application, and exhausting to stack S-SBI137. This unit will replace the spray booth identified as U-SB68.
- (e) One (1) enclosed automatic spray booth, identified as U-RP48, approved for construction in 2010, with a maximum production rate of 225 doors per hour, using dry filters as particulate control, equipped with an air atomization application system, and exhausting to stack S-RP48.
- (f) One (1) drying tunnel, identified as U-RP49, heated by the natural gas-fired boiler I139,

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associated with spray booth U-RP48, approved for construction in 2010, with a maximum drying rate of 225 doors per hour.

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

This stationary source also includes the following insignificant activities:

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
  - (1) One (1) warehouse heater, identified as I140, installed in 2000, with a rated heat capacity of 4 MMBtu per hour.
  - (2) One (1) S&R heater, identified as I141, installed in 1986, with a rated heat capacity of 0.4 MMBtu per hour.
  - (3) Three (3) make-up heaters, identified as I142 through I144, installed in 1986, with a rated heat capacity of 1.60 MMBtu per hour, each.
  - (4) Two (2) office heaters, identified as I145 and I146, installed in 1986, with a rated heat capacity of 0.12 MMBtu per hour, each.
  - One (1) upstairs office heater, identified as I147, installed in 1986, with a rated heat capacity of 0.05 MMBtu per hour.
  - (6) Six (6) hanging heaters, identified as I148 through I153, installed n 1986, with a rated heat capacity of 0.06 MMBtu per hour, each.
  - (7) Two (2) hanging heaters, identified as I154 and I155, installed in 1986, with a rated heat capacity of 0.2 MMBtu per hour, each.
  - (8) One (1) hanging heater, identified as I156, installed in 1986, with a rated heat capacity of 0.1 MMBtu per hour.
  - (9) One (1) boiler, identified as I139, installed in 2010, with a rated heat capacity of 1.814 MMBtu per hour.
  - (10) One (1) make-up heater, identified as I157, installed in 2010, with a rated heat capacity of 9.765 MMBtu per hour.
  - (11) One (1) heater, identified as I158, installed in 2010, with a rated heat capacity of 2.2 MMBtu per hour.
- (b) Woodworking equipment controlled by a baghouse that does not exhaust to the atmosphere greater than 125,000 cubic feet per minute:
  - (1) Various woodworking operations consisting of saws, sanders, moulders and booring machines, with a maximum capacity of 1725 pounds of doors per hour, with particulate emissions controlled by a dust collector identified as DC-I163.
- (c) Woodworking equipment controlled by a baghouse that does not exhaust to the atmosphere greater than 40,000 cubic feet per minute:
  - (1) Woodworking operations consisting of planers, sanders and saws, with a maximum capacity of 1725 pounds of doors per hour, with particulate emission controlled by a dust collector identified as U-DC108.

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- (d) Adhesive applicator equipment with potential VOC emissions less than five (5) tons per year:
  - (1) One (1) in house glue booth, identified as I161, installed in 1988, using a maximum usage rate of 0.15 gallons of adhesive per day.
  - One (1) suat gluer, identified as I164, installed in 1988, using a maximum usage rate of 2 pounds of adhesive pellets per day.
  - One (1) 62" Glue Station, identified as I33, installed in 1988, with a maximum usage rate of 30 gallons of adhesive per day.
  - One (1) 56" Glue Station, identified as I32, installed in 1991, with a maximum usage rate of 30 gallons of adhesive per day.
  - (5) One (1) Hot Press, identified as I31, installed in 1992, with a maximum usage rate of 30 gallons of adhesive per day.
  - (6) One (1) RFS Gluer, identified as I28, installed in 1996, with a maximum usage rate of 8 gallons of adhesive per day.
  - (7) One (1) Rosenquist Gluer, identified as I27, installed in 2002, with a maximum usage rate of 8 gallons of adhesive per day.
  - (8) One (1) Hot Press, identified as I34, installed in 2003, with a maximum usage rate of 30 gallons of adhesive per day.
  - (9) One (1) Edge Gluing Machine, identified as RP25, installed in 2010, with a maximum usage rate of 5 gallons of adhesive per day.
  - (10) One (1) Door Press, identified as RP27, installed in 2010, with a maximum usage rate of 5 gallons of adhesive per day.
  - (11) One (1) Veneer Face Hot Press, identified as RP17, installed in 2010, with a maximum usage rate of 20 gallons of adhesive per day.
  - One (1) Glue Spreader, identified as RP 24, installed in 2010, with a maximum usage rate of 20 gallons of adhesive per day.
  - One (1) Door Clamp, identified as RP26, installed in 2010, with a maximum usage rate of 20 gallons of adhesive per day.
  - One (1) Glue Spreader, identified as RP28, installed in 2010, with a maximum usage rate of 20 gallons of adhesive per day.
  - One (1) Bladder Press, identified as RP20, installed in 2010, with a maximum usage rate of 20 gallons of adhesive per day.

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

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

#### **SECTION B**

#### **GENERAL CONDITIONS**

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

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

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

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

#### B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

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

#### B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F043-28705-00062, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

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

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

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

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#### B.6 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.7 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.8 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.9 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.10 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:
  - (i) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and
  - (ii) 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.11 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.12 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.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall 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 Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

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

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance and Enforcement Branch), or

Telephone Number: 317-233-0178 (ask for Office of Air Quality,

Compliance and Enforcement Branch) Facsimile Number: 317-233-6865

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

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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.

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

#### B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F043-28705-00062 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.16 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.17 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.18 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.

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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.19 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.20 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

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(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) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

#### B.21 Source Modification Requirement [326 IAC 2-8-11.1]

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#### B.22 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.23 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.24 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.

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(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.25 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

#### SECTION C SOURCE OPERATION CONDITIONS

#### **Entire Source**

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

C.1 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), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) 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 Stack Height [326 IAC 1-7]

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

#### C.8 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:

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

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

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

#### C.9 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 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 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.

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#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.10 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.11 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.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

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

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#### Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

#### C.13 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

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

#### C.14 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

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

- 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.

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, 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.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported 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.

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Permit Reviewer: Anne-Marie C. Hart

#### **Stratospheric Ozone Protection**

#### C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

#### SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

#### **Emissions Unit Description:**

- (a) One (1) open front spray booth, identified as U-SB68, constructed after January 1, 1990, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control and equipped with a HVLP application system. This unit will be eliminated and replaced by U-SBI137 in 2010.
- (b) One (1) open front spray booth, identified as U-SB69, constructed after February 1, 2002, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, equipped with a HVLP application system, and exhausting to stack S-SBI69.
- (c) One (1) open front spray booth, identified as U-SB70, constructed after January 1, 1986, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, a HVLP application system, and exhausting to stack S-SBI70.
- (d) One (1) open front spray booth, identified as U-SBI137, approved for construction in March 2010, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, equipped with a High Volume Low Pressure (HVLP) spray application, and exhausting to stack S-SBI137. This unit will replace the spray booth identified as U-SB68.
- (e) One (1) enclosed automatic spray booth, identified as U-RP48, approved for construction in February 2010, with a maximum production rate of 225 doors per hour, using dry filters as particulate control, equipped with an air atomization application system, and exhausting to stack S-RP48.

(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 Volatile Organic Compounds (VOC) [326 IAC 8-1-6] [326 IAC 2-8] [326 IAC 2-2]

- (a) The input of VOC, including coatings, dilution solvents, catalysts and cleaning solvents for each of the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70, shall be less than 22 tons per twelve (12) consecutive month period, each, with compliance determined at the end of each month.
- (b) The total input of VOC, including coatings, dilution solvents, catalysts and cleaning solvents to the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be less than 90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits, combined with the potential to emit VOC from other emission units at the source, shall limit VOC emissions from the entire source to less than 100 tons per twelve (12) consecutive month period and each facility to less than 25 tons per twelve (12) consecutive month period and render the requirements of 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), 326 IAC 2-7 (Part 70 Permits), and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

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#### D.1.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-8] [326 IAC 2-4.1]

(a) The total input of any single HAP to the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be less than 7 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) The total input of combined HAPs to the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be less than 20 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits, combined with the potential to emit HAPs from other emission units at the source, shall limit HAP emissions from the entire source to less than 10 tons per twelve (12) consecutive month period for each individual HAP and less than 25 tons per twelve (12) consecutive month period for total combined HAPs and render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP)) not applicable.

#### D.1.3 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

#### D.1.4 Preventive Maintenance Plan [326 IAC 1-6-1]

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

#### **Compliance Determination Requirements**

D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC and HAP usage limit contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

#### D.1.6 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry filters. To monitor the performance of the dry filter, weekly observations shall be made of the overspray from the surface coating booths (U-SBI137, U-SB68, U-RP48, U-SB69, U-SB70) stacks S-SBI137, S-RP48, S-SB68, S-SBI69 and S-SBI70 while the booths are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps. Section C Response to Excursions and 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 and 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.1.7 Record Keeping Requirement

- (a) To document the compliance status with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC input limits and the HAP input limits established in Conditions D.1.1 and D.1.2.
  - (1) The VOC and HAP content of each coating material and solvent used.
  - (2) The amount of coating material and solvent used on monthly basis.
    - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
  - (3) The cleanup solvent input for each month.
  - (4) The total VOC input, total single HAP input, and total combined HAP input for all the spray booths combined for each month.
  - (5) The total VOC input, total single HAP input, and total combined HAP input for all the spray booths combined for each compliance period.
  - (6) The total VOC input for each spray booth for each month.
  - (7) The total VOC input for each spray booth for each compliance period.
- (b) To document the compliance status with Condition D.1.6, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections. The Permittee shall include in its daily record when an overspray reading is not taken and the reason for the lack of overspray reading, (i.e. the process did not operate that day).
- (c) Section C General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

#### D.1.8 Reporting Requirements

A quarterly summary of the information to document the compliance status with Conditions D.1.1 and D.1.2 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not 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 report 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).

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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

#### **SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS**

#### **Emissions Unit Description:**

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
  - (9) One (1) boiler, identified as I139, installed in 2010, with a rated heat capacity of 1.814 MMBtu per hour.

(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 6-2]

Pursuant to 326 IAC 6-2-4, the particulate from the natural gas-fired boiler, identified as I139, shall not exceed 0.6 lb/MMBtu.

#### **SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS**

#### **Emissions Unit Description:**

- (b) Woodworking equipment controlled by a baghouse that does not exhaust to the atmosphere greater than 125,000 cubic feet per minute:
  - (1) Various woodworking operations consisting of saws, sanders, moulders and booring machines, with a maximum capacity of 1725 pounds of doors per hour, with particulate emissions controlled by a dust collector identified as DC-I163.
- (c) Woodworking equipment controlled by a baghouse that does not exhaust to the atmosphere greater than 40,000 cubic feet per minute:
  - (1) Woodworking operations consisting of planers, sanders and saws, with a maximum capacity of 1725 pounds of doors per hour, with particulate emission controlled by a dust collector identified as U-DC108.

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

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

#### D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate from the woodworking operations controlled by DC-I163 and U-DC108 shall not exceed 3.71 pounds per hour, each, when operating at a process weight rate of 0.86 tons per hour, each. The pound per hour limitation was calculated with the following equation:

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

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

#### D.3.2 PSD Minor Limit [326 IAC 2-2]

The PM, PM10 and PM2.5 emissions from the woodworking operation controlled U-DC108 shall not exceed 3.71 pounds per hour, each.

Compliance with the above limits, combined with the potential to emit PM, PM10 and PM2.5 from all other emission units at the source, shall limit the PM, PM10 and PM2.5 emissions from the entire source to less than 250 tons per twelve (12) consecutive month period, respectively, and render 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

#### D.3.3 Preventive Maintenance Plan

A Preventive Maintenance Plan is required for these facilities 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.

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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

#### **Compliance Determination Requirements**

#### D.3.4 Particulate Control

- (a) In order to comply with Condition D.3.1 and D.3.2, the baghouses for particulate control shall be in operation and control emissions from the woodworking facilities at all times the woodworking facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

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

#### D.3.5 Visible Emission Notations

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

#### D.3.6 Baghouse Inspections

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

#### D.3.7 Broken or Failed Bag Detection

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

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Permit Reviewer: Anne-Marie C. Hart

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

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

#### D.3.8 Record Keeping Requirements

- (a) To document the compliance status with Condition D.3.5, the Permittee shall maintain daily records of the visible emission notations of the woodworking facilities' stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (e.g., the process did not operate that day).
- (b) To document the compliance status with Condition D.3.6, the Permittee shall maintain records of the results of the inspections required under Condition D.3.6.
- (c) Section C General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

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

### FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Ideal Doors

Source Address: 890 Central Court, New Albany, Indiana 47150

FESOP Permit No.: F043-28705-00062

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:

Ideal Doors Page 33 of 45 New Albany, Indiana F043-28705-00062

Permit Reviewer: Anne-Marie C. Hart

## 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: Ideal Doors

Source Address: 890 Central Court, New Albany, Indiana 47150

FESOP Permit No.: F043-28705-00062

#### 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

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 Describe:	N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>X</sub> , 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 imminent injury to persons, severe damage to equipment, substantial loss of ca of product or raw materials of substantial economic value:	
Form Completed by:	_
Title / Position:	
Date:	<del>-</del> -
Phone:	_

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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

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

#### **FESOP Quarterly Report**

Source Name: Source Address: FESOP Permit No.: Facility: Parameter: Limit:	F043-28705-00062 Spray booths U-SBI VOC input The total input of VC cleaning solvents to U-SB70 shall be les compliance determin		
	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ D D Subr Title	mitted by: / Position: ature:	•	

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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

> Date: Phone:

	FESC	OP Quarterly Report	
Source Name: Source Address: FESOP Permit No.: Facility: Parameter: Limit:	surce Address: 890 Central Court, New Albany, Indiana 47150 SOP Permit No.: F043-28705-00062 cility: Spray booth U-SBI137 vrameter: VOC input		
	YEAR:_		
Marrie	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ No deviation occurred in this quarter. □ Deviation/s occurred in this quarter. □ Deviation has been reported on: □ Submitted by: □ Title / Position: □ Signature:			

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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

> Date: Phone:

	FES	OP Quarterly Report	
Source Name: Source Address: FESOP Permit No.: Facility: Parameter: Limit:	F043-28705-00062 Spray booth U-RP4 VOC input The total input of VC cleaning solvents to	New Albany, Indiana 47150 8 DC, including coatings, dilution the spray booth U-RP48 shall tive month period, with compli	be less than 22 tons per
	YEAR:_		
March	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ De De Subn Title	nitted by:	·	

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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

Phone:

	FES	OP Quarterly Report	
Source Name: Source Address: FESOP Permit No.: Facility: Parameter: Limit:	F043-28705-00062 Spray booth U-SB68 VOC input The total input of VC cleaning solvents to	New Albany, Indiana 47150  3  OC, including coatings, dilution the spray booth U-SB68 shall tive month period, with complis	be less than 22 tons per
	YEAR:_		
M	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

Phone:

	FES	OP Quarterly Report	
Source Name: Source Address: FESOP Permit No.: Facility: Parameter: Limit:	F043-28705-00062 Spray booth U-RP69 VOC input The total input of VC cleaning solvents to	New Albany, Indiana 47150  OC, including coatings, dilution the spray booth U-RP69 shall tive month period, with compli	be less than 22 tons per
	YEAR:_		
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Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
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Phone:

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

## OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH

	FESC	OP Quarterly Report	
Source Name: Source Address: FESOP Permit No.: Facility: Parameter: Limit:	F043-28705-00062 Spray booth U-RP70 VOC input The total input of VC cleaning solvents to	New Albany, Indiana 47150  OC, including coatings, dilution the spray booth U-RP70 shall tive month period, with complia	be less than 22 tons per
	YEAR:_		
	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ D D Subn Title	nitted by: / Position: ature:	·	

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Ideal Doors New Albany, Indiana Permit Reviewer: Anne-Marie C. Hart

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

#### **FESOP Quarterly Report**

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Source Name: Source Address: FESOP Permit No.: Facility: Parameter: Limit:	F043-28705-00062 Spray booths U-SBI Individual HAP input The total input of an RP48, U-SB69, and consecutive month p	y single HAP to the spray boo U-SB70 shall be less than 7 t	ths U-SBI137, U-SB68, U-
	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ D D Subr Title	nitted by: / Position: ature:	·	

> Date: Phone:

FESOP Quarterly Report			
Source Name: Source Address: FESOP Permit No.: Facility: Parameter: Limit:	Ideal Doors 890 Central Court, New Albany, Indiana 47150 5.: F043-28705-00062 Spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 Combination of HAP input The total input of combined HAPs to the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be less than 20 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.		
	YEAR:_		
	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			
□ No deviation occurred in this quarter. □ Deviation/s occurred in this quarter. □ Deviation has been reported on: □ Submitted by: □ Title / Position: □ Signature:			

## 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: Source Address: FESOP Permit No.:	ource Address: 890 Central Court, New Albany, Indiana 47150			
Мог	nths:	to	Year:	 Page 1 of 2
requirements of this presponse steps taken requirement that exist the applicable require	permit, the date(so in must be reported ts independent of tement and does in the date of the date of the date of the date of t	s) of each devi ed. A deviation of the permit, s not need to be	required to be reported hall be reported according	e of the deviation, and the pursuant to an applicable ng to the schedule stated in Additional pages may be
□ NO DEVIATIONS	OCCURRED TH	IIS REPORTII	NG PERIOD.	
☐ THE FOLLOWING	DEVIATIONS (	OCCURRED T	HIS REPORTING PERI	OD
Permit Requirement	t (specify permit	condition #)		
Date of Deviation:			<b>Duration of Deviation</b>	:
Number of Deviation	ns:			
Probable Cause of D	Deviation:			
Response Steps Tal	ken:			
Permit Requirement	t (specify permit	condition #)		
Date of Deviation:			Duration of Deviation	:
Number of Deviation	ns:			
Probable Cause of D	Deviation:			
Response Steps Tal	ken:			

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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:				

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Permit Reviewer: Anne-Marie C. Hart

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

(typed or printed)

Ideal Doors 890 Central Court New Albany, Indiana 47150

	Affidavit of Construction
I,	, being duly sworn upon my oath, depose and say:
(Na	, being duly sworn upon my oath, depose and say: me of the Authorized Representative)
1.	I live in County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2.	I hold the position of for (Company Name)
3.	By virtue of my position with, I have personal (Company Name) knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of  (Company Name)
4.	I hereby certify that Ideal Doors 890 Central Court, New Albany, Indiana 47150, completed construction of the architectural wood doors manufacturing operation on
Further Affia	nt said not.
I affirm unde and belief.	r penalties of perjury that the representations contained in this affidavit are true, to the best of my information  Signature
	Date
STATE OF I	NDIANA) )SS
COUNTY O	)
Su	oscribed and sworn to me, a notary public in and for County and State of Indiana
on this	day of My Commission expires:
	Signature

Name

## Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a New Source Construction and Federally Enforceable State Operating Permit (FESOP)

#### **Source Background and Description**

Source Name: Ideal Doors

Source Location: 890 Central Court, New Albany, Indiana 47150

County: Floyd SIC Code: 2431

Operation Permit No.: F 043-28705-00062 Permit Reviewer: Anne-Marie C. Hart

On April 21, 2010, the Office of Air Quality (OAQ) had a notice published in the New Albany Tribune, New Albany, Indiana, stating that Ideal Doors had applied for a New Source Construction and FESOP to construct and operate new emission units and continue operating emission units at an existing stationary architectural wood doors manufacturing operation. The notice also stated that the OAQ proposed to issue a New Source Construction and FESOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

#### **Comments and Responses**

No comments were received during the public notice period.

#### **Additional Changes**

IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as strikeouts and new language **bolded**.

- (a) IDEM, OAQ has decided to clarify Section B Certification to be consistent with the rule.
- B.10 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:
    - (i) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), and
    - (ii) the certification is **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) IDEM, OAQ has decided to remove all references to the source mailing address. IDEM, OAQ will continue to maintain records of the mailing address.

Mailing Address: P.O. Box 490, Holstein, Iowa 51025

#### **IDEM Contact**

- (a) Questions regarding this proposed New Source Construction and FESOP can be directed to Anne-Marie C. Hart at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5174 or toll free at 1-800-451-6027 extension 4-5174.
- (b) A copy of the permit is available on the Internet at: <a href="http://www.in.gov/ai/appfiles/idem-caats/">http://www.in.gov/ai/appfiles/idem-caats/</a>
- (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: <a href="https://www.idem.in.gov">www.idem.in.gov</a>

## Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Federally Enforceable State Operating Permit (FESOP)

#### **Source Description and Location**

Source Name: Ideal Doors

Source Location: 890 Central Court, New Albany, Indiana 47150

County: Floyd SIC Code: 2431

Operation Permit No.: F 043-28705-00062 Permit Reviewer: Anne-Marie C. Hart

On December 2, 2009, the Office of Air Quality (OAQ) received an application from Ideal Doors related to the construction and operation of new emission units and the continued operation of an existing stationary architectural wood doors manufacturing operation.

#### **Existing Approvals**

There have been no previous approvals issued to this source.

#### **County Attainment Status**

The source is located in Floyd County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective July 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.

<sup>&</sup>lt;sup>1</sup>Attainment effective October 23, 2001, for the 1-hour ozone standard for the Louisville area, including Floyd County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standard (NAAQS) for purposes of 40 CFR Part 51, Subpart X\*. The 1-hour standard was revoked effective June 15, 2005.

Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

#### (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. Floyd County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

#### (b) PM2.5

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Floyd County as nonattainment for PM2.5. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a law suit with the Court of Appeals for the District of Columbia Circuit

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New Albany, Indiana TSD for FESOP No. F043-28705-00062

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challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM2.5 promulgated on May 8, 2008, and effective on July 15, 2008. Therefore, direct PM2.5 and SO2 emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

Floyd County has been classified as attainment or unclassifiable in Indiana for othe regulated 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 New Source Construction**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Ideal Doors on December 2, 2009, relating to construction and operation of new equipment at an existing, previously unpermitted architectural wooden door manufacturer.

The source consists of the following existing, previously unpermitted emission units:

- (a) Insignificant activities consisting of the following:
  - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
    - (A) One (1) warehouse heater, identified as I140, installed in 2000, with a rated heat capacity of 4 MMBtu per hour.
    - (B) One (1) S&R heater, identified as I141, installed in 1986, with a rated heat capacity of 0.4 MMBtu per hour.
    - (C) Three (3) make-up heaters, identified as I142 through I144, installed in 1986, with a rated heat capacity of 1.60 MMBtu per hour, each.
    - (D) Two (2) office heaters, identified as I145 and I146, installed in 1986, with a rated heat capacity of 0.12 MMBtu per hour, each.
    - (E) One (1) upstairs office heater, identified as I147, installed in 1986, with a rated heat capacity of 0.05 MMBtu per hour.
    - (F) Six (6) hanging heaters, identified as I148 through I153, installed n 1986, with a rated heat capacity of 0.06 MMBtu per hour, each.
    - (G) Two (2) hanging heaters, identified as I154 and I155, installed in 1986, with a rated heat capacity of 0.2 MMBtu per hour, each.
    - (H) One (1) hanging heater, identified as I156, installed in 1986, with a rated heat capacity of 0.1 MMBtu per hour.

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(2) Woodworking equipment controlled by a baghouse that does not exhaust to the atmosphere greater than 125,000 cubic feet per minute:

- (A) Various woodworking operations consisting of saws, sanders, moulders and booring machines, with a maximum capacity of 1725 pounds of doors per hour, with particulate emissions controlled by a dust collector identified as DC-I163.
- (3) Woodworking equipment controlled by a baghouse that does not exhaust to the atmosphere greater than 40,000 cubic feet per minute:
  - (A) Woodworking operations consisting of planers, sanders and saws, with a maximum capacity of 1725 pounds of doors per hour, with particulate emission controlled by a dust collector identified as U-DC108.
- (4) Adhesive applicator equipment with potential VOC emissions less than five (5) tons per year:
  - (A) One (1) in house glue booth, identified as I161, installed in 1988, using a maximum usage rate of 0.15 gallons of adhesive per day.
  - (B) One (1) suat gluer, identified as I164, installed in 1988, using a maximum usage rate of 2 pounds of adhesive pellets per day.
  - (C) One (1) Rosenquist Gluer, identified as I27, installed in 2002, with a maximum usage rate of 8 gallons of adhesive per day.
  - (D) One (1) RFS Gluer, identified as I28, installed in 1996, with a maximum usage rate of 8 gallons of adhesive per day.
  - (E) One (1) Hot Press, identified as I31, installed in 1992, with a maximum usage rate of 30 gallons of adhesive per day.
  - (F) One (1) 56" Glue Station, identified as I32, installed in 1991, with a maximum usage rate of 30 gallons of adhesive per day.
  - (G) One (1) 62" Glue Station, identified as I33, installed in 1988, with a maximum usage rate of 30 gallons of adhesive per day.
  - (H) One (1) Hot Press, identified as I34, installed in 2003, with a maximum usage rate of 30 gallons of adhesive per day.

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

- (a) One (1) open front spray booth, identified as U-SBI137, approved for construction in 2010, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, equipped with a High Volume Low Pressure (HVLP) spray application, and exhausting to stack S-SBI137. This unit will replace the spray booth identified as U-SB68, that is currently unpermitted.
- (b) One (1) enclosed automatic spray booth, identified as U-RP48, approved for construction in 2010, with a maximum production rate of 225 doors per hour, using dry filters as particulate control, equipped with an air atomization application system, and exhausting to stack S-RP48.
- (c) One (1) drying tunnel, identified as U-RP49, heated by the natural gas-fired boiler I139, associated with spray booth U-RP48, approved for construction in 2010, with a maximum drying rate of 225 doors per hour.

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(d) Insignificant activities consisting of the following:

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- (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
  - (A) One (1) boiler, identified as I139, installed in 2010, with a rated heat capacity of 1.814 MMBtu per hour.
  - (B) One (1) make-up heater, identified as I157, installed in 2010, with a rated heat capacity of 9.765 MMBtu per hour.
  - (C) One (1) heater, identified as I158, installed in 2010, with a rated heat capacity of 2.2 MMBtu per hour.
- (2) Adhesive applicator equipment with potential VOC emissions less than five (5) tons per year:
  - (A) One (1) Edge Gluing Machine, identified as RP25, installed in 2010, with a maximum usage rate of 5 gallons of adhesive per day.
  - (B) One (1) Door Press, identified as RP27, installed in 2010, with a maximum usage rate of 5 gallons of adhesive per day.
  - (C) One (1) Veneer Face Hot Press, identified as RP17, approved for construction in 2010, with a maximum usage rate of 20 gallons of adhesive per day.
  - (D) One (1) Glue Spreader, identified as RP 24, approved for construction in 2010, with a maximum usage rate of 20 gallons of adhesive per day.
  - (E) One (1) Door Clamp, identified as RP26, approved for construction in 2010, with a maximum usage rate of 20 gallons of adhesive per day.
  - (F) One (1) Glue Spreader, identified as RP28, approved for construction in 2010, with a maximum usage rate of 20 gallons of adhesive per day.
  - (G) One (1) Bladder Press, identified as RP20, approved for construction in 2010, with a maximum usage rate of 20 gallons of adhesive per day.

#### Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted emission units:

- (a) One (1) open front spray booth, identified as U-SB68, constructed after January 1, 1990, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control and equipped with a HVLP application system. This unit will be eliminated and replaced by U-SBI137 in 2010.
- (b) One (1) open front spray booth, identified as U-SB69, constructed after February 1, 2002, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, equipped with a HVLP application system, and exhausting to stack S-SBI69.
- (c) One (1) open front spray booth, identified as U-SB70, constructed after January 1, 1986, with a maximum production rate of 15 wooden doors per hour, using dry filters as particulate control, a

HVLP application system, and exhausting to stack S-SBI70.

#### **Enforcement Issues**

IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

#### **Emission Calculations**

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

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 before 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	238.72
PM10 <sup>(1)</sup>	239.32
PM2.5	239.32
SO <sub>2</sub>	0.06
NO <sub>x</sub>	10.57
VOC	468.64
СО	8.88

<sup>(1)</sup> 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)
Benzene	Negligible
Cadmium	Negligible
Chromium	4.92
Cobalt	0.12
Dichlorobenzene	Negligible
Ethyl Benzene	5.44
Formaldehyde	2.61
Hexane	0.19
Lead	Negligible
Manganese	4.44
Nickel	Negligible
Toluene	2.20
Vinyl Acetate	0.37
Xylene	40.44
TOTAL HAPs	60.39

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of VOC, PM10 and PM2.5 is greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are 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 New Source Construction Permit (326 IAC 2-5.1-3) and 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 New Source Construction Permit (326 IAC 2-5.1-3) and a FESOP (326 IAC 2-8), because the source will limit emissions of HAPs to less than the Title V major source threshold levels.

#### 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.

	Pote	ntial To E	mit of the	Entire S	Source A	After Issu	iance o	f FESOP	(tons/year)
Process/ Emission Unit	PM	PM10	PM2.5	SO <sub>2</sub>	NOx	VOC	СО	Total HAPs	Worst Single HAP
Spray Booth U- SBI137									
Spray Booth U-SB68									
Spray Booth U-RP48	11.75**	11.75**	11.75**	0.00	0.00	<90	0.00	<20	<7 (Xylene)
Spray Booth U-SB69									
Spray Booth U-SB70									
Adhesive Application Operations	0.00	0.00	0.00	0.00	0.00	1.46	0.00	2.61	2.61 (Formaldehyde)
Woodworking Operations	3.52	3.52	3.52	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Combustion	0.20	0.80	0.80	0.06	10.57	0.58	8.88	0.20	0.19 (Hexane)
Total PTE of Entire Source	15.47	15.47	15.47	0.06	10.57	<100	8.88	<25	<10 (Xylene)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	NA	250	250	250	250	NA	NA
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	100	NA	NA	NA	NA	NA	NA

negl. = negligible

#### (a) FESOP Status

This 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 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. IDEM has determined that PM/PM10/PM2.5 limits for the spray booths are not necessary to ensure that the PM/PM10/PM2.5 emissions are below the major source threshold levels under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70 Permits), since the permit requires that the spray booths shall be controlled by dry particulate filters and the dry particulate filters shall be operated in accordance with manufacturer's specifications. 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).

<sup>\*</sup> 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".

<sup>\*\*</sup>PTE after control with dry filters (spray booths are required to be controlled pursuant to 326 IAC 6-3-2(d))

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

- (1) The total input of VOC, including coatings, dilution solvents, catalysts and cleaning solvents to the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be less than 90 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (2) The total input of any single HAP to the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be less than 7 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (3) The total input of combined HAPs to the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be less than 20 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 VOC and HAPs 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, 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), 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), and 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP) not applicable.

#### (b) PSD Minor Source

This existing source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit VOC, PM, PM10 and PM2.5 is limited to less than 250 tons per year and the potential to emit all other attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

In order to comply with the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the source shall comply with the following:

- (1) The PM/PM10/PM2.5 from the woodworking operation controlled by U-DC108 shall not exceed 3.71 pounds per hour.
- (c) Nonattainment New Source Review Minor Source

This existing source is not a major stationary source, under 326 IAC 2-1.1-5 (Nonattainment New Source Review), because the potential to emit particulate matter with a diameter less than ten 2.5 micrometers (PM2.5), is less than 100 tons per year. Therefore, pursuant to 326 IAC 2-1.1-5, the Nonattainment New Source Review requirements do not apply.

#### **Federal Rule Applicability Determination**

#### New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc (326 IAC 12), are not included in the permit, since all the boilers at the source have a rated heat capacity less than 10 MMBtu per hour.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

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#### National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ (326 IAC 20-14), are not included in the permit since the source is not a major source of HAPs.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Plywood and Composite Wood Products, 40 CFR 63, Subpart DDDD, are not included in the permit since the source is not a major source of HAPs.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Wood Building Products, 40 CFR 63, Subpart QQQQ, are not included in the permit since the source is not a major source of HAPs.
- (f) 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)

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

#### **State Rule Applicability Determination**

The following state rules are applicable to the 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 2-1.1-5 (Nonattainment New Source Review) Nonattainment New Source Review applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
  The unlimited potential to emit of HAPs from the new and existing 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 existing 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.
- (e) 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.
- (f) 326 IAC 5-1 (Opacity Limitations)

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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.
- (g) 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.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations) The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year.

#### **Surface Coating**

(i) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The unlimited VOC potential emissions from the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 are greater than twenty-five (25) tons per year, each. However, the source shall limit the VOC potential emissions from each the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 to less than twenty-five (25) tons per year, each. Therefore, the requirements of 326 IAC 8-1-6 do not apply.

In order to render the requirements of 326 IAC 8-1-6 not applicable, each of the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be limited as follows:

(1) The input of VOC, including coatings, dilution solvents, catalysts and cleaning solventsfor each of the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 shall be less than 22 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limits shall limit the potential to emit VOC from each of the spray booths U-SBI137, U-SB68, U-RP48, U-SB69, and U-SB70 to less than twenty-five (25) tons per 12 consecutive month period and shall render the requirements of 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) not applicable.

- (j) 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)
  The source does not engage in the surface coating of wood furnishings as defined in the rule.
  Therefore, the requirements of 326 IAC 8-2-12 do not apply.
- (k) 326 IAC 8-7 (Specific VOC Reduction Requirements for Lake/Porter/Clark/Floyd Counties) The source will limit potential emissions of VOC to less than 100 tons per year. Therefore, the requirements of 326 IAC 8-7 do not apply.
- (I) 326 IAC 8-22 (Miscellaneous Industrial Adhesives)
   This source is located in Floyd County. Therefore, the requirements of 326 IAC 8-22 do not apply.
- (m) There are no other 326 IAC 8 Rules that are applicable to the surface coating operations.

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(n) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) Pursuant to 326 IAC 6-3-2(d), the spray booths shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, operated in accordance with manufacturer's specifications.

#### Woodworking Operation

(o) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate from the woodworking operations controlled by DC-I163 and U-DC108 shall not exceed 3.71 pounds per hour, each, when operating at a process weight rate of 0.86 tons per hour, each. The pound per hour limitation was calculated with the following equation:

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

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

The dust collectors DC-I163 and U-DC108 shall be in operation at all times the woodworking operations are in operation, in order to comply with this limit.

#### Natural Gas-Fired Boiler

(p) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)
The maximum operating capacity rating of the natural gas-fired boiler identified as I139 is less than 10 MMBtu/hour. Pursuant to 326 IAC 6-2-4, the particulate from the natural gas-fired boiler, identified as I139, shall not exceed 0.6 lb/MMBtu.

Boiler I139 has the potential to emit 0.0016 lb/MMBtu. Therefore, Boiler I139 is able to comply with this limit.

- (q) 326 IAC 12 (New Source Performance Standards)
   See Federal Rule Applicability Section of this TSD.
- (r) 326 IAC 20 (Hazardous Air Pollutants) See Federal Rule Applicability Section of this TSD.

#### **Compliance Determination, Monitoring and Testing Requirements**

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

<b>Emission Unit/Control</b>	Operating Parameters	Frequency
	Inspection of placement, integrity and particle loading	Daily
Surface Coating Operations	Overspray observation	Weekly
(U-SBI137, U-SB68, U- RP48, U-SB69, U-SB70)/Dry Filters	Coating emissions from the stacks (S-SBI137, S-RP48, S-SB68, S-SBI69, S-SBI70) and the presence of overspray on the rooftops and the nearby ground	Monthly
Woodworking Operations/Dust Collectors	Visible Emission Notations	Daily
DC-I163 and U-DC108	Baghouse Inspections	Quarterly

These monitoring conditions are necessary because the dry filters for the spray booths and the dust collectors for the woodworking operations must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), 326 IAC 2-8 (Federally Enforceable State Operating Permit Program (FESOP)) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

(b) The testing requirements applicable to this source are as follows:

There are no testing requirements applicable to this source.

#### **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 December 2, 2009.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and FESOP No. F043-28705-00062. The staff recommends to the Commissioner that this New Source Construction and FESOP be approved.

#### **IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Anne-Marie C. Hart at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5174 or toll free at 1-800-451-6027 extension 4-5174.
- (b) A copy of the findings is available on the Internet at: <a href="http://www.in.gov/ai/appfiles/idem-caats/">http://www.in.gov/ai/appfiles/idem-caats/</a>
- (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: <a href="https://www.idem.in.gov">www.idem.in.gov</a>

### Appendix A: Emissions Calculations Emissions Summary

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062
Reviewer: Anne-Marie C. Hart
Date: December 7, 2009

#### **Uncontrolled Potential Emissions (tons/year)**

	Surface Coating Operations**	Adhesive Application	Natural Gas Combustion	Woodworking Operations*	Total
PM	235.00	0.00	0.20	703.27	938.47
PM10	235.00	0.00	0.80	703.27	939.07
PM2.5	235.00	0.00	0.80	703.27	939.07
SO2	0.00	0.00	0.06	0.00	0.06
NOx	0.00	0.00	10.57	0.00	10.57
VOC	466.60	1.46	0.58	0.00	468.64
CO	0.00	0.00	8.88	0.00	8.88
Total HAPs	57.58	2.61	0.20	0.00	60.39
Worst-Case	40.44	2.61	0.19	0.00	40.44
Individual HAP	(Xylene)	(Formaldehyde)	(Hexane)		(Xylene)

Limited/Controlled Emissions (tons/year)

Limited/Controll	eu Ellissions (lons/year)				
	Surface Coating Operations**	Adhesive Application	Natural Gas Combustion	Woodworking Operations*	Total
PM	11.75	0.00	0.20	3.52	15.47
PM10	11.75	0.00	0.80	3.52	16.07
PM2.5	11.75	0.00	0.80	3.52	16.07
SO2	0.00	0.00	0.06	0.00	0.06
NOx	0.00	0.00	10.57	0.00	10.57
VOC	<90	1.46	0.58	0.00	<100
CO	0.00	0.00	8.88	0.00	8.88
Total HAPs	<20	2.61	0.20	0.00	<25
Worst-Case Individual HAP	<7 (Xylene)	2.61 (Formaldehyde)	0.19 (Hexane)	0.00	<7 (Xylene)

<sup>\*</sup>The dust collection systems associated with the woodworking operations are considered integral to the process for the purposes of permit level determination. Therefore, potential emissions will be considered after the use of the control devices for the purposes of determining permit level.

<sup>\*\*</sup>IDEM has determined that PM/PM10/PM2.5 limits for the spray booths are not necessary to ensure that the PM/PM10/PM2.5 emissions are below the major source threshold levels under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-7 (Part 70 Permits), since the permit contains VOC and HAP limits that limit the usage of the surface coating materials in the spray booths and the permit requires that the spray booths shall be controlled by dry particulate filters and the dry particulate filters shall be operated in accordance with manufacturer's specifications.

### Appendix A: Emissions Calculations Surface Coating Booth U-SBI137 VOC and Particulate Emissions

Company Name: Ideal Doors
Address City IN Zip: 890 Central Court New Albany, IN 47150
Permit Number: F043-28705-00062

Reviewer: Anne-Marie C. Hart

Coatings	8.99 8.65 8.35 8.82 8.70 8.59 9.13 7.56 7.67 13.15 9.77	Weight % Volatile (H20 & Organics)  73.00%  73.00%  80.00%  86.00%  69.00%  70.00%  31.40%  44.10%  57.60%  23.40%	Weight % Water 0.0% 0.0% 16.0% 0.0% 0.0% 0.0% 0.0% 0.0%	Weight % Organics  73.0% 80.0% 70.0% 69.0% 70.0% 80.0% 70.0%	Volume % Water 0.0% 0.0% 16.0% 0.0%	Volume % Non- Volatiles (solids) 17.00% 13.70% 9.30% 22.70%	Gal of Mat. (gal/unit)  0.12500 0.12500	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficience
Sherwin Williams	8.65 8.35 8.82 8.70 8.59 8.50 9.13 7.56 7.67 13.15 9.77	80.00% 86.00% 69.00% 70.00% 83.00% 70.00% 31.40% 44.10% 57.60%	0.0% 16.0% 0.0% 0.0% 3.0% 0.0% 0.3%	80.0% 70.0% 69.0% 70.0% 80.0%	0.0% 16.0% 0.0%	13.70% 9.30%	0.12500	15.000	icas water	coating			-	H		
Shewin Williams	8.65 8.35 8.82 8.70 8.59 8.50 9.13 7.56 7.67 13.15 9.77	80.00% 86.00% 69.00% 70.00% 83.00% 70.00% 31.40% 44.10% 57.60%	0.0% 16.0% 0.0% 0.0% 3.0% 0.0% 0.3%	80.0% 70.0% 69.0% 70.0% 80.0%	0.0% 16.0% 0.0%	13.70% 9.30%	0.12500	15.000								1
\$61E501 (Orange) \$61L505 (Blue) \$61N502 (Brown) \$61R503 (Red) \$61R506 (Bordeaux) \$61R506 (Bordeaux) \$61Y504 (Yellow) \$64N23 (Dark Fruitwood) \$64N23 (Dark Fruitwood) \$64N23 (Dark Sedw31 (Which \$64W31 (Which \$64W31 (Which \$64W31 (Which \$64W31 (Which \$64W31 (Pellow Oxide) \$64R33 (Red Oxide) \$64R35 (Deep Red) \$64R35 (Deep Red) \$64R37 (Burnt Ulmen)	8.65 8.35 8.82 8.70 8.59 8.50 9.13 7.56 7.67 13.15 9.77	80.00% 86.00% 69.00% 70.00% 83.00% 70.00% 31.40% 44.10% 57.60%	0.0% 16.0% 0.0% 0.0% 3.0% 0.0% 0.3%	80.0% 70.0% 69.0% 70.0% 80.0%	0.0% 16.0% 0.0%	13.70% 9.30%	0.12500	15.000								
\$61L505 (Blue) \$61N502 (Brown) \$61R503 (Red) \$61R503 (Red) \$61R506 (Bordeaux) \$61Y504 (Yellow) \$64N23 (Dark Fruitwood) \$64N23 (Dark Fruitwood) \$64N23 (Dark Fruitwood) \$64N23 (Black) \$64N23 (Black) \$64N21 (While) \$64N21 (While) \$64N32 (Yellow Oxide) \$64R35 (Deep Red) \$64R35 (Deep Red) \$64R37 (Burnt Sienna) \$64N37 (Burnt Sienna)	8.35 8.82 8.70 8.59 8.50 9.13 7.56 7.67 13.15 9.77 9.86	86.00% 69.00% 70.00% 83.00% 70.00% 31.40% 44.10% 57.60%	16.0% 0.0% 0.0% 3.0% 0.0% 0.3%	70.0% 69.0% 70.0% 80.0%	16.0% 0.0%	9.30%			6.56	6.56	12.31	295.32	53.90	4.98	38.60	75%
\$61N502 (Brown) \$61R503 (Red) \$61R503 (Red) \$61R506 (Bordeaux) \$61Y504 (Yellow) \$641Y504 (Yellow) \$644N23 (Dark Fruttwood) \$64728 (Clear) \$64803 (Black) \$64803 (Yellow Oxide) \$648733 (Red Oxide) \$648735 (Deep Red) \$648736 (Burnt Sienna) \$64873 (Burnt Jienna)	8.82 8.70 8.59 8.50 9.13 7.56 7.67 13.15 9.77 9.86	69.00% 70.00% 83.00% 70.00% 31.40% 44.10% 57.60%	0.0% 0.0% 3.0% 0.0% 0.3%	69.0% 70.0% 80.0%	0.0%		0.42500	15.000	6.92	6.92	12.98	311.40	4.38	3.55	50.51	75%
S61R503 (Red) S61R506 (Bordeaux) S61R506 (Bordeaux) S64R23 (Dark Fruitwood) S64R23 (Dark Fruitwood) S64R30 (Black) S64R33 (Black) S64R33 (Pellow Oxide) S64R33 (Red Oxide) S64R35 (Deep Red) S64R35 (Deep Red) S64R37 (Burnt Sienna)	8.70 8.59 8.50 9.13 7.56 7.67 13.15 9.77 9.86	70.00% 83.00% 70.00% 31.40% 44.10% 57.60%	0.0% 3.0% 0.0% 0.3%	70.0% 80.0%		22.70%	0.12500	15.000	6.96	5.85	10.96	263.03	48.00	2.40	62.85	75%
\$61R506 (Bordeaux) \$61Y504 (Yellov) \$64N23 (Dark Fruitwood) \$64N23 (Dark Fruitwood) \$64B30 (Black) \$64B30 (Black) \$64W31 (White) \$64R33 (Yellow Oxide) \$64R33 (Red Oxide) \$64R35 (Deop Red) \$64R35 (Burnt Sienna) \$64R37 (Burnt Umina)	8.59 8.50 9.13 7.56 7.67 13.15 9.77 9.86	83.00% 70.00% 31.40% 44.10% 57.60%	3.0% 0.0% 0.3%	80.0%	0.0%		0.12500	15.000	6.09	6.09	11.41	273.86	49.98	5.61	26.81	75%
S61Y504 (Yellow) S64N23 (Dark Fruitwood) S64N23 (Dark Fruitwood) S64N23 (Clear) S64N33 (Black) S64N33 (Pullow Oxide) S64N32 (Yellow Oxide) S64R33 (Red Oxide) S64R35 (Deep Red) S64R35 (Burnt Sienna) S64N37 (Burnt Umbar)	8.50 9.13 7.56 7.67 13.15 9.77 9.86	70.00% 31.40% 44.10% 57.60%	0.0% 0.3%			23.40%	0.12500	15.000	6.09	6.09	11.42	274.05	50.01	5.36	26.03	75%
S64N23 (Dark Fruitwood) S64T28 (Clear) S64B30 (Black) S64W31 (White) S64W32 (Yellow Oxide) S64R33 (Red Oxide) S64R35 (Deep Red) S64N36 (Burnt Sienna) S64N37 (Burnt Umber)	9.13 7.56 7.67 13.15 9.77 9.86	31.40% 44.10% 57.60%	0.3%	70.0%	3.0%	11.60%	0.12500	15.000	7.08	6.87	12.89	309.24	56.44	3.00	59.24	75%
S64T28 (Clear) S64B30 (Black) S64W31 (White) S64W32 (Yellow Oxide) S64R33 (Red Oxide) S64R35 (Deep Red) S64R35 (Deep Red) S64R37 (Burnt Umber)	7.56 7.67 13.15 9.77 9.86	44.10% 57.60%			0.0%	20.50%	0.12500	15.000	5.95	5.95	11.16	267.75	48.86	5.24	29.02	75%
S64B30 (Black) S64W31 (White) S64W32 (Yellow Oxide) S64R33 (Red Oxide) S64R35 (Deep Red) S64N36 (Burnt Sienna) S64N37 (Burnt Umber)	7.67 13.15 9.77 9.86	57.60%		31.1% 44.0%	0.3%	55.50%	0.12500	15.000	2.85	2.84	5.32	127.77	23.32	12.86	5.12 6.94	75%
S64W31 (White) S64W32 (Yellow Oxide) S64R33 (Red Oxide) S64R35 (Deep Red) S64N36 (Burnt Sienna) S64N37 (Burnt Umber)	13.15 9.77 9.86		0.4%	57.2%	0.1%	47.90% 32.80%	0.12500 0.12500	15.000 15.000	3.33 4.40	3.33 4.39	6.24 8.23	149.69 197.43	27.32 36.03	8.68 6.68	13.38	75% 75%
S64W32 (Yellow Oxide) S64R33 (Red Oxide) S64R35 (Deep Red) S64N36 (Burnt Sienna) S64N37 (Burnt Umber)	9.77 9.86		2.8%	20.6%	2.8%	54.80%	0.12500	15.000	2.79	2.71	5.08	121.90	22.25	20.68	4.94	75%
S64R33 (Red Oxide) S64R35 (Deep Red) S64N36 (Burnt Sienna) S64N37 (Burnt Umber)	9.86	42.60%	0.3%	42.3%	0.3%	36.90%	0.12500	15.000	4.15	4.13	7.75	185.97	33.94	11.51	11.20	75%
S64R35 (Deep Red) S64N36 (Burnt Sienna) S64N37 (Burnt Umber)		43.30%	0.4%	42.9%	0.4%	35.40%	0.12500	15.000	4.25	4.23	7.93	190.35	34.74	11.48	11.95	75%
S64N36 (Burnt Sienna) S64N37 (Burnt Umber)	7.10	78.50%	0.1%	78.4%	0.1%	14.30%	0.12500	15.000	5.57	5.57	10.44	250.49	45.71	3.13	38.93	75%
S64N37 (Burnt Umber)	9.66	40.90%	0.3%	40.6%	0.1%	40.40%	0.12500	15.000	3.93	3.92	7.35	176.49	32.21	11.72	9.71	75%
	9.65	42.50%	0.3%	42.2%	0.3%	37.80%	0.12500	15.000	4.08	4.07	7.64	183.25	33.44	11.39	10.77	75%
S64G38 (Green)	7.58	60.40%	0.4%	60.0%	0.4%	31.00%	0.12500	15.000	4.57	4.55	8.53	204.66	37.35	6.16	14.67	75%
S64L39 (Blue)	7.50	61.10%	0.4%	60.7%	0.4%	30.90%	0.12500	15.000	4.57	4.55	8.54	204.86	37.39	5.99	14.73	75%
S64R40 (Bright Red)	7.43	61.10%	0.4%	60.7%	0.4%	31.50%	0.12500	15.000	4.53	4.51	8.46	202.95	37.04	5.93	14.32	75%
S64Y41 (Bright Yellow)	7.58	59.10%	0.4%	58.7%	0.4%	32.60%	0.12500	15.000	4.47	4.45	8.34	200.23	36.54	6.37	13.65	75%
S64N42 (Raw Umber)	9.36	43.60%	0.3%	43.3%	0.3%	38.30%	0.12500	15.000	4.07	4.05	7.60	182.38	33.28	10.84	10.58	75%
S64N44 (Gilsonite)	7.10	60.00%	0.0%	60.0%	0.0%	33.00%	0.12500	15.000	4.26	4.26	7.99	191.70	34.99	5.83	12.91	75%
S64N45 (Van Dyke)	7.91	46.50%	0.2%	46.3%	0.2%	42.50%	0.12500	15.000	3.67	3.66	6.87	164.80	30.08	8.69	8.62	75%
S64Y46 (Raw Sienna)	9.47	41.70%	0.3%	41.4%	0.3%	40.40%	0.12500	15.000	3.93	3.92	7.35	176.43	32.20	11.34	9.70	75%
Mohawk	0.00	07.770/	70.00/	07.00/	70.00/	0.000/	0.40500	45.000	6.41	4.00	0.00	00.40	15.78	0.00	00.47	750/
Raw Umber	6.92	97.77%	70.0%	27.8%	70.0%	2.23%	0.12500	15.000		1.92	3.60	86.48		0.32	86.17	75%
Mustard Walnut Medium Brown	6.80 6.84	98.93%	70.0% 70.0%	28.9% 28.7%	70.0% 70.0%	0.81%	0.12500	15.000 15.000	6.56 6.54	1.97 1.96	3.69 3.68	88.53 88.34	16.16 16.12	0.15 0.18	242.87 248.49	75% 75%
Walnut Medium Brown Walnut Extra Dark	6.85	98.70% 98.77%	70.0%	28.8%	70.0%	0.79%	0.12500 0.12500	15.000	6.57	1.96	3.68	88.68	16.12	0.18	317.86	75%
Black	6.95	97.71%	70.0%	27.7%	70.0%	1.50%	0.12500	15.000	6.42	1.93	3.61	86.66	15.82	0.33	128.39	75%
Mahogany Dark Red	6.89	98.28%	70.0%	28.3%	70.0%	0.97%	0.12500	15.000	6.49	1.95	3.65	87.68	16.00	0.24	200.88	75%
Mahogany Brown	6.87	98.38%	70.0%	28.4%	70.0%	0.97%	0.12500	15.000	6.50	1.95	3.66	87.74	16.01	0.23	201.00	75%
Walnut Medium Dark	6.83	98.68%	70.0%	28.7%	70.0%	0.85%	0.12500	15.000	6.53	1.96	3.67	88.15	16.09	0.19	230.45	75%
Red	6.98	96.84%	70.0%	26.8%	70.0%	2.12%	0.12500	15.000	6.24	1.87	3.51	84.30	15.39	0.45	88.37	75%
Perfect Brown	6.87	98.26%	70.0%	28.3%	70.0%	1.06%	0.12500	15.000	6.47	1.94	3.64	87.37	15.94	0.25	183.16	75%
Cherry	6.81	99.30%	70.0%	29.3%	70.0%	0.38%	0.12500	15.000	6.65	2.00	3.74	89.79	16.39	0.10	525.09	75%
Blue	6.86	98.11%	70.0%	28.1%	70.0%	0.75%	0.12500	15.000	6.43	1.93	3.62	86.78	15.84	0.27	257.11	75%
Oak Light Golden	6.81	99.02%	70.0%	29.0%	70.0%	0.70%	0.12500	15.000	6.59	1.98	3.71	88.93	16.23	0.14	282.32	75%
Sienna Burnt	6.91	97.82%	70.0%	27.8%	70.0%	1.32%	0.12500	15.000	6.41	1.92	3.60	86.51	15.79	0.31	145.63	75%
Raw Sienna	6.78	99.22%	70.0%	29.2%	70.0%	0.55%	0.12500	15.000	6.60	1.98	3.71	89.15	16.27	0.11	360.20	75%
Burnt Umber	6.88	98.36%	70.0%	28.4%	70.0%	0.99%	0.12500	15.000	6.50	1.95	3.66	87.80	16.02	0.23	197.09	75%
Brown Van Dyke	6.88	97.86%	70.0%	27.9%	70.0%	1.30%	0.12500	15.000	6.39	1.92	3.59	86.25	15.74	0.30	147.44	75%
Mahogany Light Red	6.82	99.22%	70.0%	29.2%	70.0%	0.43%	0.12500	15.000	6.64	1.99	3.74	89.68	16.37	0.11	463.44	75%
Becker Bernyl Surfacer White	10.68	34.00%	0.0%	34.0%	0.0%	49.00%	0.12500	15.000	3.63	3.63	6.81	163.40	29.82	14.47	7.41	75%
Bernyl Surfacer White Bernyl Facett 15	10.68 7.87	34.00% 64.09%	0.0%	34.0% 64.1%	0.0%	49.00% 27.64%	0.12500 0.12500	15.000	3.63 5.04	3.63 5.04	6.81 9.46	163.40 226.97	29.82 41.42	14.47 5.80	7.41 18.25	75% 75%
Bernyl Facett LV 25 HAPs Free	7.87	68.84%	0.0%	68.8%	0.0%	23.85%	0.12500	15.000	5.04	5.04	10.05	241.32	41.42	5.80 4.98	18.25 22.48	75%
Solvents	1.15	00.0470	0.076	00.070	0.076	23.03/0	0.12300	13.000	5.50	5.50	10.05	241.32	44.04	4.30	22.40	1370
Rule 66 Mineral Spirits	6.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.10000	15.000	6.58	6.58	9.87	236.91	43.24	0.00	NA	75%
L-610 Blend	6.67	100.00%	0.0%	100.0%	0.0%	0.00%	0.03000	1.000	6.67	6.67	0.20	4.80	0.88	0.00	NA.	75%
Acetone	6.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.07000	1.000	6.58	6.58	0.46	11.05	2.02	0.00	NA NA	75%
Aqua Clean	8.23	99.00%	0.0%	99.0%	0.0%	1.00%	0.00600	1.000	8.15	8.15	0.05	1.17	0.21	0.00	NA	75%
Catalyst				1 1									i	i I		
	7.66	78.07%	0.0%	78.1%	0.0%	28.00%	0.10000	1.000	5.98	5.98	0.60	14.34	2.62	0.18	21.34	75%
Catalyst 6900	7.38	85.42%	0.0%	85.4%	0.0%	8.88%	0.10000	1.000	6.30	6.30	0.63	15.13	2.76	0.12	70.99	75%
Catalyst 494		·		1			1	1								1
Catalyst 494 Thinner							1									
Catalyst 494	7.13	100.00%	0.0%	100.0%	0.0%	0.00%	0.10000	1.000	7.13	7.13 Potential to Emit	0.71 24.90	17.11 <b>597.58</b>	3.12 108.66	0.00 <b>20.86</b>	NA	75%

Dry Filter Particulate Control Efficiency

95%

Controlled Particulate

1.04

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) \* (lb/gal) \* (1 - Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)
Total = Worst Coating + Worst-Case Solvent

#### Appendix A: Emissions Calculations Surface Coating Booth U-SBI137 HAP Emissions

Company Name: Ideal Doors Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### HAPs

HAPS															
Material	Density (Lb/Gal)	Gallons of Material	Maximum	Weight %	Weight %	Chromium Emissions	Cobalt Emissions	Xylene Emissions	Toluene Emissions	Manganese Emissions	Ethyl Benzene Emissions				
Coatings*		(gal/unit)	(unit/hour)	Chromium	Cobalt	Xylene	Toluene	Manganese	Ethyl Benzene	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
Sherwin Williams															
S61B500 (Black)	8.99	0.12500	15.000	0.80%	0.00%	0.00%	0.00%	0.00%		0.59	0.00	0.00	0.00	0.00	0.00
S61E501 (Orange)	8.65	0.12500	15.000	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.43	0.00	0.00	0.00	0.00	0.00
S61L505 (Blue)	8.35	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S61N502 (Brown)	8.82	0.12500	15.000	1.70%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23	0.00	0.00	0.00	0.00	0.00
S61R503 (Red)	8.70	0.12500	15.000	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71	0.00	0.00	0.00	0.00	0.00
S61R506 (Bordeaux)	8.59	0.12500	15.000	1.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.92	0.00	0.00	0.00	0.00	0.00
S61Y504 (Yellow)	8.50	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S64N23 (Dark Fruitwood)	9.13	0.12500	15.000	0.00%	0.03%	1.28%	0.00%	0.00%	0.00%	0.00	0.02	0.96	0.00	0.00	0.00
S64T28 (Clear)	7.56	0.12500	15.000	0.00%	0.04%	0.42%	0.00%	0.00%	0.00%	0.00	0.02	0.26	0.00	0.00	0.00
S64B30 (Black)	7.67	0.12500	15.000	0.00%	0.04%	1.72%	0.48%	0.00%	0.00%	0.00	0.03	1.08	0.30	0.00	0.00
S64W31 (White)	13.15	0.12500	15.000	0.00%	0.03%	0.28%	0.24%	0.00%	0.00%	0.00	0.03	0.30	0.26	0.00	0.00
S64W32 (Yellow Oxide)	9.77	0.12500	15.000	0.00%	0.03%	0.57%	0.39%	0.00%	0.00%	0.00	0.02	0.46	0.31	0.00	0.00
S64R33 (Red Oxide)	9.86	0.12500	15.000	0.00%	0.03%	0.49%	0.24%	0.00%	0.00%	0.00	0.02	0.40	0.19	0.00	0.00
S64R35 (Deep Red)	7.10	0.12500	15.000	0.00%	0.00%	1.02%	0.54%	0.00%	0.00%	0.00	0.00	0.59	0.31	0.00	0.00
S64N36 (Burnt Sienna)	9.66	0.12500	15.000	0.00%	0.03%	0.51%	0.33%	1.40%	0.00%	0.00	0.02	0.40	0.26	1.11	0.00
S64N37 (Burnt Umber)	9.65	0.12500	15.000	0.00%	0.00%	0.56%	0.39%	0.00%	0.00%	0.00	0.00	0.44	0.31	0.00	0.00
S64G38 (Green)	7.58	0.12500	15.000	0.00%	0.00%	1.78%	0.57%	0.00%	0.00%	0.00	0.00	1.11	0.35	0.00	0.00
S64L39 (Blue)	7.50	0.12500	15.000	0.00%	0.00%	1.80%	0.60%	0.00%	0.00%	0.00	0.00	1.11	0.37	0.00	0.00
S64R40 (Bright Red)	7.43	0.12500	15.000	0.00%	0.00%	1.76%	0.54%	0.00%	0.00%	0.00	0.00	1.07	0.33	0.00	0.00
S64Y41 (Bright Yellow)	7.58	0.12500	15.000	0.00%	0.00%	1.74%	0.54%	0.00%	0.00%	0.00	0.00	1.08	0.34	0.00	0.00
S64N42 (Raw Umber)	9.36	0.12500	15.000	0.00%	0.00%	0.51%	0.30%	0.00%	0.00%	0.00	0.00	0.39	0.23	0.00	0.00
S64N44 (Gilsonite)	7.10	0.12500	15.000	0.00%	0.00%	0.60%	0.00%	0.00%	0.00%	0.00	0.00	0.35	0.00	0.00	0.00
S64N45 (Van Dyke)	7.91	0.12500	15.000	0.00%	0.00%	0.45%	0.00%	0.00%	0.00%	0.00	0.00	0.29	0.00	0.00	0.00
S64Y46 (Raw Sienna)	9.47	0.12500	15.000	0.00%	0.00%	0.44%	0.33%	0.00%	0.00%	0.00	0.00	0.34	0.26	0.00	0.00
Becker															
Bernyl Surfacer White	10.68	0.12500	15.000	0.00%	0.00%	5.00%	0.00%	0.00%	1.00%	0.00	0.00	4.39	0.00	0.00	0.88
Bernyl Facett 15	7.87	0.12500	15.000	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00	0.00	6.46	0.00	0.00	0.00
Bernyl Facett LV 25 HAPs Free	7.79	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Solvents															
Rule 66 Mineral Spirits	6.58	0.10000	15.000	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00	0.00	0.43	0.00	0.00	0.00
L-610 Blend	6.67	0.03000	1.000	0.00%	0.00%	0.00%	21.00%	0.00%	0.00%	0.00	0.00	0.00	0.18	0.00	0.00
Acetone	6.58	0.07000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Aqua Clean	8.23	0.00600	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Catalyst															
Catalyst 6900	7.66	0.10000	1.000	0.00%	0.00%	40.00%	0.00%	0.00%	5.00%	0.00	0.00	1.34	0.00	0.00	0.17
Catalyst 494	7.38	0.10000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Thinner															
Thinner 219	7.13	0.10000	1.000	0.00%	0.00%	60.00%	0.00%	0.00%	10.00%	0.00	0.00	1.87	0.00	0.00	0.31
								Norst Case F	Potential to Emit	1.23	0.03	10.11	0.55	1.11	1.30

<sup>\*</sup>Mohawk coatings do not contain any HAPs.

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 lb: Total = Worst Coating + Worst-Case Solvent

14.40

#### Appendix A: Emissions Calculations Surface Coating Booth U-SB68 VOC and Particulate Emissions

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### **VOC and Particulate**

/OC and Particulate				,												
Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfe Efficien
Coatings																
Sherwin Williams																
S61B500 (Black)	8.99	73.00%	0.0%	73.0%	0.0%	17.00%	0.12500	15.000	6.56		0.00	0.00	0.00	4.98	38.60	75%
S61E501 (Orange)	8.65	80.00%	0.0%	80.0%	0.0%	13.70%	0.12500	15.000	6.92	6.92	12.98	311.40	56.83	3.55	50.51	75%
S61L505 (Blue)	8.35	86.00%	16.0%	70.0%	16.0%	9.30%	0.12500	15.000	6.96	5.85	10.96	263.03	48.00	2.40	62.85	75%
S61N502 (Brown)	8.82	69.00%	0.0%	69.0%	0.0%	22.70%	0.12500	15.000	6.09	6.09	11.41	273.86	49.98	5.61	26.81	75%
S61R503 (Red)	8.70	70.00%	0.0%	70.0%	0.0%	23.40%	0.12500	15.000	6.09	6.09	11.42	274.05	50.01	5.36	26.03	75%
S61R506 (Bordeaux)	8.59	83.00%	3.0%	80.0%	3.0%	11.60%	0.12500	15.000	7.08	6.87	12.89	309.24	56.44	3.00	59.24	75%
S61Y504 (Yellow)	8.50	70.00%	0.0%	70.0%	0.0%	20.50%	0.12500	15.000	5.95	5.95	11.16	267.75	48.86	5.24	29.02	75%
S64N23 (Dark Fruitwood)	9.13	31.40%	0.3%	31.1%	0.3%	55,50%	0.12500	15,000	2.85	2.84	5.32	127.77	23.32	12.86	5.12	75%
S64T28 (Clear)	7.56	44.10%	0.1%	44.0%	0.1%	47.90%	0.12500	15.000	3.33	3.33	6.24	149.69	27.32	8.68	6.94	75%
S64B30 (Black)	7.67	57.60%	0.4%	57.2%	0.4%	32.80%	0.12500	15.000	4.40	4.39	8.23	197.43	36.03	6.68	13.38	75%
S64W31 (White)	13.15	23.40%	2.8%	20.6%	2.8%	54.80%	0.12500	15,000	2.79	2.71	5.08	121.90	22.25	20.68	4.94	75%
S64W32 (Yellow Oxide)	9.77	42.60%	0.3%	42.3%	0.3%	36.90%	0.12500	15.000	4.15	4.13	7.75	185.97	33.94	11.51	11.20	75%
S64R33 (Red Oxide)	9.86	43.30%	0.4%	42.9%	0.4%	35.40%	0.12500	15.000	4.25	4.23	7.93	190.35	34.74	11.48	11.95	75%
S64R35 (Deep Red)	7.10	78.50%	0.1%	78.4%	0.1%	14.30%	0.12500	15.000	5.57	5.57	10.44	250.49	45.71	3.13	38.93	75%
S64N36 (Burnt Sienna)	9.66	40.90%	0.1%	40.6%	0.1%	40.40%	0.12500	15.000	3.93	3.92	7.35	176.49	32.21	11.72	9.71	75%
S64N37 (Burnt Umber)	9.65	42.50%	0.3%	42.2%	0.3%	37.80%	0.12500	15.000	4.08	4.07	7.64	183.25	33.44	11.39	10.77	75%
S64G38 (Green)	7.58	60.40%	0.3%	60.0%	0.3%	31.00%	0.12500	15.000	4.57	4.55	8.53	204.66	37.35	6.16	14.67	75%
S64L39 (Blue)	7.50	61.10%	0.4%	60.7%	0.4%	30.90%	0.12500	15.000	4.57	4.55	8.54	204.86	37.39	5.99	14.07	75%
S64R40 (Bright Red)	7.43	61.10%	0.4%	60.7%	0.4%	31.50%	0.12500	15.000	4.53	4.51	8.46	202.95	37.04	5.93	14.73	75%
S64Y41 (Bright Yellow)	7.43	59.10%	0.4%	58.7%	0.4%	32.60%	0.12500	15.000	4.55	4.45	8.34	202.95	36.54	6.37	13.65	75%
S64N42 (Raw Umber)	9.36	43.60%	0.4%	43.3%	0.4%	38.30%	0.12500	15.000	4.47	4.45	7.60	182.38	33.28	10.84	10.58	75%
S64N44 (Gilsonite)	7.10	60.00%	0.0%	60.0%	0.0%	33.00%	0.12500	15.000	4.26	4.26	7.99	191.70	34.99	5.83	12.91	75%
S64N45 (Van Dyke)	7.91	46.50%	0.2%	46.3%	0.2%	42.50%	0.12500	15.000	3.67	3.66	6.87	164.80	30.08	8.69	8.62	75%
S64Y46 (Raw Sienna)	9.47	41.70%	0.3%	41.4%	0.3%	40.40%	0.12500	15.000	3.93	3.92	7.35	176.43	32.20	11.34	9.70	75%
Mohawk																
Raw Umber	6.92	97.77%	70.0%	27.8%	70.0%	2.23%	0.12500	15.000	6.41	1.92	3.60	86.48	15.78	0.32	86.17	75%
Mustard	6.80	98.93%	70.0%	28.9%	70.0%	0.81%	0.12500	15.000	6.56	1.97	3.69	88.53	16.16	0.15	242.87	75%
Walnut Medium Brown	6.84	98.70%	70.0%	28.7%	70.0%	0.79%	0.12500	15.000	6.54	1.96	3.68	88.34	16.12	0.18	248.49	75%
Walnut Extra Dark	6.85	98.77%	70.0%	28.8%	70.0%	0.62%	0.12500	15.000	6.57	1.97	3.70	88.68	16.18	0.17	317.86	75%
Black	6.95	97.71%	70.0%	27.7%	70.0%	1.50%	0.12500	15.000	6.42	1.93	3.61	86.66	15.82	0.33	128.39	75%
Mahogany Dark Red	6.89	98.28%	70.0%	28.3%	70.0%	0.97%	0.12500	15.000	6.49	1.95	3.65	87.68	16.00	0.24	200.88	75%
Mahogany Brown	6.87	98.38%	70.0%	28.4%	70.0%	0.97%	0.12500	15.000	6.50	1.95	3.66	87.74	16.01	0.23	201.00	75%
Walnut Medium Dark	6.83	98.68%	70.0%	28.7%	70.0%	0.85%	0.12500	15.000	6.53	1.96	3.67	88.15	16.09	0.19	230.45	75%
Red	6.98	96.84%	70.0%	26.8%	70.0%	2.12%	0.12500	15.000	6.24	1.87	3.51	84.30	15.39	0.45	88.37	75%
Perfect Brown	6.87	98.26%	70.0%	28.3%	70.0%	1.06%	0.12500	15.000	6.47	1.94	3.64	87.37	15.94	0.25	183.16	75%
Cherry	6.81	99.30%	70.0%	29.3%	70.0%	0.38%	0.12500	15.000	6.65	2.00	3.74	89.79	16.39	0.10	525.09	75%
Blue	6.86	98.11%	70.0%	28.1%	70.0%	0.75%	0.12500	15,000	6.43	1.93	3.62	86.78	15.84	0.27	257.11	75%
Oak Light Golden	6.81	99.02%	70.0%	29.0%	70.0%	0.70%	0.12500	15.000	6.59	1.98	3.71	88.93	16.23	0.14	282.32	75%
Sienna Burnt	6.91	97.82%	70.0%	27.8%	70.0%	1.32%	0.12500	15.000	6.41	1.92	3.60	86.51	15.79	0.31	145.63	75%
Raw Sienna	6.78	99.22%	70.0%	29.2%	70.0%	0.55%	0.12500	15.000	6.60	1.98	3.71	89.15	16.27	0.11	360.20	75%
Burnt Umber	6.88	98.36%	70.0%	28.4%	70.0%	0.99%	0.12500	15.000	6.50	1.95	3.66	87.80	16.02	0.23	197.09	75%
Brown Van Dyke	6.88	97.86%	70.0%	27.9%	70.0%	1.30%	0.12500	15.000	6.39	1.92	3.59	86.25	15.74	0.30	147.44	75%
Mahogany Light Red	6.82	99.22%	70.0%	29.2%	70.0%	0.43%	0.12500	15.000	6.64	1.99	3.74	89.68	16.37	0.11	463.44	75%
Becker	0.02	33.2270	70.070	23.270	10.070	0.4070	0.12000	13.000	0.04	1.55	3.74	03.00	10.07	0.11	700.77	13/0
Bernyl Surfacer White	10.68	34.00%	0.0%	34.0%	0.0%	49.00%	0.12500	15.000	3.63	3.63	6.81	163.40	29.82	14.47	7.41	75%
Bernyl Facett 15	7.87	64.09%	0.0%	64.1%	0.0%	27.64%	0.12500	15.000	5.04	5.04	9.46	226.97	41.42	5.80	18.25	75%
Bernyl Facett LV 25 HAPs Free	7.79	68.84%	0.0%	68.8%	0.0%	23.85%	0.12500	15.000	5.04	5.04	10.05	241.32	41.42	4.98	22.48	75%
olvents	1.19	00.04%	0.0%	00.0%	U.U%	23.03%	0.12000	15.000	5.30	5.30	10.05	241.32	44.04	4.90	22.40	159
	6 50	100.00%	0.00/	100.0%	0.0%	0.00%	0.10000	15.000	6.58	6.58	9.87	236.91	43.24	0.00	NA	750
Rule 66 Mineral Spirits	6.58		0.0%													75%
L-610 Blend	6.67	100.00%	0.0%	100.0%	0.0%	0.00%	0.03000	1.000	6.67	6.67	0.20	4.80	0.88	0.00	NA	75%
Acetone	6.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.07000	1.000	6.58	6.58	0.46	11.05	2.02	0.00	NA	75%
Aqua Clean	8.23	99.00%	0.0%	99.0%	0.0%	1.00%	0.00600	1.000	8.15	8.15	0.05	1.17	0.21	0.00	NA	75%
atalyst																
Catalyst 6900	7.66	78.07%	0.0%	78.1%	0.0%	28.00%	0.10000	1.000	5.98	5.98	0.60	14.34	2.62	0.18	21.34	75%
Catalyst 494	7.38	85.42%	0.0%	85.4%	0.0%	8.88%	0.10000	1.000	6.30	6.30	0.63	15.13	2.76	0.12	70.99	75%
hinner																
TI : 040	7.13	100.00%	0.0%	100.0%	0.0%	0.00%	0.10000	4 000	7.13	7.13	0.71	47.44	3.12	0.00	NA	75%
Thinner 219 METHODOLOGY	7.13	100.0070	0.070	100.076	0.076	0.0078	0.10000	1.000	7.13	7.13	24.90	17.11 <b>597.58</b>	109.06	20.86	14/4	1370

Dry Filter Particulate Control Efficiency

Controlled Particulate

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)

Pounds or VoC per Califor Cotating = (Density (logal) \* Veright % Organics)

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

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

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

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs) Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Worst Solvent

#### Appendix A: Emissions Calculations Surface Coating Booth U-SB68 HAP Emissions

HAP Emissions

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### HAPs

HAPS		1	1	1	1	1			1	ı	ı	1	1		Ethyl
Material	Density (Lb/Gal)	Gallons of Material	Maximum	Weight %	Weight %	Chromium Emissions	Cobalt Emissions	Xylene Emissions	Toluene Emissions	Manganese Emissions	Benzene Emissions				
Coatings*		(gal/unit)	(unit/hour)	Chromium	Cobalt	Xylene	Toluene	Manganese	Ethyl Benzene	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
Sherwin Williams															
S61B500 (Black)	8.99	0.12500	15.000	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.59	0.00	0.00	0.00	0.00	0.00
S61E501 (Orange)	8.65	0.12500	15.000	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.43	0.00	0.00	0.00	0.00	0.00
S61L505 (Blue)	8.35	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S61N502 (Brown)	8.82	0.12500	15.000	1.70%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23	0.00	0.00	0.00	0.00	0.00
S61R503 (Red)	8.70	0.12500	15.000	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71	0.00	0.00	0.00	0.00	0.00
S61R506 (Bordeaux)	8.59	0.12500	15.000	1.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.92	0.00	0.00	0.00	0.00	0.00
S61Y504 (Yellow)	8.50	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S64N23 (Dark Fruitwood)	9.13	0.12500	15.000	0.00%	0.03%	1.28%	0.00%	0.00%	0.00%	0.00	0.02	0.96	0.00	0.00	0.00
S64T28 (Clear)	7.56	0.12500	15.000	0.00%	0.04%	0.42%	0.00%	0.00%	0.00%	0.00	0.02	0.26	0.00	0.00	0.00
S64B30 (Black)	7.67	0.12500	15.000	0.00%	0.04%	1.72%	0.48%	0.00%	0.00%	0.00	0.03	1.08	0.30	0.00	0.00
S64W31 (White)	13.15	0.12500	15.000	0.00%	0.03%	0.28%	0.24%	0.00%	0.00%	0.00	0.03	0.30	0.26	0.00	0.00
S64W32 (Yellow Oxide)	9.77	0.12500	15.000	0.00%	0.03%	0.57%	0.39%	0.00%	0.00%	0.00	0.02	0.46	0.31	0.00	0.00
S64R33 (Red Oxide)	9.86	0.12500	15.000	0.00%	0.03%	0.49%	0.24%	0.00%	0.00%	0.00	0.02	0.40	0.19	0.00	0.00
S64R35 (Deep Red)	7.10	0.12500	15.000	0.00%	0.00%	1.02%	0.54%	0.00%	0.00%	0.00	0.00	0.59	0.31	0.00	0.00
S64N36 (Burnt Sienna)	9.66	0.12500	15.000	0.00%	0.03%	0.51%	0.33%	1.40%	0.00%	0.00	0.02	0.40	0.26	1.11	0.00
S64N37 (Burnt Umber)	9.65	0.12500	15.000	0.00%	0.00%	0.56%	0.39%	0.00%	0.00%	0.00	0.00	0.44	0.31	0.00	0.00
S64G38 (Green)	7.58	0.12500	15.000	0.00%	0.00%	1.78%	0.57%	0.00%	0.00%	0.00	0.00	1.11	0.35	0.00	0.00
S64L39 (Blue)	7.50	0.12500	15.000	0.00%	0.00%	1.80%	0.60%	0.00%	0.00%	0.00	0.00	1.11	0.37	0.00	0.00
S64R40 (Bright Red)	7.43	0.12500	15.000	0.00%	0.00%	1.76%	0.54%	0.00%	0.00%	0.00	0.00	1.07	0.33	0.00	0.00
S64Y41 (Bright Yellow)	7.58	0.12500	15.000	0.00%	0.00%	1.74%	0.54%	0.00%	0.00%	0.00	0.00	1.08	0.34	0.00	0.00
S64N42 (Raw Umber)	9.36	0.12500	15.000	0.00%	0.00%	0.51%	0.30%	0.00%	0.00%	0.00	0.00	0.39	0.23	0.00	0.00
S64N44 (Gilsonite)	7.10	0.12500	15.000	0.00%	0.00%	0.60%	0.00%	0.00%	0.00%	0.00	0.00	0.35	0.00	0.00	0.00
S64N45 (Van Dyke)	7.91	0.12500	15.000	0.00%	0.00%	0.45%	0.00%	0.00%	0.00%	0.00	0.00	0.29	0.00	0.00	0.00
S64Y46 (Raw Sienna)	9.47	0.12500	15.000	0.00%	0.00%	0.44%	0.33%	0.00%	0.00%	0.00	0.00	0.34	0.26	0.00	0.00
Becker															
Bernyl Surfacer White	10.68	0.12500	15.000	0.00%	0.00%	5.00%	0.00%	0.00%	1.00%	0.00	0.00	4.39	0.00	0.00	0.88
Bernyl Facett 15	7.87	0.12500	15.000	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00	0.00	6.46	0.00	0.00	0.00
Bernyl Facett LV 25 HAPs Free	7.79	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Solvents															
Rule 66 Mineral Spirits	6.58	0.10000	15.000	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00	0.00	0.43	0.00	0.00	0.00
L-610 Blend	6.67	0.03000	1.000	0.00%	0.00%	0.00%	21.00%	0.00%	0.00%	0.00	0.00	0.00	0.18	0.00	0.00
Acetone	6.58	0.07000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Aqua Clean	8.23	0.00600	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Catalyst															
Catalyst 6900	7.66	0.10000	1.000	0.00%	0.00%	40.00%	0.00%	0.00%	5.00%	0.00	0.00	1.34	0.00	0.00	0.17
Catalyst 494	7.38	0.10000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Thinner															
Thinner 219	7.13	0.10000	1.000	0.00%	0.00%	60.00%	0.00%	0.00%	10.00%	0.00	0.00	1.87	0.00	0.00	0.31
							1	Vorst Case F	otential to Emit	1.23	0.03	10.11	0.55	1.11	1.36

\*Mohawk coatings do not contain any HAPs.

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 Total = Worst Coating + Sum of all solvents used

#### Appendix A: Emissions Calculations Surface Coating Booth U-SB69 VOC and Particulate Emissions

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### **VOC and Particulate**

VOC and Particulate															,	
Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Coatings										<i>u</i>						
Sherwin Williams																
S61B500 (Black)	8.99	73.00%	0.0%	73.0%	0.0%	17.00%	0.12500	15.000	6.56		0.00	0.00	0.00	4.98	38.60	75%
S61E501 (Orange)	8.65	80.00%	0.0%	80.0%	0.0%	13.70%	0.12500	15.000	6.92	6.92	12.98	311.40	56.83	3.55	50.51	75%
S61L505 (Blue)	8.35	86.00%	16.0%	70.0%	16.0%	9.30%	0.12500	15.000	6.96	5.85	10.96	263.03	48.00	2.40	62.85	75%
S61N502 (Brown)	8.82	69.00%	0.0%	69.0%	0.0%	22.70%	0.12500	15.000	6.09	6.09	11.41	273.86	49.98	5.61	26.81	75%
S61R503 (Red)	8.70	70.00%	0.0%	70.0%	0.0%	23.40%	0.12500	15.000	6.09	6.09	11.42	274.05	50.01	5.36	26.03	75%
S61R506 (Bordeaux)	8.59	83.00%	3.0%	80.0%	3.0%	11.60%	0.12500	15.000	7.08	6.87	12.89	309.24	56.44	3.00	59.24	75%
S61Y504 (Yellow)	8.50	70.00%	0.0%	70.0%	0.0%	20.50%	0.12500	15.000	5.95	5.95	11.16	267.75	48.86	5.24	29.02	75%
S64N23 (Dark Fruitwood)	9.13	31.40%	0.3%	31.1%	0.3%	55.50%	0.12500	15.000	2.85	2.84	5.32	127.77	23.32	12.86	5.12	75%
S64T28 (Clear)	7.56	44.10%	0.1%	44.0%	0.1%	47.90%	0.12500	15.000	3.33	3.33	6.24	149.69	27.32	8.68	6.94	75%
S64B30 (Black)	7.67	57.60%	0.4%	57.2%	0.4%	32.80%	0.12500	15.000	4.40	4.39	8.23	197.43	36.03	6.68	13.38	75%
S64W31 (White)	13.15	23.40%	2.8%	20.6%	2.8%	54.80%	0.12500	15.000	2.79	2.71	5.08	121.90	22.25	20.68	4.94	75%
S64W32 (Yellow Oxide)	9.77	42.60%	0.3%	42.3%	0.3%	36.90%	0.12500	15.000	4.15	4.13	7.75	185.97	33.94	11.51	11.20	75%
S64R33 (Red Oxide)	9.86	43.30%	0.4%	42.9%	0.4%	35.40%	0.12500	15.000	4.25	4.23	7.93	190.35	34.74	11.48	11.95	75%
S64R35 (Deep Red)	7.10	78.50%	0.1%	78.4%	0.1%	14.30%	0.12500	15.000	5.57	5.57	10.44	250.49	45.71	3.13	38.93	75%
S64N36 (Burnt Sienna)	9.66	40.90%	0.1%	40.6%	0.1%	40.40%	0.12500	15.000	3.93	3.92	7.35	176.49	32.21	11.72	9.71	75%
S64N37 (Burnt Umber)	9.65	42.50%	0.3%	42.2%	0.3%	37.80%	0.12500	15.000	4.08	4.07	7.64	183.25	33.44	11.72	10.77	75%
S64G38 (Green)	7.58	42.50% 60.40%	0.3%	60.0%	0.3%	37.80%	0.12500	15.000	4.08	4.07	7.64 8.53	204.66	37.35	6.16	14.67	75%
S64G38 (Green) S64L39 (Blue)	7.58	61.10%	0.4%	60.7%	0.4%	30.90%	0.12500	15.000	4.57	4.55	8.53 8.54	204.86	37.35	5.99	14.67	75%
							0.12500	15.000	4.53	4.55	8.46	202.95	37.04			
S64R40 (Bright Red)	7.43	61.10%	0.4%	60.7%	0.4%	31.50%								5.93	14.32	75%
S64Y41 (Bright Yellow)	7.58	59.10%	0.4%	58.7% 43.3%	0.4%	32.60%	0.12500	15.000	4.47	4.45 4.05	8.34	200.23	36.54	6.37	13.65	75%
S64N42 (Raw Umber)	9.36	43.60%	0.3%			38.30%	0.12500	15.000	4.07		7.60	182.38	33.28	10.84	10.58	75%
S64N44 (Gilsonite)	7.10	60.00%	0.0%	60.0%	0.0%	33.00%	0.12500	15.000	4.26	4.26	7.99	191.70	34.99	5.83	12.91	75%
S64N45 (Van Dyke)	7.91	46.50%	0.2%	46.3%	0.2%	42.50%	0.12500	15.000	3.67	3.66	6.87	164.80	30.08	8.69	8.62	75%
S64Y46 (Raw Sienna)	9.47	41.70%	0.3%	41.4%	0.3%	40.40%	0.12500	15.000	3.93	3.92	7.35	176.43	32.20	11.34	9.70	75%
Mohawk																
Raw Umber	6.92	97.77%	70.0%	27.8%	70.0%	2.23%	0.12500	15.000	6.41	1.92	3.60	86.48	15.78	0.32	86.17	75%
Mustard	6.80	98.93%	70.0%	28.9%	70.0%	0.81%	0.12500	15.000	6.56	1.97	3.69	88.53	16.16	0.15	242.87	75%
Walnut Medium Brown	6.84	98.70%	70.0%	28.7%	70.0%	0.79%	0.12500	15.000	6.54	1.96	3.68	88.34	16.12	0.18	248.49	75%
Walnut Extra Dark	6.85	98.77%	70.0%	28.8%	70.0%	0.62%	0.12500	15.000	6.57	1.97	3.70	88.68	16.18	0.17	317.86	75%
Black	6.95	97.71%	70.0%	27.7%	70.0%	1.50%	0.12500	15.000	6.42	1.93	3.61	86.66	15.82	0.33	128.39	75%
Mahogany Dark Red	6.89	98.28%	70.0%	28.3%	70.0%	0.97%	0.12500	15.000	6.49	1.95	3.65	87.68	16.00	0.24	200.88	75%
Mahogany Brown	6.87	98.38%	70.0%	28.4%	70.0%	0.97%	0.12500	15.000	6.50	1.95	3.66	87.74	16.01	0.23	201.00	75%
Walnut Medium Dark	6.83	98.68%	70.0%	28.7%	70.0%	0.85%	0.12500	15.000	6.53	1.96	3.67	88.15	16.09	0.19	230.45	75%
Red	6.98	96.84%	70.0%	26.8%	70.0%	2.12%	0.12500	15.000	6.24	1.87	3.51	84.30	15.39	0.45	88.37	75%
Perfect Brown	6.87	98.26%	70.0%	28.3%	70.0%	1.06%	0.12500	15.000	6.47	1.94	3.64	87.37	15.94	0.25	183.16	75%
Cherry	6.81	99.30%	70.0%	29.3%	70.0%	0.38%	0.12500	15.000	6.65	2.00	3.74	89.79	16.39	0.10	525.09	75%
Blue	6.86	98.11%	70.0%	28.1%	70.0%	0.75%	0.12500	15.000	6.43	1.93	3.62	86.78	15.84	0.27	257.11	75%
Oak Light Golden	6.81	99.02%	70.0%	29.0%	70.0%	0.70%	0.12500	15.000	6.59	1.98	3.71	88.93	16.23	0.14	282.32	75%
Sienna Burnt	6.91	97.82%	70.0%	27.8%	70.0%	1.32%	0.12500	15.000	6.41	1.92	3.60	86.51	15.79	0.31	145.63	75%
Raw Sienna	6.78	99.22%	70.0%	29.2%	70.0%	0.55%	0.12500	15.000	6.60	1.98	3.71	89.15	16.27	0.11	360.20	75%
Burnt Umber	6.88	98.36%	70.0%	28.4%	70.0%	0.99%	0.12500	15.000	6.50	1.95	3.66	87.80	16.02	0.23	197.09	75%
Brown Van Dyke	6.88	97.86%	70.0%	27.9%	70.0%	1.30%	0.12500	15.000	6.39	1.92	3.59	86.25	15.74	0.30	147.44	75%
Mahogany Light Red	6.82	99.22%	70.0%	29.2%	70.0%	0.43%	0.12500	15.000	6.64	1.99	3.74	89.68	16.37	0.11	463.44	75%
Becker														1		
Bernyl Surfacer White	10.68	34.00%	0.0%	34.0%	0.0%	49.00%	0.12500	15.000	3.63	3.63	6.81	163.40	29.82	14.47	7.41	75%
Bernyl Facett 15	7.87	64.09%	0.0%	64.1%	0.0%	27.64%	0.12500	15.000	5.04	5.04	9.46	226.97	41.42	5.80	18.25	75%
Bernyl Facett LV 25 HAPs Free	7.79	68.84%	0.0%	68.8%	0.0%	23.85%	0.12500	15.000	5.36	5.36	10.05	241.32	44.04	4.98	22.48	75%
Solvents																
Rule 66 Mineral Spirits	6.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.10000	15.000	6.58	6.58	9.87	236.91	43.24	0.00	NA	75%
L-610 Blend	6.67	100.00%	0.0%	100.0%	0.0%	0.00%	0.03000	1.000	6.67	6.67	0.20	4.80	0.88	0.00	NA	75%
Acetone	6.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.07000	1.000	6.58	6.58	0.46	11.05	2.02	0.00	NA.	75%
Aqua Clean	8.23	99.00%	0.0%	99.0%	0.0%	1.00%	0.00600	1.000	8.15	8.15	0.05	1.17	0.21	0.00	NA	75%
Catalyst	0.20	00.0070	0.070	55.575	0.070	1.0070	0.0000		0.10	0.10	0.00		0.2.1	0.00		10,0
Catalyst 6900	7.66	78.07%	0.0%	78.1%	0.0%	28.00%	0.10000	1.000	5.98	5.98	0.60	14.34	2.62	0.18	21.34	75%
Catalyst 6900	7.00	85.42%	0.0%	85.4%	0.0%	8.88%	0.10000	1.000	6.30	6.30	0.63	15.13	2.76	0.12	70.99	75%
Thinner	1.30	00.42/0	0.076	00.470	0.076	0.0070	0.10000	1.000	0.30	0.30	0.03	10.10	2.10	0.12	10.55	1370
Thinner 219	7.13	100.00%	0.0%	100.0%	0.0%	0.00%	0.10000	1.000	7.13	7.13	0.71	17.11	3.12	0.00	NA	750/
METHODOLOGY	1.13	100.00%	U.U%	100.0%	0.0%	U.UU%	0.10000		Worst Case Pote			597.58	109.06	20.86	INA	75%
WIETHODOLOGY									vvoist case Pote	ential to EMIT	24.90	J97.J0	109.00	∠∪.00		

Dry Filter Particulate Control Efficiency 95%

Controlled Particulate

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)

Pounds or VoC per Califor Cotating = (Density (logal) \* Veright % Organics)

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

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

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

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs) Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

#### Appendix A: Emissions Calculations Surface Coating Booth U-SB69 HAP Emissions

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062
Reviewer: Anne-Marie C. Hart
Date: December 7, 2009

#### HAPs

Material	Density (Lb/Gal)	Gallons of Material	Maximum	Weight %	Chromium Emissions	Cobalt Emissions	Xylene Emissions	Toluene Emissions	Manganese Emissions	Ethyl Benzene Emissions					
Coatings*		(gal/unit)	(unit/hour)	Chromium	Cobalt	Xylene	Toluene	Ŭ	Ethyl Benzene	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
Sherwin Williams		,	,			j		Ŭ		, , ,	· ,	ì	` , , ,	, , , ,	ì
S61B500 (Black)	8.99	0.12500	15.000	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.59	0.00	0.00	0.00	0.00	0.00
S61E501 (Orange)	8.65	0.12500	15.000	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.43	0.00	0.00	0.00	0.00	0.00
S61L505 (Blue)	8.35	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S61N502 (Brown)	8.82	0.12500	15.000	1.70%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23	0.00	0.00	0.00	0.00	0.00
S61R503 (Red)	8.70	0.12500	15.000	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71	0.00	0.00	0.00	0.00	0.00
S61R506 (Bordeaux)	8.59	0.12500	15.000	1.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.92	0.00	0.00	0.00	0.00	0.00
S61Y504 (Yellow)	8.50	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S64N23 (Dark Fruitwood)	9.13	0.12500	15.000	0.00%	0.03%	1.28%	0.00%	0.00%	0.00%	0.00	0.02	0.96	0.00	0.00	0.00
S64T28 (Clear)	7.56	0.12500	15.000	0.00%	0.04%	0.42%	0.00%	0.00%	0.00%	0.00	0.02	0.26	0.00	0.00	0.00
S64B30 (Black)	7.67	0.12500	15.000	0.00%	0.04%	1.72%	0.48%	0.00%	0.00%	0.00	0.03	1.08	0.30	0.00	0.00
S64W31 (White)	13.15	0.12500	15.000	0.00%	0.03%	0.28%	0.24%	0.00%	0.00%	0.00	0.03	0.30	0.26	0.00	0.00
S64W32 (Yellow Oxide)	9.77	0.12500	15.000	0.00%	0.03%	0.57%	0.39%	0.00%	0.00%	0.00	0.02	0.46	0.31	0.00	0.00
S64R33 (Red Oxide)	9.86	0.12500	15.000	0.00%	0.03%	0.49%	0.24%	0.00%	0.00%	0.00	0.02	0.40	0.19	0.00	0.00
S64R35 (Deep Red)	7.10	0.12500	15.000	0.00%	0.00%	1.02%	0.54%	0.00%	0.00%	0.00	0.00	0.59	0.31	0.00	0.00
S64N36 (Burnt Sienna)	9.66	0.12500	15.000	0.00%	0.03%	0.51%	0.33%	1.40%	0.00%	0.00	0.02	0.40	0.26	1.11	0.00
S64N37 (Burnt Umber)	9.65	0.12500	15.000	0.00%	0.00%	0.56%	0.39%	0.00%	0.00%	0.00	0.00	0.44	0.31	0.00	0.00
S64G38 (Green)	7.58	0.12500	15.000	0.00%	0.00%	1.78%	0.57%	0.00%	0.00%	0.00	0.00	1.11	0.35	0.00	0.00
S64L39 (Blue)	7.50	0.12500	15.000	0.00%	0.00%	1.80%	0.60%	0.00%	0.00%	0.00	0.00	1.11	0.37	0.00	0.00
S64R40 (Bright Red)	7.43	0.12500	15.000	0.00%	0.00%	1.76%	0.54%	0.00%	0.00%	0.00	0.00	1.07	0.33	0.00	0.00
S64Y41 (Bright Yellow)	7.58	0.12500	15.000	0.00%	0.00%	1.74%	0.54%	0.00%	0.00%	0.00	0.00	1.08	0.34	0.00	0.00
S64N42 (Raw Umber)	9.36	0.12500	15.000	0.00%	0.00%	0.51%	0.30%	0.00%	0.00%	0.00	0.00	0.39	0.23	0.00	0.00
S64N44 (Gilsonite)	7.10	0.12500	15.000	0.00%	0.00%	0.60%	0.00%	0.00%	0.00%	0.00	0.00	0.35	0.00	0.00	0.00
S64N45 (Van Dyke)	7.91	0.12500	15.000	0.00%	0.00%	0.45%	0.00%	0.00%	0.00%	0.00	0.00	0.29	0.00	0.00	0.00
S64Y46 (Raw Sienna)	9.47	0.12500	15.000	0.00%	0.00%	0.44%	0.33%	0.00%	0.00%	0.00	0.00	0.34	0.26	0.00	0.00
Becker															
Bernyl Surfacer White	10.68	0.12500	15.000	0.00%	0.00%	5.00%	0.00%	0.00%	1.00%	0.00	0.00	4.39	0.00	0.00	0.88
Bernyl Facett 15	7.87	0.12500	15.000	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00	0.00	6.46	0.00	0.00	0.00
Bernyl Facett LV 25 HAPs Free	7.79	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Solvents															
Rule 66 Mineral Spirits	6.58	0.10000	15.000	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00	0.00	0.43	0.00	0.00	0.00
L-610 Blend	6.67	0.03000	1.000	0.00%	0.00%	0.00%	21.00%	0.00%	0.00%	0.00	0.00	0.00	0.18	0.00	0.00
Acetone	6.58	0.07000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Aqua Clean	8.23	0.00600	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Catalyst															
Catalyst 6900	7.66	0.10000	1.000	0.00%	0.00%	40.00%	0.00%	0.00%	5.00%	0.00	0.00	1.34	0.00	0.00	0.17
Catalyst 494	7.38	0.10000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Thinner															
Thinner 219	7.13	0.10000	1.000	0.00%	0.00%	60.00%	0.00%	0.00%	10.00%	0.00	0.00	1.87	0.00	0.00	0.31
	•								tential to Emit	1.23	0.03	10.11	0.55	1.11	1.36

\*Mohawk coatings do not contain any HAPs.

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 Total = Worst Coating + Sum of all solvents used

14.40

#### Appendix A: Emissions Calculations Surface Coating Booth U-SB70 VOC and Particulate Emissions

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### **VOC and Particulate**

/OC and Particulate				,												
Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfe Efficien
Coatings																
Sherwin Williams																
S61B500 (Black)	8.99	73.00%	0.0%	73.0%	0.0%	17.00%	0.12500	15.000	6.56		0.00	0.00	0.00	4.98	38.60	75%
S61E501 (Orange)	8.65	80.00%	0.0%	80.0%	0.0%	13.70%	0.12500	15.000	6.92	6.92	12.98	311.40	56.83	3.55	50.51	75%
S61L505 (Blue)	8.35	86.00%	16.0%	70.0%	16.0%	9.30%	0.12500	15.000	6.96	5.85	10.96	263.03	48.00	2.40	62.85	75%
S61N502 (Brown)	8.82	69.00%	0.0%	69.0%	0.0%	22.70%	0.12500	15.000	6.09	6.09	11.41	273.86	49.98	5.61	26.81	75%
S61R503 (Red)	8.70	70.00%	0.0%	70.0%	0.0%	23.40%	0.12500	15.000	6.09	6.09	11.42	274.05	50.01	5.36	26.03	75%
S61R506 (Bordeaux)	8.59	83.00%	3.0%	80.0%	3.0%	11.60%	0.12500	15.000	7.08	6.87	12.89	309.24	56.44	3.00	59.24	75%
S61Y504 (Yellow)	8.50	70.00%	0.0%	70.0%	0.0%	20.50%	0.12500	15.000	5.95	5.95	11.16	267.75	48.86	5.24	29.02	75%
S64N23 (Dark Fruitwood)	9.13	31.40%	0.3%	31.1%	0.3%	55,50%	0.12500	15,000	2.85	2.84	5.32	127.77	23.32	12.86	5.12	75%
S64T28 (Clear)	7.56	44.10%	0.1%	44.0%	0.1%	47.90%	0.12500	15.000	3.33	3.33	6.24	149.69	27.32	8.68	6.94	75%
S64B30 (Black)	7.67	57.60%	0.4%	57.2%	0.4%	32.80%	0.12500	15.000	4.40	4.39	8.23	197.43	36.03	6.68	13.38	75%
S64W31 (White)	13.15	23.40%	2.8%	20.6%	2.8%	54.80%	0.12500	15,000	2.79	2.71	5.08	121.90	22.25	20.68	4.94	75%
S64W32 (Yellow Oxide)	9.77	42.60%	0.3%	42.3%	0.3%	36.90%	0.12500	15.000	4.15	4.13	7.75	185.97	33.94	11.51	11.20	75%
S64R33 (Red Oxide)	9.86	43.30%	0.4%	42.9%	0.4%	35.40%	0.12500	15.000	4.25	4.23	7.93	190.35	34.74	11.48	11.95	75%
S64R35 (Deep Red)	7.10	78.50%	0.1%	78.4%	0.1%	14.30%	0.12500	15.000	5.57	5.57	10.44	250.49	45.71	3.13	38.93	75%
S64N36 (Burnt Sienna)	9.66	40.90%	0.1%	40.6%	0.1%	40.40%	0.12500	15.000	3.93	3.92	7.35	176.49	32.21	11.72	9.71	75%
S64N37 (Burnt Umber)	9.65	42.50%	0.3%	42.2%	0.3%	37.80%	0.12500	15.000	4.08	4.07	7.64	183.25	33.44	11.39	10.77	75%
S64G38 (Green)	7.58	60.40%	0.3%	60.0%	0.3%	31.00%	0.12500	15.000	4.57	4.55	8.53	204.66	37.35	6.16	14.67	75%
S64L39 (Blue)	7.50	61.10%	0.4%	60.7%	0.4%	30.90%	0.12500	15.000	4.57	4.55	8.54	204.86	37.39	5.99	14.07	75%
S64R40 (Bright Red)	7.43	61.10%	0.4%	60.7%	0.4%	31.50%	0.12500	15.000	4.53	4.51	8.46	202.95	37.04	5.93	14.73	75%
S64Y41 (Bright Yellow)	7.43	59.10%	0.4%	58.7%	0.4%	32.60%	0.12500	15.000	4.55	4.45	8.34	202.95	36.54	6.37	13.65	75%
S64N42 (Raw Umber)	9.36	43.60%	0.4%	43.3%	0.4%	38.30%	0.12500	15.000	4.47	4.45	7.60	182.38	33.28	10.84	10.58	75%
S64N44 (Gilsonite)	7.10	60.00%	0.0%	60.0%	0.0%	33.00%	0.12500	15.000	4.26	4.26	7.99	191.70	34.99	5.83	12.91	75%
S64N45 (Van Dyke)	7.91	46.50%	0.2%	46.3%	0.2%	42.50%	0.12500	15.000	3.67	3.66	6.87	164.80	30.08	8.69	8.62	75%
S64Y46 (Raw Sienna)	9.47	41.70%	0.3%	41.4%	0.3%	40.40%	0.12500	15.000	3.93	3.92	7.35	176.43	32.20	11.34	9.70	75%
Mohawk																
Raw Umber	6.92	97.77%	70.0%	27.8%	70.0%	2.23%	0.12500	15.000	6.41	1.92	3.60	86.48	15.78	0.32	86.17	75%
Mustard	6.80	98.93%	70.0%	28.9%	70.0%	0.81%	0.12500	15.000	6.56	1.97	3.69	88.53	16.16	0.15	242.87	75%
Walnut Medium Brown	6.84	98.70%	70.0%	28.7%	70.0%	0.79%	0.12500	15.000	6.54	1.96	3.68	88.34	16.12	0.18	248.49	75%
Walnut Extra Dark	6.85	98.77%	70.0%	28.8%	70.0%	0.62%	0.12500	15.000	6.57	1.97	3.70	88.68	16.18	0.17	317.86	75%
Black	6.95	97.71%	70.0%	27.7%	70.0%	1.50%	0.12500	15.000	6.42	1.93	3.61	86.66	15.82	0.33	128.39	75%
Mahogany Dark Red	6.89	98.28%	70.0%	28.3%	70.0%	0.97%	0.12500	15.000	6.49	1.95	3.65	87.68	16.00	0.24	200.88	75%
Mahogany Brown	6.87	98.38%	70.0%	28.4%	70.0%	0.97%	0.12500	15.000	6.50	1.95	3.66	87.74	16.01	0.23	201.00	75%
Walnut Medium Dark	6.83	98.68%	70.0%	28.7%	70.0%	0.85%	0.12500	15.000	6.53	1.96	3.67	88.15	16.09	0.19	230.45	75%
Red	6.98	96.84%	70.0%	26.8%	70.0%	2.12%	0.12500	15.000	6.24	1.87	3.51	84.30	15.39	0.45	88.37	75%
Perfect Brown	6.87	98.26%	70.0%	28.3%	70.0%	1.06%	0.12500	15.000	6.47	1.94	3.64	87.37	15.94	0.25	183.16	75%
Cherry	6.81	99.30%	70.0%	29.3%	70.0%	0.38%	0.12500	15.000	6.65	2.00	3.74	89.79	16.39	0.10	525.09	75%
Blue	6.86	98.11%	70.0%	28.1%	70.0%	0.75%	0.12500	15,000	6.43	1.93	3.62	86.78	15.84	0.27	257.11	75%
Oak Light Golden	6.81	99.02%	70.0%	29.0%	70.0%	0.70%	0.12500	15.000	6.59	1.98	3.71	88.93	16.23	0.14	282.32	75%
Sienna Burnt	6.91	97.82%	70.0%	27.8%	70.0%	1.32%	0.12500	15.000	6.41	1.92	3.60	86.51	15.79	0.31	145.63	75%
Raw Sienna	6.78	99.22%	70.0%	29.2%	70.0%	0.55%	0.12500	15.000	6.60	1.98	3.71	89.15	16.27	0.11	360.20	75%
Burnt Umber	6.88	98.36%	70.0%	28.4%	70.0%	0.99%	0.12500	15.000	6.50	1.95	3.66	87.80	16.02	0.23	197.09	75%
Brown Van Dyke	6.88	97.86%	70.0%	27.9%	70.0%	1.30%	0.12500	15.000	6.39	1.92	3.59	86.25	15.74	0.30	147.44	75%
Mahogany Light Red	6.82	99.22%	70.0%	29.2%	70.0%	0.43%	0.12500	15.000	6.64	1.99	3.74	89.68	16.37	0.11	463.44	75%
Becker	0.02	33.2270	70.070	23.270	10.070	0.4070	0.12000	13.000	0.04	1.55	3.74	03.00	10.07	0.11	700.77	13/0
Bernyl Surfacer White	10.68	34.00%	0.0%	34.0%	0.0%	49.00%	0.12500	15.000	3.63	3.63	6.81	163.40	29.82	14.47	7.41	75%
Bernyl Facett 15	7.87	64.09%	0.0%	64.1%	0.0%	27.64%	0.12500	15.000	5.04	5.04	9.46	226.97	41.42	5.80	18.25	75%
Bernyl Facett LV 25 HAPs Free	7.79	68.84%	0.0%	68.8%	0.0%	23.85%	0.12500	15.000	5.04	5.04	10.05	241.32	41.42	4.98	22.48	75%
olvents	1.19	00.04%	0.0%	00.0%	U.U%	23.03%	0.12000	15.000	5.30	5.30	10.05	241.32	44.04	4.90	22.40	159
	6 50	100.00%	0.00/	100.0%	0.0%	0.00%	0.10000	15.000	6.58	6.58	9.87	236.91	43.24	0.00	NA	750
Rule 66 Mineral Spirits	6.58		0.0%													75%
L-610 Blend	6.67	100.00%	0.0%	100.0%	0.0%	0.00%	0.03000	1.000	6.67	6.67	0.20	4.80	0.88	0.00	NA	75%
Acetone	6.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.07000	1.000	6.58	6.58	0.46	11.05	2.02	0.00	NA	75%
Aqua Clean	8.23	99.00%	0.0%	99.0%	0.0%	1.00%	0.00600	1.000	8.15	8.15	0.05	1.17	0.21	0.00	NA	75%
atalyst																
Catalyst 6900	7.66	78.07%	0.0%	78.1%	0.0%	28.00%	0.10000	1.000	5.98	5.98	0.60	14.34	2.62	0.18	21.34	75%
Catalyst 494	7.38	85.42%	0.0%	85.4%	0.0%	8.88%	0.10000	1.000	6.30	6.30	0.63	15.13	2.76	0.12	70.99	75%
hinner																
TI : 040	7.13	100.00%	0.0%	100.0%	0.0%	0.00%	0.10000	4 000	7.13	7.13	0.71	47.44	3.12	0.00	NA	75%
Thinner 219 METHODOLOGY	7.13	100.0070	0.070	100.076	0.076	0.0078	0.10000	1.000	7.13	7.13	24.90	17.11 <b>597.58</b>	109.06	20.86	14/4	1370

Dry Filter Particulate Control Efficiency

Controlled Particulate

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)

Pounds or VoC per Califor Cotating = (Density (logal) \* Veright % Organics)

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

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

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

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs) Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

#### Appendix A: Emissions Calculations Surface Coating Booth U-SB70 HAPs Emissions

TIAFS LIIISSIOIIS

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### HAPs

IIAI 3														1	Ed. 2
Material	Density (Lb/Gal)	Gallons of Material	Maximum	Weight %	Weight %	Chromium Emissions	Cobalt Emissions	Xylene Emissions	Toluene Emissions	Manganese Emissions	Ethyl Benzene Emissions				
Coatings*		(gal/unit)	(unit/hour)	Chromium	Cobalt	Xylene	Toluene	Manganese	Ethyl Benzene	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)
Sherwin Williams															
S61B500 (Black)	8.99	0.12500	15.000	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.59	0.00	0.00	0.00	0.00	0.00
S61E501 (Orange)	8.65	0.12500	15.000	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.43	0.00	0.00	0.00	0.00	0.00
S61L505 (Blue)	8.35	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S61N502 (Brown)	8.82	0.12500	15.000	1.70%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23	0.00	0.00	0.00	0.00	0.00
S61R503 (Red)	8.70	0.12500	15.000	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71	0.00	0.00	0.00	0.00	0.00
S61R506 (Bordeaux)	8.59	0.12500	15.000	1.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.92	0.00	0.00	0.00	0.00	0.00
S61Y504 (Yellow)	8.50	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
S64N23 (Dark Fruitwood)	9.13	0.12500	15.000	0.00%	0.03%	1.28%	0.00%	0.00%	0.00%	0.00	0.02	0.96	0.00	0.00	0.00
S64T28 (Clear)	7.56	0.12500	15.000	0.00%	0.04%	0.42%	0.00%	0.00%	0.00%	0.00	0.02	0.26	0.00	0.00	0.00
S64B30 (Black)	7.67	0.12500	15.000	0.00%	0.04%	1.72%	0.48%	0.00%	0.00%	0.00	0.03	1.08	0.30	0.00	0.00
S64W31 (White)	13.15	0.12500	15.000	0.00%	0.03%	0.28%	0.24%	0.00%	0.00%	0.00	0.03	0.30	0.26	0.00	0.00
S64W32 (Yellow Oxide)	9.77	0.12500	15.000	0.00%	0.03%	0.57%	0.39%	0.00%	0.00%	0.00	0.02	0.46	0.31	0.00	0.00
S64R33 (Red Oxide)	9.86	0.12500	15.000	0.00%	0.03%	0.49%	0.24%	0.00%	0.00%	0.00	0.02	0.40	0.19	0.00	0.00
S64R35 (Deep Red)	7.10	0.12500	15.000	0.00%	0.00%	1.02%	0.54%	0.00%	0.00%	0.00	0.00	0.59	0.31	0.00	0.00
S64N36 (Burnt Sienna)	9.66	0.12500	15.000	0.00%	0.03%	0.51%	0.33%	1.40%	0.00%	0.00	0.02	0.40	0.26	1.11	0.00
S64N37 (Burnt Umber)	9.65	0.12500	15.000	0.00%	0.00%	0.56%	0.39%	0.00%	0.00%	0.00	0.00	0.44	0.31	0.00	0.00
S64G38 (Green)	7.58	0.12500	15.000	0.00%	0.00%	1.78%	0.57%	0.00%	0.00%	0.00	0.00	1.11	0.35	0.00	0.00
S64L39 (Blue)	7.50	0.12500	15.000	0.00%	0.00%	1.80%	0.60%	0.00%	0.00%	0.00	0.00	1.11	0.37	0.00	0.00
S64R40 (Bright Red)	7.43	0.12500	15.000	0.00%	0.00%	1.76%	0.54%	0.00%	0.00%	0.00	0.00	1.07	0.33	0.00	0.00
S64Y41 (Bright Yellow)	7.58	0.12500	15.000	0.00%	0.00%	1.74%	0.54%	0.00%	0.00%	0.00	0.00	1.08	0.34	0.00	0.00
S64N42 (Raw Umber)	9.36	0.12500	15.000	0.00%	0.00%	0.51%	0.30%	0.00%	0.00%	0.00	0.00	0.39	0.23	0.00	0.00
S64N44 (Gilsonite)	7.10	0.12500	15.000	0.00%	0.00%	0.60%	0.00%	0.00%	0.00%	0.00	0.00	0.35	0.00	0.00	0.00
S64N45 (Van Dyke)	7.91	0.12500	15.000	0.00%	0.00%	0.45%	0.00%	0.00%	0.00%	0.00	0.00	0.29	0.00	0.00	0.00
S64Y46 (Raw Sienna)	9.47	0.12500	15.000	0.00%	0.00%	0.44%	0.33%	0.00%	0.00%	0.00	0.00	0.34	0.26	0.00	0.00
Becker															
Bernyl Surfacer White	10.68	0.12500	15.000	0.00%	0.00%	5.00%	0.00%	0.00%	1.00%	0.00	0.00	4.39	0.00	0.00	0.88
Bernyl Facett 15	7.87	0.12500	15.000	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00	0.00	6.46	0.00	0.00	0.00
Bernyl Facett LV 25 HAPs Free	7.79	0.12500	15.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Solvents															
Rule 66 Mineral Spirits	6.58	0.10000	15.000	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00	0.00	0.43	0.00	0.00	0.00
L-610 Blend	6.67	0.03000	1.000	0.00%	0.00%	0.00%	21.00%	0.00%	0.00%	0.00	0.00	0.00	0.18	0.00	0.00
Acetone	6.58	0.07000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Aqua Clean	8.23	0.00600	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Catalyst															
Catalyst 6900	7.66	0.10000	1.000	0.00%	0.00%	40.00%	0.00%	0.00%	5.00%	0.00	0.00	1.34	0.00	0.00	0.17
Catalyst 494	7.38	0.10000	1.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Thinner				2.2070	2.2070	2.2070	2.2070	2.2070	2:3070	2.00	2.00	2.00	2.00	2.00	5.00
Thinner 219	7.13	0.10000	1.000	0.00%	0.00%	60.00%	0.00%	0.00%	10.00%	0.00	0.00	1.87	0.00	0.00	0.31
	-			1.1070	2.2070	22.2070			tential to Emit	1.23	0.03	10.11	0.55	1.11	1.36

\*Mohawk coatings do not contain any HAPs.

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 Total = Worst Coating + Sum of all solvents used

7.58

Appendix A: Emissions Calculations Surface Coating Booth U-RP48

**VOC and Particulate Emissions** 

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### **VOC and Particulate**

VOO ana i antiounato																
Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics		Volume % Non- Volatiles (solids)		Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Coatings																
Sherwin Williams																
White Tint Base	11.77	61.00%	57.4%	3.7%	55.0%	39.00%	0.06700	225.000	0.95	0.43	6.48	155.43	28.37	151.55	1.10	50%
Solvents																
Acetone	6.58	100.00%	0.0%	100.0%	0.0%	0.00%	0.08300	1.000	6.58	6.58	0.55	13.11	2.39	0.00	NA	50%
Aqua Clean	8.23	99.00%	0.0%	99.0%	0.0%	1.00%	0.00830	1.000	8.15	8.15	0.07	1.62	0.30	0.00	NA	50%
The coatings used in U-RP48 do not contain HAPs  Worst Case Potential to Emit 7.02 168.54 30.76 151.55																

Dry Filter Particulate Control Efficiency METHODOLOGY 95% **Controlled Particulate** 

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

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

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

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

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

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

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

Total = Worst Coating + Sum of all solvents used

Controlled Potential to Emit Particulate = Particulate Potential (ton/yr) x (1-control efficiency)

Appendix A: Emissions Calculations VOC, Particulate and HAPs From Adhesive Application

Company Name: Ideal Doors

2.61

3.69E-06

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### **VOC and Particulate**

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non- Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
RK8490X	9.00	55.00%	54.90%	0.10%	0.0%	45.00%	0.12100	14.950	0.01	0.01	0.02	0.39	0.07	0.00	0.02	100%
Multibond 3200	9.08	52.00%	51.56%	0.44%	0.0%	50.00%	0.01200	14.950	0.04	0.04	0.01	0.17	0.03	0.00	0.08	100%
CP0208	9.16	0.00%	0.00%	0.00%	0.0%	50.00%	0.64000	14.950	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
RK3369	9.00	56.00%	55.70%	0.30%	0.0%	44.00%	0.02600	14.950	0.03	0.03	0.01	0.25	0.05	0.00	0.06	100%
CL-1809	9.05	54.00%	53.50%	0.50%	0.0%	30.00%	0.44000	14.950	0.05	0.05	0.30	7.14	1.30	0.00	0.15	100%
Splyset 400	9.40	45.20%	43.20%	2.00%	0.0%	50.00%	0.00060	14.950	0.188	0.188	0.00	0.04	0.01	0.00	0.38	100%

Total 0.33 8.00 1.46 0.00

#### METHODOLOGY

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

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

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

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

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

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

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

Total = Sum of Adhesives

#### HAPs

Material	Density (Lb/Gal)	Gal of Mat. (gal/unit)	Maximum (unit/hr)	Weight % Formaldehyde	Weight % Vinyl Acetate	Formaldehyde Emissions (ton/yr)	Vinyl Acetate Emissions (ton/yr)
RK8490X	9.00	0.12100	14.950	0.00%	0.00%	0.00	0.00
Multibond 3200	9.08	0.01200	14.950	0.00%	0.00%	0.00	0.00
CP0208	9.16	0.64000	14.950	0.00%	0.00%	0.00	0.00
RK3369	9.00	0.02600	14.950	0.00%	0.00%	0.00	0.00
CL-1809	9.05	0.44000	14.950	1.00%	0.00%	2.61E+00	0.00
Splyset 400	9.40	0.00060	14.950	0.00%	0.001%	0.00	3.69E-06

### Total METHODOLOGY

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

### Appendix A: Emissions Calculations Woodworking Operations

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2009

#### Controlled by DC-I163

Outlet Grain Loading (gr/dscf)	Air Flow (dscf/min)	Control Efficiency	
0.00006	61,000	99.50%	
Controlled PM Emissions	Controlled PM Emissions	Uncontrolled PM	Uncontrolled PM
(lb/hour)	(tons/year)	Emissions (lb/hour)	Emissions (tons/year)
0.03	0.14	6.27	27.48

PM=PM10=PM2.5

#### Controlled by U-DC108

Sawdust Collected (lb/door)	Production Rate (doors/year)	Sawdust Collected (lb/year)	Operating Hours (hr/year)	Sawdust Collected (lb/hr)	Control Efficiency
13.84	25,956	359,231.04	2340	153.52	99.50%
Controlled PM Emissions (lb/hr)	Controlled PM Emissions	Uncontrolled PM	Uncontrolled PM		
Controlled Fivi Emissions (Ib/III)	(tons/year)*	Emissions (lb/hr)	Emissions (tons/year)		
0.77	3 38	154 29	675.79	1	

PM=PM10=PM2.5

Therefore, potential emissions will be considered after the use of the control devices.

#### Methodology

#### **Emissions from DC-I163**

Controlled PM Emissions (lb/hour) = Outlet Grain Loading (gr/dscf) x Air Flow (dscf/min) x 60 (minutes/hour) x (1 lb/7000 gr)

Controlled PM Emissions (tons/year) = Controlled PM Emissions (lb/hour) x 8760 (hours/year) x (1 ton/2000 lb)

Uncontrolled PM Emissions (lb/hour) = Controlled PM Emissions (lb/hour) / (1-Control Efficiency)

Uncontrolled PM Emissions (tons/year) = Controlled PM Emissions (tons/year) / (1-Control Efficiency)

#### **Emissions from U-DC108**

Sawdust Collected (lb/hr) = Sawdust Collected (lb/door) x Production Rate (doors/year) x Operating Hours (hr/year)

Uncontrolled PM Emissions (lb/hour) = Sawdust Collected (lb/hr) / Control Efficiency

Uncontrolled PM Emissions (tons/year) = Uncontrolled PM Emissions (lb/hr) x 8760 (hours/year) x (1 ton/2000 lb)

Controlled PM Emissions (lb/hr) = Uncontrolled PM Emissions (lb/hr) x (1-Control Efficiency)

Controlled PM Emissions (tons/year) = Controlled PM Emissions (lb/hr) x 8760 (hours/year) x (1 ton/2000 lb)

<sup>\*</sup>The dust collection systems associated with the woodworking operations are considered integral to the process.

#### Appendix A: Emissions Calculations Natural Gas Combustion Only

MM BTU/HR <100

Company Name: Ideal Doors

Address City IN Zip: 890 Central Court New Albany, IN 47150

Permit Number: F043-28705-00062 Reviewer: Anne-Marie C. Hart Date: December 7, 2010

Heat Input Capacity MMBtu/hr Potential Throughput MMCF/yr

211.4

04.400		
24.129		
4.000	I140	
0.400	l141	
4.800	I142 through I 144	1.6 MMBtu/hour each
0.240	I145 and I146	0.12 MMBtu/hour each
0.050	l147	
0.360	I148 through I153	0.06 MMBtu/hour each
0.400	I154 and I155	0.20 MMBtu/hour each
0.100	I156	
1.814	I139	
9.765	l157	
2.200	I158	

	Pollutant								
Emission Factor in lb/MMCF	PM* 1.9	PM10/PM2.5* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84			
Potential Emission in tons/yr	0.20	0.80	0.06	10.57	0.58	8.88			

<sup>\*</sup>PM emission factor is filterable PM only. PM10/PM2.5 emission factor is filterable and condensable PM10 combined.

#### 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/1,000 MMBtu

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

	HAPs - Organics								
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03				
Potential Emission in tons/yr	2.219E-04	1.268E-04	7.926E-03	1.902E-01	3.593E-04				

	HAPs - Metals										
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03						
Potential Emission in tons/yr	5.284E-05	1.163E-04	1.480E-04	4.016E-05	2.219E-04						
				Total	1.99E-01						

Methodology is the same as above.

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

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



We Protect Hoosiers and Our Environment.

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

Thomas W. Easterly Commissioner

Governor

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

TO: Ed Hubert

Ideal Doors

890 Central Court New Albany IN 47150

DATE: May 25, 2010

FROM: Matt Stuckey, Branch Chief

> Permits Branch Office of Air Quality

SUBJECT: Final Decision

**FESOP** 

043-28705-00062

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: Jason Farver VP Architectural Wood Door Div. Ideal Doors **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 ibrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07







We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr. Governor

Thomas W. Easterly Commissioner

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

May 25, 2010

TO: New Albany Floyd Co. Library

From: Matthew Stuckey, Branch Chief

> Permits Branch Office of Air Quality

Subject: Important Information for Display Regarding a Final Determination

> **Applicant Name: Ideal Doors Permit Number:** 043-28705-00062

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 11/30/07



### Mail Code 61-53

IDEM Staff	BMILLER 5/25/2	010		
	Ideal Doors 043	3-28705-00062 (final)		AFFIX STAMP
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1		Ed Hubert Ideal Doors 890 Central Court New Albany IN 47150 (Source CAATS) (Via	Confirmed	Delivery)							Remarks
2		Jason Farver VP - Architectural Wood Door Division Ideal Doors PO Box 490 Holstein	Jason Farver VP - Architectural Wood Door Division Ideal Doors PO Box 490 Holstein IA 51025 (RO CAATS)								
3		Ar. Robert Bottom Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 (Affected Party)									
4		Floyd County Commissioners 311-319 West 1st St, Rm 214 New Albany IN 47150 (Local Official)									
5		New Albany City Council and Mayors Office City County Building #316 New Albany IN 47150 (Local Official)									
6		New Albany Floyd Co Public Library 180 W Spring St New Albany IN 47150-3692 (Library)									
7		Floyd County Health Department 1917 Bono Rd New Albany IN 47150-4607 (Health	n Departmen	t)							
8		Ms. Sue Green 1985 Kepley Road Georgetown IN 47122 (Affected Party)									
9		American Beverage Marketers 810 Progressive Boulevard New Albany IN 47150 (A	ffected Party	)							
10		Blue Grass Chemical Specialties 895 Industrial Boulevard New Albany IN 47150 (Al	fected Party								
11		Fire King International 900 Park Place New Albany IN 47150 (Affected Party)									
12		Louisville Tile & Logistics 540 Central Court New Albany IN 47150 (Affected Party)									
13		Wards Landscape Service 910 Industrial Boulevard New Albany IN 47150 (Affected	Party)								
14											
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