INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53 IGCN 1003
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: August 8, 2007

RE: Masterbrand Cabinets / 177-18525-00015

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

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

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

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

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

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

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

Enclosures
FNTVOP.dot 03/23/06

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

PART 70 OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

Masterbrand Cabinets, Inc.
701 South N Street
Richmond, Indiana 47374

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

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

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

Operation Permit No.: T177-18525-00015	
Issued by: Original Signed By: Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: August 8, 2007 Expiration Date: August 8, 2012

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

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.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

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

The Permittee owns and operates a stationary kitchen cabinet and miscellaneous wood fixture manufacturing operations.

Source Address:	701 South N Street, Richmond, Indiana 47374
Mailing Address:	P.O. Box 1567, Richmond, Indiana 47374
General Source Phone Number:	705-935-2211
SIC Code:	2434
County Location:	Wayne
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Rules Major 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 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

(a) Five (5) spray coating booths, identified as B9B-1 and B9B-2, installed in 1987, and B9B-3 through B9B-5, installed in 1967, using dry filter for control, exhausting to stacks 1 through 5. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(b) Monorail Line #1 surface coating booths, including:

(1) Two (2) toner booths, identified as NMB-1 and NMB-2 installed in 1986, using dry filters for control, exhausting to Stacks NMS-1 and NMS-2.

(2) Two (2) stain booths identified as NMB-3 and NMB-4, installed in 1977, using dry filters for control, exhausting to stacks NMS-3 and NMS-4.

(3) Two (2) sealer booths identified as NMB-5 and NMB-6, installed in 1986, using dry filters for control, exhausting to stacks NMB-5 and NMB-6.

(4) Two (2) topcoat booths identified as NMB-7 and NMB-8, installed in 1986, using dry filters for control, exhausting to stacks NMB-7 and NMB-8.

Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(c) Monorail Line #2 surface coating booths, constructed in 1999, including:

(1) Two (2) toner booths identified as SMB-1 and SMB-2, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-1 and SMS-2.

(2) Two (2) stain booths identified as SMB-3 and SMB-4, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns

using dry filters for control, exhausting to stacks SMS-3 and SMS-4.

(3) One (1) pre-sealer/glaze booth identified as SMB-5, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-5.

(4) Two (2) sealer booths identified as SMB-6 and SMB-7, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-6 and SMS-7.

(5) Two (2) topcoat booths identified as SMB-8 and SMB-9, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-8 and SMS-9.

(6) One (1) repair booth identified as SMB-10, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-10.

Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(d) UV Flatline, including five (5) roller coaters, constructed in 1985, exhausting to stacks UVRS-1 through UVRS-5, with associated flash oven and drying tunnel, exhausting to stacks UVRS-1 through UVRS-5. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(e) One (1) spray coating booth, identified as EGB-1, installed in 2002, for applying “end grain equalizer” to doors with sponges, using filters for control. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(f) One woodworking operation, including a scrap wood grinding process, with three (3) baghouses for particulate matter control, identified as BH-1 and BH-2, exhausting to stacks BHS-1 and BHS-2. Wood chips from the grinder are transferred pneumatically and collected by cyclone [326 IAC 6.5-1-2(a)].

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour [326 IAC 6.5-1-2(a)], including:

(1) Two (2) 1.5 MMBtu/hr sealer drying ovens.

(2) One (1) 0.5 MMBtu/hr stain drying oven.

(3) Two (2) 7.5 MMBtu/hr air handlers.

(b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a fast flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive, blasting, pneumatic conveying, and woodworking operations.

(c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.
[326 IAC 6.5-1-2(a)]

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

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

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

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

B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T177-18525-00015, 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

B.4 Enforceability [326 IAC 2-7-7]

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

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

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

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

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

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

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

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

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

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This

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

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

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

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

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

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

and

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

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

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

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

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

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

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

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

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

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

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

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

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

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T177-18525-00015 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source’s existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

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

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

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

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

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

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

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

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

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

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

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
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 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

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

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

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

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

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

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

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

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

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

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

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

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

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

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of 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.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

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

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

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

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

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

C.5 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 by using ambient air quality modeling pursuant to 326 IAC 1-7-4.

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

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

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

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

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

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

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

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

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

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

C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale

such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

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

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

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on 12/18/1999.

(b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

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

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

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

(1) initial inspection and evaluation;

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

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

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

(1) monitoring results;

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

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

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

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

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

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

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

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) (“Regulated pollutant, which is used only for purposes of Section 19 of this rule”) from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

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

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

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

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

(a) Five (5) spray coating booths, identified as B9B-1 and B9B-2, installed in 1987, and B9B-3 through B9B-5, installed in 1967, using dry filter for control, exhausting to stacks 1 through 5. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(b) Monorail Line #1 surface coating booths, including:

(1) Two (2) toner booths, identified as NMB-1 and NMB-2 installed in 1986, using dry filters for control, exhausting to Stacks NMS-1 and NMS-2.

(2) Two (2) stain booths identified as NMB-3 and NMB-4, installed in 1977, using dry filters for control, exhausting to stacks NMS-3 and NMS-4.

(3) Two (2) sealer booths identified as NMB-5 and NMB-6, installed in 1986, using dry filters for control, exhausting to stacks NMB-5 and NMB-6.

(4) Two (2) topcoat booths identified as NMB-7 and NMB-8, installed in 1986, using dry filters for control, exhausting to stacks NMB-7 and NMB-8.

Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(c) Monorail Line #2 surface coating booths, constructed in 1999, including:

(1) Two (2) toner booths identified as SMB-1 and SMB-2, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-1 and SMS-2.

(2) Two (2) stain booths identified as SMB-3 and SMB-4, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-3 and SMS-4.

(3) One (1) pre-sealer/glaze booth identified as SMB-5, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-5.

(4) Two (2) sealer booths identified as SMB-6 and SMB-7, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-6 and SMS-7.

(5) Two (2) topcoat booths identified as SMB-8 and SMB-9, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-8 and SMS-9.

(6) One (1) repair booth identified as SMB-10, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-10.

Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(d) UV Flatline, including five (5) roller coaters, constructed in 1985, exhausting to stacks UVRS-1 through UVRS-5, with associated flash oven and drying tunnel, exhausting to stacks UVRS-1 through UVRS-5. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood

furniture surface coating booths.

(e) One (1) spray coating booth, identified as EGB-1, installed in 2002, for applying "end grain equalizer" to doors with sponges, using filters for control. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limits [326 IAC 2-2]

(a) Pursuant to CP177-9892-00015, issued on November 16, 1998, the input of VOC, including coatings, dilution solvents, and cleaning solvents, to the surface coating operations, including spray booths B9B-1 through B9B-5, Monorail Line #1, Monorail Line #2, and EGB-1 and the UV Flatline, shall be less than 246.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The VOC content of waste shipped offsite may be deducted from the reported monthly VOC usage. This usage limit is required to limit the potential to emit of VOC to less than 246.0 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

(b) The coatings applied by paint booths B9B-1 through B9B-5, Monorail Lines #1 and #2, and booth EGB-1 shall be limited such that the total PM and PM10 emissions shall not exceed 241 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The transfer efficiency of paint booths B9B-1 through B9B-5, Monorail Lines #1 and #2, and booth EGB-1 shall not be less than 50%.

(d) The control efficiency of the dry filters shall not be less than 90%.

Compliance with these limits will render the requirements of 326 IAC 2-2 not applicable with respect to PM and PM10.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (BACT), the surface coating applied to wood furniture and cabinets in booths B9B-1, B9B-2, NMB-1, NMB-2, NMB-5, NMB-6, NMB-7 and NMB-8 shall utilize one of the following application methods:

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

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

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

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets in booths SMB-1 through SMB-10 shall utilize one of the following application methods:

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

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

D.1.4 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a)(Particulate Matter Limitations), particulate matter (PM) emissions from each of the surface coating booths shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements [326 IAC 2-1.1-][326 IAC 2-7-6(1)]

D.1.6 Volatile Organic Compounds (VOC)

(a) Compliance with the VOC content and usage limitations contained in condition D.1.1(a) 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, and Anderson Office of Air Management reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) The Permittee shall determine the VOC content of the combined coating material and cleanup solvents in each shipment that is sent offsite. VOC content shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by EPA Reference Method 24 and the sampling procedures in 326 IAC 8-1-4 or other methods as approved by the Commissioner. If a shipment consists of separate containers, the Permittee shall sample and test each container for VOC. The testing shall be conducted in accordance with Section C- Performance Testing, except for notifying IDEM of the test in paragraph (a), all of paragraph (b), and all of paragraph (c).

(c) Compliance with the VOC usage limitations contained in condition D.1.1(a) shall be demonstrated within 30 days of the end of each month. This shall be based on the total volatile organic compound used for the previous month, minus the VOC solvent shipped out for recycling or disposal, and adding it to previous 11 months total VOC usage, minus the VOC solvent shipped out for recycling or disposal, so as to arrive at VOC emissions for the most recent twelve (12) consecutive month period.

(d) The VOC emissions for a month shall be calculated using the following equation:

$$\text{VOC emitted} = \text{SCL} - \text{SR}$$

Where:

SCL = The total amount of VOC, in tons, delivered to the coating applicators, including coatings, dilution solvents, and cleaning solvents, at the coating booths; and

SR = The total amount of VOC, in tons, shipped out for either recycling or disposal, including coatings, dilution solvents, and cleaning solvents, from the coating booths.

D.1.7 Particulate Matter (PM/PM10) Emissions Determination [326 IAC 2-2]

Compliance with Conditions D.1.1(b) shall be determined by calculating the PM/PM10 emissions associated with each coating applied by paint booths B9B-1 through B9B-5, Monorail Line#1 and #2 and booth EGB-1 using the following equation:

PM/PM10 = CU x D x W%S x (1-TE/100) x (1-CE/100) x 1/2000

Where:

PM/PM10 = The total PM/PM10 emissions (ton/month) for a given coating.

CU = The total coating use (gal coating/month) of a given coating.

D = The density (lb coating/gal coating) of a given coating.

W%S = The weight percent solids (lb solids/lb coating) of a given coating.

TE = The transfer efficiency (%) of the spray applicators. This value shall equal 75% or a value determined from the most recent valid compliance demonstration.

CE = The control efficiency (%) of the dry filters. This value shall equal 90% or a value determined from the most recent valid compliance demonstration.

The total PM/PM10 emissions (ton/month) from paint booths B9B-1 through B9B-5, Monorail Line#1 and #2 and booth EGB-1 is equal to the sum of the PM/PM10 emissions associated with each coating applied by those booths.

D.1.8 Particulate Control

In order to comply with condition D.1.1(d) and D.1.4, the dry filters for particulate control shall be in operation and control emissions from the surfacing coating booths at all times that the surface coating booths are in operation.

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

D.1.9 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. Section C – Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. Section C – Response to Excursions or Exceedances shall be followed whenever a condition exists which should

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

D.1.10 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1(a), 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 usage limits and/or the VOC emission limits established in Condition D.1.1, and to document the quantity of any VOC shipped offsite and deducted from total reported VOC usage. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

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

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

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

(B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents, if the VOC content of waste shipped offsites is deducted from the reported monthly VOC usage.

(3) The cleanup solvent usage for each month;

(4) The amount of VOC solvent shipped out to be recycled each month. Records shall include weight of coating material and cleaning solvent in each shipment, and VOC content test results, which are necessary to verify the type and amount recycled.

(5) The total VOC usage for each month; and

(6) The weight of VOCs usage, minus the VOC solvent shipped out to be recycled, for each compliance period.

(b) To document compliance with Condition D.1.1(b), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to demonstrate compliance with the PM/PM10 emission limits established in Condition D.1.1(b).

(1) The amount of each coating material used (as applied). Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(2) The density and weight percent solids of each coating material used (as applied).

(3) Calculations as determined in Condition D.1.7.

(c) To document compliance with Condition D.1.9, the Permittee shall maintain a log of weekly overspray observations, and daily and monthly inspections.

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

D.1.11 Reporting Requirements [326 IAC 2-1.1-11]

(a) A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements,

of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A quarterly summary of the monthly PM/PM10 emissions from the booths covered by Condition D.1.1 calculated in accordance with Condition D.1.7 shall be submitted to the address listed in Section C – General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

D.1.12 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.800(d), the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the wood furniture surface coating operations as specified in Appendix A of 40 CFR Part 63, Subpart JJ, in accordance with the schedule in 40 CFR 63, Subpart JJ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all of the required notifications and reports to:

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

D.1.13 National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations Requirements [40 CFR Part 63, Subpart JJ] [326 IAC 20-14]

Pursuant to 40 CFR Part 63, Subpart JJ, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart JJ, which are incorporated by reference as 326 IAC 20-14, for the wood furniture surface coating and spray adhesive operations as specified as follows.

Subpart JJ—National Emission Standards for Wood Furniture Manufacturing Operations

Source: 60 FR 62936, Dec. 7, 1995, unless otherwise noted.

§ 63.800 Applicability.

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

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

§ 63.801 Definitions.

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

Adhesive means any chemical substance that is applied for the purpose of bonding two surfaces together other than by mechanical means. Under this subpart, adhesives shall not be considered coatings or

finishing materials. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

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

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

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

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

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

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

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

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

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

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

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

(1) The VHAP content of a finishing material, contact adhesive, or solvent, by percent weight, measured using the EPA Method 311 (as promulgated in this subpart), or an equivalent or alternative method (or formulation data if the coating meets the criteria specified in §63.805(a));

(2) The solids content of a finishing material or contact adhesive by percent weight, determined using data from the EPA Method 24, or an alternative or equivalent method (or formulation data if the coating meets the criteria specified in §63.805 (a)); and

(3) The density, measured by EPA Method 24 or an alternative or equivalent method. Therefore, the reportable VHAP content shall represent the maximum aggregate emissions potential of the finishing material, adhesive, or solvent in concentrations greater than or equal to 1.0 percent by weight or 0.1 percent for VHAP that are carcinogens, as defined by the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR part 1910), as formulated. Only VHAP present in concentrations greater than or equal to 1.0 percent by weight, or 0.1 percent for VHAP that are carcinogens, must be reported on the CPDS. The purpose of the CPDS is to assist the affected source in demonstrating compliance with the emission limitations presented in §63.802.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Incinerator means, for the purposes of this industry, an enclosed combustion device that thermally oxidizes volatile organic compounds to CO and CO_2. This term does not include devices that burn municipal or hazardous waste material.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Strippable spray booth material means a coating that:

(1) Is applied to a spray booth wall to provide a protective film to receive over spray during finishing operations;

(2) That is subsequently peeled off and disposed; and

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

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

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

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

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

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

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

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

Volatile organic compound (VOC) means any organic compound which participates in atmospheric

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

meters per hour.

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

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

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

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

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

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

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

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

(23) bc=before control.

§ 63.802 Emission limits.

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

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

(2) Limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives based on the following criteria:

(i) For foam adhesives (contact adhesives used for upholstery operations) used in products that meet the upholstered seating flammability requirements of California Technical Bulletin 116, 117, or 133, the Business and Institutional Furniture Manufacturers Association's (BIFMA's) X5.7, UFAC flammability testing, or any similar requirements from local, State, or Federal fire regulatory agencies, the VHAP content of the adhesive shall not exceed 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied; or

(ii) For all other contact adhesives (including foam adhesives used in products that do not meet the standards presented in paragraph (a)(2)(i) of this section, but excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, the VHAP content of the adhesive shall not exceed 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied.

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

§ 63.803 Work practice standards.

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

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

or modifications to the plan do not require a revision of the source's Title V permit.

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

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

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

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

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

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

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

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

(2) An inspection schedule;

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

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

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

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

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

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

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

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

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

(f) *Spray booth cleaning.* Each owner or operator of an affected source shall not use compounds

containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) Using normally closed tanks for washoff; and

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

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

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

(2) Establishes a baseline level of usage by the affected source, for each VHAP identified in paragraph (l)(1) of this section. The baseline usage level shall be the highest annual usage from 1994, 1995, or

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

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

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

(i) The exceedance is no more than 15.0 percent above the baseline level;

(ii) Usage of the VHAP is below the de minimis level presented in Table 5 of this subpart for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in §63.805 (d) or (e);

(iii) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or

(iv) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.

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

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

§ 63.804 Compliance procedures and monitoring requirements.

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

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

$$E=(M_{c1}\,C_{c1}+M_{c2}\,C_{c2}+\ *\ *\ *+M_{cn}\,C_{cn}+S_1\,W_1+S_2\,W_2+\ *\ *\ *\,S_n\,W_n)/(M_{c1}+M_{c2}+\ *\ *\ *+M_{cn})$$ Equation 1

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

(i) Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than 1.0 kg VHAP/kg

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

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

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

(4) Use any combination of an averaging approach, as described in paragraph (a)(1) of this section, compliant finishing materials, as described in paragraph (a)(2) of this section, and a control system, as described in paragraph (a)(3) of this section.

(b) The owner or operator of an affected source subject to §63.802(a)(2)(i) shall comply with the provisions by using compliant foam adhesives with a VHAP content no greater than 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied.

(c) The owner or operator of an affected source subject to §63.802(a)(2)(ii) shall comply with those provisions by using either of the methods presented in §63.804 (c)(1) and (c)(2).

(1) Use compliant contact adhesives with a VHAP content no greater than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied; or

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

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

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

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

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

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

(3) Owners or operators of an affected source subject to the provisions of §63.802 (a)(1) or (b)(1) that are complying through the procedures established in §63.804 (a)(2) or (d)(2) and are applying coatings using continuous coaters shall demonstrate continuous compliance by following the procedures in paragraph (g)(3) (i) or (ii) of this section.

(i) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, using compliant thinners, and submitting a compliance

certification with the semiannual report required by §63.807(c).

(A) The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used.

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

(ii) Using compliant coatings, as determined by the VHAP content of the coating in the reservoir, using compliant thinners, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a compliance certification with the semiannual report required by §63.807(c).

(A) The compliance certification shall state that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the semiannual reporting period.

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

(C) An affected source is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit established in §63.804 (a)(2) or (d)(2), as determined using EPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating.

(5) Owners or operators of an affected source subject to the provisions of §63.802 (a)(2) (i) or (ii) or (b)(2) that comply through the procedures established in §63.804 (b), (c)(1), or (e)(1), shall submit a compliance certification with the semiannual report required by §63.807(c).

(i) The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.

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

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

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

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

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

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

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

operates the affected source.

§ 63.805 Performance test methods.

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

§ 63.806 Recordkeeping requirements.

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

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

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

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

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

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

(d) The owner or operator of an affected source following the compliance procedures of §63.804 (f)(3)(ii) and (g)(3)(ii) shall maintain the records required by §63.806(b) as well as records of the following:

(1) Solvent and coating additions to the continuous coater reservoir;

(2) Viscosity measurements; and

(3) Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance.

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

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

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

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

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

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

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

(h) The owner or operator of an affected source subject to the emission limits in §63.802 and following the compliance provisions of §63.804(f) (1), (2), (3), (5), (7) and (8) and §63.804(g) (1), (2), (3), (5), (7), and (8) shall maintain records of the compliance certifications submitted in accordance with §63.807(c) for each semiannual period following the compliance date.

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

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

§ 63.807 Reporting requirements.

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

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

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

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

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

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

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

§ 63.808 Implementation and enforcement.

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

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

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

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

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

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

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

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

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

Chemical name	CAS No.
Acetaldehyde	75070
Acetamide	60355
Acetonitrile	75058
Acetophenone	98862
2-Acetylaminofluorine	53963
Acrolein	107028
Acrylamide	79061
Acrylic acid	79107
Acrylonitrile	107131
Allyl chloride	107051
4-Aminobiphenyl	92671
Aniline	62533
o-Anisidine	90040
Benzene	71432
Benzidine	92875
Benzotrichloride	98077
Benzyl chloride	100447
Biphenyl	92524
Bis (2-ethylhexyl) phthalate (DEHP)	117817
Bis (chloromethyl) ether	542881
Bromoform	75252
1,3-Butadiene	106990
Carbon disulfide	75150
Carbon tetrachloride	56235
Carbonyl sulfide	463581
Catechol	120809
Chloroacetic acid	79118
2-Chloroacetophenone	532274
Chlorobenzene	108907
Chloroform	67663
Chloromethyl methyl ether	107302
Chloroprene	126998
Cresols (isomers and mixture)	1319773
o-Cresol	95487
m-Cresol	108394
p-Cresol	106445
Cumene	98828
2,4-D (2,4-Dichlorophenoxyacetic acid, including salts and esters)	94757
DDE (1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene)	72559
Diazomethane	334883
Dibenzofuran	132649
1,2-Dibromo-3-chloropropane	96128
Dibutylphthalate	84742
1,4-Dichlorobenzene	106467
3,3[prime]-Dichlorobenzidine	91941
Dichloroethyl ether (Bis(2-chloroethyl)ether)	111444

1,3-Dichloropropene	542756
Diethanolamine	111422
N,N-Dimethylaniline	121697
Diethyl sulfate	64675
3,3[prime]-Dimethoxybenzidine	119904
4-Dimethylaminoazobenzene	60117
3,3[prime]-Dimethylbenzidine	119937
Dimethylcarbamoyl chloride	79447
N,N-Dimethylformamide	68122
1,1-Dimethylhydrazine	57147
Dimethyl phthalate	131113
Dimethyl sulfate	77781
4,6-Dinitro-o-cresol, and salts	534521
2,4-Dinitrophenol	51285
2,4-Dinitrotoluene	121142
1,4-Dioxane (1,4-Diethyleneoxide)	123911
1,2-Diphenylhydrazine	122667
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106898
1,2-Epoxybutane	106887
Ethyl acrylate	140885
Ethylbenzene	100414
Ethyl carbamate (Urethane)	51796
Ethyl chloride (Chloroethane)	75003
Ethylene dibromide (Dibromoethane)	106934
Ethylene dichloride (1,2-Dichloroethane)	107062
Ethylene glycol	107211
Ethylene oxide	75218
Ethylenethiourea	96457
Ethylidene dichloride (1,1-Dichloroethane)	75343
Formaldehyde	50000
Glycolethers a	.....
Hexachlorobenzene	118741
Hexachloro-1,3-butadiene	87683
Hexachloroethane	67721
Hexamethylene-1,6-diisocyanate	822060
Hexamethylphosphoramide	680319
Hexane	110543
Hydrazine	302012
Hydroquinone	123319
Isophorone	78591
Maleic anhydride	108316
Methanol	67561
Methyl bromide (Bromomethane)	74839
Methyl chloride (Chloromethane)	74873
Methyl chloroform (1,1,1-Trichloroethane)	71556
Methyl ethyl ketone (2-Butanone)	78933
Methylhydrazine	60344
Methyl iodide (Iodomethane)	74884
Methyl isobutyl ketone (Hexone)	108101
Methyl isocyanate	624839
Methyl methacrylate	80626
Methyl tert-butyl ether	1634044
4,4[prime]-Methylenebis (2-chloroaniline)	101144
Methylene chloride (Dichloromethane)	75092
4,4[prime]-Methylenediphenyl diisocyanate (MDI)	101688
4,4[prime]-Methylenedianiline	101779
Naphthalene	91203
Nitrobenzene	98953
4-Nitrobiphenyl	92933
4-Nitrophenol	100027

2-Nitropropane	79469
N-Nitroso-N-methylurea	684935
N-Nitrosodimethylamine	62759
N-Nitrosomorpholine	59892
Phenol	108952
p-Phenylenediamine	106503
Phosgene	75445
Phthalic anhydride	85449
Polychlorinated biphenyls (Aroclors)	1336363
Polycyclic Organic Matter b	.....
1,3-Propane sultone	1120714
beta-Propiolactone	57578
Propionaldehyde	123386
Propoxur (Baygon)	114261
Propylene dichloride (1,2-Dichloropropane)	78875
Propylene oxide	75569
1,2-Propylenimine (2-Methyl aziridine)	75558
Quinone	106514
Styrene	100425
Styrene oxide	96093
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
1,1,2,2-Tetrachloroethane	79345
Tetrachloroethylene (Perchloroethylene)	127184
Toluene	108883
2,4-Toluenediamine	95807
Toluene-2,4-diisocyanate	584849
o-Toluidine	95534
1,2,4-Trichlorobenzene	120821
1,1,2-Trichloroethane	79005
Trichloroethylene	79016
2,4,5-Trichlorophenol	95954
2,4,6-Trichlorophenol	88062
Triethylamine	121448
Trifluralin	1582098
2,2,4-Trimethylpentane	540841
Vinyl acetate	108054
Vinyl bromide	593602
Vinyl chloride	75014
Vinylidene chloride (1,1-Dichloroethylene)	75354
Xylenes (isomers and mixture)	1330207
o-Xylene	95476
m-Xylene	108383
p-Xylene	106423

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

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

Emission point	Existing source	New source
Finishing Operations:		

(a) Achieve a weighted average VHAP content across all coatings (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied.....	a 1.0	a 0.8
(b) Use compliant finishing materials (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied):		
_stains.....	a 1.0	a 1.0
_washcoats.....	a,b 1.0	a,b 0.8
_sealers.....	a 1.0	a 0.8
_topcoats.....	a 1.0	a 0.8
_basecoats.....	a,b 1.0	a,b 0.8
_enamels.....	a,b 1.0	a,b 0.8
_thinners (maximum percent VHAP allowable); or.....	10.0	10.0
(c) As an alternative, use control device; or.....	c 1.0	c 0.8
(d) Use any combination of (a), (b), and (c)	1.0	0.8
Cleaning Operations:		
Strippable spray booth material (maximum VOC content, kg VOC/kg solids [lb VOC/lb solids]).....	0.8	0.8
Contact Adhesives:		
(a) Use compliant contact adhesives (maximum kg VHAP/kg solids [lb VHAP/lb solids], as applied) based on following criteria:		
i. For aerosol adhesives, and for contact adhesives applied to nonporous substrates.....	d NA	d NA
ii. For foam adhesives used in products that meet flammability requirements....	1.8	0.2
iii. For all other contact adhesives (including foam adhesives used in products that do not meet flammability requirements); or.....	1.0	0.2
(b) Use a control device.....	e 1.0	e 0.2

a The limits refer to the VHAP content of the coating, as applied.
b Washcoats, basecoats, and enamels must comply with the limits presented in this table if they are purchased premade, that is, if they are not formulated onsite by thinning other finishing materials. If they are formulated onsite, they must be formulated using compliant finishing materials, i.e., those that meet the limits specified in this table, and thinners containing no more than 3.0 percent VHAP by weight.
c The control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram (or 0.8 kilogram) of VHAP being emitted from the affected emission source per kilogram of solids used.
d There is no limit on the VHAP content of these adhesives.
e The control device must operate at an efficiency that is equivalent to no greater than 1.0 kilogram (or 0.2 kilogram) of VHAP being emitted from the affected emission source per kilogram of solids used.

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

Chemical name	CAS No.
4-Aminobiphenyl.....	92671
Styrene oxide.....	96093

Diethyl sulfate	64675
N-Nitrosomorpholine	59892
Dimethyl formamide	68122
Hexamethylphosphoramide	680319
Acetamide	60355
4,4[prime]-Methylenedianiline	101779
o-Anisidine	90040
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
Beryllium salts	.....
Benzidine	92875
N-Nitroso-N-methylurea	684935
Bis (chloromethyl) ether	542881
Dimethyl carbamoyl chloride	79447
Chromium compounds (hexavalent)	.....
1,2-Propylenimine (2-Methyl aziridine)	75558
Arsenic and inorganic arsenic compounds	99999904
Hydrazine	302012
1,1-Dimethyl hydrazine	57147
Beryllium compounds	7440417
1,2-Dibromo-3-chloropropane	96128
N-Nitrosodimethylamine	62759
Cadmium compounds	.....
Benzo (a) pyrene	50328
Polychlorinated biphenyls (Aroclors)	1336363
Heptachlor	76448
3,3[prime]-Dimethyl benzidine	119937
Nickel subsulfide	12035722
Acrylamide	79061
Hexachlorobenzene	118741
Chlordane	57749
1,3-Propane sultone	1120714
1,3-Butadiene	106990
Nickel refinery dust	.....
2-Acetylaminoflourine	53963
3,3[prime]-Dichlorobenzidine	53963
Lindane (hexachlorcyclohexane, gamma)	58899
2,4-Toluene diamine	95807
Dichloroethyl ether (Bis(2-chloroethyl) ether)	111444
1,2-Diphenylhydrazine	122667
Toxaphene (chlorinated camphene)	8001352
2,4-Dinitrotoluene	121142
3,3[prime]-Dimethoxybenzidine	119904
Formaldehyde	50000
4,4[prime]-Methylene bis (2-chloroaniline)	101144
Acrylonitrile	107131
Ethylene dibromide (1,2-Dibromoethane)	106934
DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	72559
Chlorobenzilate	510156
Dichlorvos	62737
Vinyl chloride	75014
Coke Oven Emissions	.....
Ethylene oxide	75218
Ethylene thiourea	96457
Vinyl bromide (bromoethene)	593602
Selenium sulfide (mono and di)	7488564
Chloroform	67663
Pentachlorophenol	87865
Ethyl carbamate (Urethane)	51796
Ethylene dichloride (1,2-Dichloroethane)	107062
Propylene dichloride (1,2-Dichloropropane)	78875

Carbon tetrachloride	56235
Benzene	71432
Methyl hydrazine	60344
Ethyl acrylate	140885
Propylene oxide	75569
Aniline	62533
1,4-Dichlorobenzene(p)	106467
2,4,6-Trichlorophenol	88062
Bis (2-ethylhexyl) phthalate (DEHP)	117817
o-Toluidine	95534
Propoxur	114261
1,4-Dioxane (1,4-Diethyleneoxide)	123911
Acetaldehyde	75070
Bromoform	75252
Captan	133062
Epichlorohydrin	106898
Methylene chloride (Dichloromethane)	75092
Dibenz (ah) anthracene	53703
Chrysene	218019
Dimethyl aminoazobenzene	60117
Benzo (a) anthracene	56553
Benzo (b) fluoranthene	205992
Antimony trioxide	1309644
2-Nitropropane	79469
1,3-Dichloropropene	542756
7, 12-Dimethylbenz(a) anthracene	57976
Benz(c) acridine	225514
Indeno(1,2,3-cd)pyrene	193395
1,2:7,8-Dibenzopyrene	189559

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

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

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

CAS No.	Chemical name	EPA de minimis, tons/yr*
92671	4-Aminobiphenyl	1.0
96093	Styrene oxide	1.0
64675	Diethyl sulfate	1.0

59892.....	N-Nitrosomorpholine.....	1.0
68122.....	Dimethyl formamide.....	1.0
680319.....	Hexamethylphosphoramide.....	0.01
60355.....	Acetamide.....	1.0
101779.....	4,4[prime]-Methylenedianiline....	1.0
90040.....	o-Anisidine.....	1.0
1746016.....	2,3,7,8-Tetrachlorodibenzo-p-dioxin.	0.00000006
92875.....	Benzidine.....	0.00003
684935.....	N-Nitroso-N-methylurea.....	0.00002
542881.....	Bis(chloromethyl) ether.....	0.00003
79447.....	Dimethyl carbamoyl chloride.....	0.002
75558.....	1,2-Propylenimine (2-Methyl aziridine).	0.0003
57147.....	1,1-Dimethyl hydrazine.....	0.0008
96128.....	1,2-Dibromo-3-chloropropane.....	0.001
62759.....	N-Nitrosodimethylamine.....	0.0001
50328.....	Benzo (a) pyrene.....	0.001
1336363.....	Polychlorinated biphenyls (Aroclors).	0.0009
76448.....	Heptachlor.....	0.002
119937.....	3,3[prime]-Dimethyl benzidine....	0.001
79061.....	Acrylamide.....	0.002
118741.....	Hexachlorobenzene.....	0.004
57749.....	Chlordane.....	0.005
1120714.....	1,3-Propane sultone.....	0.003
106990.....	1,3-Butadiene.....	0.007
53963.....	2-Acetylaminoflourine.....	0.0005
91941.....	3,3[prime]-Dichlorobenzidine.....	0.02
58899.....	Lindane (hexachlorocyclohexane, gamma).	0.005
95807.....	2,4-Toluene diamine.....	0.002
111444.....	Dichloroethyl ether (Bis(2-chloroethyl)ether).	0.006
122667.....	1,2_Diphenylhydrazine.....	0.009
8001352.....	Toxaphene (chlorinated camphene).	0.006
121142.....	2,4-Dinitrotoluene.....	0.002
119904.....	3,3[prime]-Dimethoxybenzidine....	0.01
50000.....	Formaldehyde.....	0.2
101144.....	4,4[prime]-Methylene bis(2-chloroaniline).	0.02
107131.....	Acrylonitrile.....	0.03
106934.....	Ethylene dibromide(1,2-Dibromoethane).	0.01
72559.....	DDE (1,1-p-chlorophenyl 1-2 dichloroethylene).	0.01
510156.....	Chlorobenzilate.....	0.04
62737.....	Dichlorvos.....	0.02
75014.....	Vinyl chloride.....	0.02
75218.....	Ethylene oxide.....	0.09
96457.....	Ethylene thiourea.....	0.06
593602.....	Vinyl bromide (bromoethene).....	0.06
67663.....	Chloroform.....	0.09
87865.....	Pentachlorophenol.....	0.07
51796.....	Ethyl carbamate (Urethane).....	0.08
107062.....	Ethylene dichloride (1,2-Dichloroethane).	0.08
78875.....	Propylene dichloride (1,2-Dichloropropane).	0.1
56235.....	Carbon tetrachloride.....	0.1

71432	Benzene	0.2
140885	Ethyl acrylate	0.1
75569	Propylene oxide	0.5
62533	Aniline	0.1
106467	1,4-Dichlorobenzene(p)	0.3
88062	2,4,6-Trichlorophenol	0.6
117817	Bis (2-ethylhexyl) phthalate (DEHP).	0.5
95534	o-Toluidine	0.4
114261	Propoxur	2.0
79016	Trichloroethylene	1.0
123911	1,4-Dioxane (1,4-Diethyleneoxide)	0.6
75070	Acetaldehyde	0.9
75252	Bromoform	2.0
133062	Captan	2.0
106898	Epichlorohydrin	2.0
75092	Methylene chloride (Dichloromethane).	4.0
127184	Tetrachloroethylene (Perchloroethylene).	4.0
53703	Dibenz (ah) anthracene	0.01
218019	Chrysene	0.01
60117	Dimethyl aminoazobenzene	1.0
56553	Benzo (a) anthracene	0.01
205992	Benzo (b) fluoranthene	0.01
79469	2-Nitropropane	1.0
542756	1,3-Dichloropropene	1.0
57976	7,12-Dimethylbenz (a) anthracene.	0.01
225514	Benz(c)acridine	0.01
193395	Indeno(1,2,3-cd)pyrene	0.01
189559	1,2:7,8-Dibenzopyrene	0.01
79345	1,1,2,2-Tetrachloroethane	0.03
91225	Quinoline	0.0006
75354	Vinylidene chloride (1,1-Dichloroethylene).	0.04
87683	Hexachlorobutadiene	0.09
82688	Pentachloronitrobenzene (Quintobenzene).	0.03
78591	Isophorone	0.7
79005	1,1,2-Trichloroethane	0.1
74873	Methyl chloride (Chloromethane)	1.0
67721	Hexachloroethane	0.5
1582098	Trifluralin	0.9
1319773	Cresols/Cresylic acid (isomers and mixture).	1.0
108394	m-Cresol	1.0
75343	Ethylidene dichloride (1,1-Dichloroethane).	1.0
95487	o-Cresol	1.0
106445	p-Cresol	1.0
74884	Methyl iodide (Iodomethane)	1.0
100425	Styrene	1.0
107051	Allyl chloride	1.0
334883	Diazomethane	1.0
95954	2,4,5_Trichlorophenol	1.0
133904	Chloramben	1.0
106887	1,2_Epoxybutane	1.0
108054	Vinyl acetate	1.0
126998	Chloroprene	1.0
123319	Hydroquinone	1.0

92933	4-Nitrobiphenyl	1.0
56382	Parathion	0.1
13463393	Nickel Carbonyl	0.1
60344	Methyl hydrazine	0.006
151564	Ethylene imine	0.0003
77781	Dimethyl sulfate	0.1
107302	Chloromethyl methyl ether	0.1
57578	beta-Propiolactone	0.1
100447	Benzyl chloride	0.04
98077	Benzotrichloride	0.0006
107028	Acrolein	0.04
584849	2,4_Toluene diisocyanate	0.1
75741	Tetramethyl lead	0.01
78002	Tetraethyl lead	0.01
12108133	Methylcyclopentadienyl manganese.	0.1
624839	Methyl isocyanate	0.1
77474	Hexachlorocyclopentadiene	0.1
62207765	Fluomine	0.1
10210681	Cobalt carbonyl	0.1
79118	Chloroacetic acid	0.1
534521	4,6-Dinitro-o-cresol, and salts	0.1
101688	Methylene diphenyl diisocyanate	0.1
108952	Phenol	0.1
62384	Mercury, (acetato-o) phenyl	0.01
98862	Acetophenone	1.0
108316	Maleic anhydride	1.0
532274	2-Chloroacetophenone	0.06
51285	2,4-Dinitrophenol	1.0
109864	2-Methyoxy ethanol	10.0
98953	Nitrobenzene	1.0
74839	Methyl bromide (Bromomethane)	10.0
75150	Carbon disulfide	1.0
121697	N,N-Dimethylaniline	1.0
106514	Quinone	5.0
123386	Propionaldehyde	5.0
120809	Catechol	5.0
85449	Phthalic anhydride	5.0
463581	Carbonyl sulfide	5.0
132649	Dibenzofurans	5.0
100027	4-Nitrophenol	5.0
540841	2,2,4-Trimethylpentane	5.0
111422	Diethanolamine	5.0
822060	Hexamethylene-1,6-diisocyanate	5.0
	Glycol ethersa	5.0
	Polycyclic organic matterb	0.01

---

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

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

ethylene glycol butyl ether acetate, ethylene glycol ethyl ether acetate, and diethylene glycol ethyl ether acetate.

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

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(f) One woodworking operation, including a scrap wood grinding process, with three (3) baghouses for particulate matter control, identified as BH-1 and BH-2, exhausting to stacks BHS-1 and BHS-2. Wood chips from the grinder are transferred pneumatically and collected by cyclone [326 IAC 6-1-2(a)].

Insignificant Activities:

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour [326 IAC 6.5-1-2(a)], including:

(1) Two (2) 1.5 MMBtu/hr sealer drying ovens.

(2) One (1) 0.5 MMBtu/hr stain drying oven.

(3) Two (2) 7.5 MMBtu/hr air handlers.

(b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a fast flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive, blasting, pneumatic conveying, and woodworking operations. [326 IAC 6.5-1-2]

(c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. [326 IAC 6.5-1-2(a)]

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

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD Minor Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), the PM and PM10 emissions from the woodworking operations, controlled by baghouses BH-1 and BH-2, shall not exceed the following pound per hour limitations:

Facility	PM/PM10 limit (lb/hr)
BH-1	0.295
BH-2	0.206

This emission limit is required to limit the potential to emit of PM and PM10 to less than 3.1 tons per twelve (12) consecutive month period and is a condition of operation of this facility. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.2.2 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a)(Particulate Matter Limitations), particulate matter (PM) emissions from the woodworking operation, the natural gas combustion sources, and the grinding and machining operations shall be limited to 0.03 grain per dry standard cubic foot of exhaust air.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the combustion unit and its woodworking, grinding, and machining operations and control devices.

Compliance Determination Requirements

D.2.4 Particulate Control

(a) In order to comply with condition D.2.1 and D.2.2, the baghouses and fabric filters for particulate control shall be in operation and control emissions from the woodworking operation and grinding and machining operations at all times that the 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 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.5 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust for the woodworking, grinding, and machining operations shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

D.2.6 Baghouse Inspections

An inspection shall be performed during the last month of 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.2.7 Broken or Failed Bag Detection

(a) For a single compartment baghouses controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

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

D.2.8 Record Keeping Requirements

(a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the woodworking stack exhaust or maintain a record of the reason why the visible emission notations were not taken. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation. (ie. The process did not operate that day).

(b) To document compliance with Condition D.2.6, the Permittee shall maintain records of the results of the inspections required under Condition D.2.6 and the dates the vents are redirected

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Masterbrand Cabinets, Inc.
Source Address: 701 South N Street, Richmond, Indiana 47374
Mailing Address: P.O. Box 1567, Richmond, Indiana 47374
Part 70 Permit No.: T177-18525-00015

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

Please check what document is being certified:

□ Annual Compliance Certification Letter

□ Test Result (specify)

□ Report (specify)

□ Notification (specify)

□ Affidavit (specify)

□ Other (specify)

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Masterbrand Cabinets, Inc.
Source Address: 701 South N Street, Richmond, Indiana 47374
Mailing Address: P.O. Box 1567, Richmond, Indiana 47374
Part 70 Permit No.: T177-18525-00015

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

□ This is an emergency as defined in 326 IAC 2-7-1(12)

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

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

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: Masterbrand Cabinets, Inc. Richmond Plant
Source Address: 701 South N Street, Richmond, Indiana 47394
Mailing Address: P.O. Box 1507, Richmond, Indiana 47374
Part 70 Permit No.: T177-18525-00015
Facility: Spray booths B9B-1 through B9B-5, EGB-1, Monorail Line #1, Monorail Line #2, UV Flatline
Parameter: VOC
Limit: Less than 246 tons per twelve (12) consecutive month period, with compliance determined at the end of each month

YEAR:

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous Months	12 Month Total
Month 1			
Waste shipped offsite			
Total			
Month 2			
Waste shipped offsite			
Total			
Month 3			
Waste shipped offsite			
Total			

☐ No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Masterbrand Cabinets, Inc. Richmond Plant
Source Address: 701 South N Street, Richmond, Indiana 47394
Mailing Address: P.O. Box 1507, Richmond, Indiana 47374
Part 70 Permit No.: T177-18525-00015
Facility: Spray booths B9B-1 through B9B-5, EGB-1, Monorail Line #1, Monorail Line #2, UV Flatline
Parameter: PM/PM10 Limit
Limit: Total PM and PM10 emissions shall not exceed 241 tons per twelve (12) consecutive month period with compliance determined at the end of each month (as calculated by Condition D.1.6).

YEAR:

Month	Column 1 This Month	Column 2 Previous Months	Column 1 + Column 2 12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Masterbrand Cabinets, Inc.
Source Address: 701 South N Street, Richmond, Indiana 47374
Mailing Address: P.O. Box 1567, Richmond, Indiana 47374
Part 70 Permit No.: T177-18525-00015

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Masterbrand Cabinets, Inc. – Richmond Plant
Source Location:	701 South N Street, Richmond, Indiana 47734
County:	Wayne
SIC Code:	2434
Operation Permit No.:	T177-5977-00015
Operation Permit Issuance Date:	September 16, 1999
Permit Renewal No.:	T177-18525-00015
Permit Reviewer:	ERG/TDP

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Masterbrand Cabinets, Inc., relating to the operation of a stationary kitchen cabinet and miscellaneous wood fixture manufacturing operation.

Permitted Emission Units and Pollution Control Equipment

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

(a) Five (5) spray coating booths, identified as B9B-1 and B9B-2, installed in 1987, and B9B-3 through B9B-5, installed in 1967, using dry filter for control, exhausting to stacks 1 through 5. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(b) Monorail Line #1 surface coating booths, including:

(1) Two (2) toner booths, identified as NMB-1 and NMB-2 installed in 1986, using dry filters for control, exhausting to Stacks NMS-1 and NMS-2.

(2) Two (2) stain booths identified as NMB-3 and NMB-4, installed in 1977, using dry filters for control, exhausting to stacks NMS-3 and NMS-4.

(3) Two (2) sealer booths identified as NMB-5 and NMB-6, installed in 1986, using dry filters for control, exhausting to stacks NMB-5 and NMB-6.

(4) Two (2) topcoat booths identified as NMB-7 and NMB-8, installed in 1986, using dry filters for control, exhausting to stacks NMB-7 and NMB-8.

Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(c) Monorail Line #2 surface coating booths, constructed in 1999, including:

(1) Two (2) toner booths identified as SMB-1 and SMB-2, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-1 and SMS-2.

(2) Two (2) stain booths identified as SMB-3 and SMB-4, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-3 and SMS-4.

(3) One (1) pre-sealer/glaze booth identified as SMB-5, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-5.

(4) Two (2) sealer booths identified as SMB-6 and SMB-7, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-6 and SMS-7.

(5) Two (2) topcoat booths identified as SMB-8 and SMB-9, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-8 and SMS-9.

(6) One (1) repair booth identified as SMB-10, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns using dry filters for control, exhausting to stacks SMS-10.

Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(d) UV Flatline, including five (5) roller coaters, constructed in 1985, exhausting to stacks UVRS-1 through UVRS-5, with associated flash oven and drying tunnel, exhausting to stacks UVRS-1 through UVRS-5. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(e) One (1) spray coating booth, identified as EGB-1, installed in 2002, for applying “end grain equalizer” to doors with sponges, using filters for control. Under 40 CFR 63, Subpart JJ, these booths are considered existing wood furniture surface coating booths.

(f) One woodworking operation, including a scrap wood grinding process, with three (3) baghouses for particulate matter control, identified as BH-1 and BH-2, exhausting to stacks BHS-1 and BHS-2. Wood chips from the grinder are transferred pneumatically and collected by cyclone [326 IAC 6.5-1-2(a)].

Unpermitted Emission Units and Pollution Control Equipment

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

Insignificant Activities

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour [326 IAC 6.5-1-2(a)], including:

(1) Two (2) 1.5 MMBtu/hr sealer drying ovens.

(2) One (1) 0.5 MMBtu/hr stain drying oven.

(3) Two (2) 7.5 MMBtu/hr air handlers.

(b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu/hour.

(c) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, and automobiles and having a storage capacity less than or equal to 10,500 gallons.

(d) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.

(e) Degreasing operations that do not exceed 145 gallons per twelve (12) months that are not subject to 326 IAC 20-6 and were constructed before January 1, 1980.

(f) Exposure chambers ("towers", "columns") for curing of ultraviolet inks and ultra-violet coatings where heat is the intended discharge.

(g) Solvent recycling systems with batch capacity less than or equal to 100 gallons.

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

(i) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. [326 IAC 6.5-1-2(a)]

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

(k) One-site fire and emergency response training approved by the department.

(l) Other emergency equipment as follows: stationary fire pumps.

(m) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a fast flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive, blasting, pneumatic conveying, and woodworking operations. [326 IAC 6.5-1-2(a)]

(n) Filter or coalesce media changeout.

Existing Approvals

The source has been operating under Title V Operating Permit 177-5977-00015, issued on September 16, 1999, and under the following approvals:

(a) First Reopening 177-13531-00015, issued on January 4, 2002.

(b) First Administrative Amendment 177-15388-00015, issued on July 22, 2002.

(c) Second Administrative Amendment 177-16261-00015, issued on August 26, 2002.

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

The following terms and conditions from previous approvals have been revised in this Part 70 permit:

(a) PSD Minor Limit: Condition D.1.1(c): During the first twelve (12) months of operation, the input of VOC to the coating facilities shall be limited such that the total usage divided by the accumulated months of operation shall not exceed the limit specified.

Reason for revision: This requirement is no longer applicable. The initial twelve (12) month time-frame for this operation has expired.

In addition, the PSD Minor Limit was revised to include a limit for particulate matter (PM) and PM10. This limit is required to limit the potential to emit of PM and PM10 from the facility to less than 250 tons per year, to retain minor source status.

(b) Particulate Matter (PM): Condition D.2.2: The PM from each of the coating spray booths and the roller coaters shall not exceed the pound per hour emission rate established as E in the following formula.

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

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

Reason for revision: Condition D.1.7, Condition D.2.2, and 326 IAC 6-3-2 are not applicable to this facility. The facility is located in Wayne County. Therefore, the facility is subject to the particulate matter limitations of 326 IAC 6.5-1-2 (see discussion of State Rule Applicability below).

(c) Baghouse Limitations: Condition D.2.1: The woodworking operations controlled by a baghouse shall be an insignificant activity for Title V permitting purposes provided that the baghouse operations meet the requirements of 326 IAC 2-7-1(21)(G)(xxix).

Reason for revision: The Permittee requested that the woodworking operations no longer be considered an insignificant activity. A new dust collector was installed in 2004, to replace the existing baghouse B-WW-2. The new baghouse has a higher design flowrate and increases the PTE by 1.15 tons per year.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

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

An administratively complete Part 70 permit renewal application for the purposes of this review was received on December 17, 2003.

There was no notice of completeness letter mailed to the Permittee.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 13).

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	greater than 250
PM-10	greater than 250
SO_2	0.30
VOC	greater than 250
CO	46.0
NO_x	54.8

HAPs	tons/year
Xylene	greater than 10
Total	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM10 and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

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

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.

Potential to Emit of the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

The source was issued a Part 70 Operating Permit on September 16, 1999. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of the original Part 70 operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (tons/year)						
Process/emission unit	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Surface coating: paint booths B9B-1 through B9B-5; Monorail lines 1 and 2; UV Flatline, and spray booth EGB-1	241	241	0.0	246.0	0.0	0.0	112.0
Woodworking operations	2.2	3.09	0.0	0.0	0.0	0.0	0.0
Natural gas combustion	4.2	4.2	0.3	3.0	46.0	54.8	0.0
Total PTE	247	247	0.3	249.0	46.0	54.8	112.0

(a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are limited to less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	--
PM10	1
PM2.5	1
SO_2	--
VOC	135
CO	--
NO_x	--
HAP	--

"--" no data submitted.

County Attainment Status

The source is located in Wayne County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO_2	Maintenance Attainment
NO_2	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

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

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) emissions 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. Wayne 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) Wayne County has been classified as attainment or unclassifiable for PM10, SO_2, NO_2, CO, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Wayne County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

(d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD applicability.

Part 70 Permit Conditions

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

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) This source does have pollutant-specific emissions units as defined in 40 CFR 64.1 for any regulated pollutant, including the scrap wood grinding process and the wood furniture coating operations:

(1) with the potential to emit before controls equal to or greater than the major source threshold for PM10,

(2) that is subject to an emission limitation or standard for PM10, and

(3) uses a control device as defined in 40 CFR Part 64.1 to comply with that emission limitation or standard.

Therefore, the scrap wood grinding process and the wood furniture coating operations are subject to 40 CFR 64, Compliance Assurance Monitoring (CAM). The Permittee has submitted the following Compliance Assurance Monitoring (CAM) plan for the scrap wood grinding process:

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

(2) An inspection shall be performed each calendar quarter of all bags controlling the woodworking process 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. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

(3) In the event that bag failure has been observed:

(A) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the

event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in Section C - Response to Excursions or Exceedances shall be initiated. For any failure with corresponding response steps and timetable not described in Section C - Response to Excursions or Exceedances, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a violation of this permit.

(B) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

The Permittee has submitted the following CAM plan for the wood furniture coating operation:

(1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. Section C – Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(2) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. Section C – Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

(c) The requirements of 40 CFR 60, Subpart K, Ka, and Kb are not included in this permit because the storage capacities of the insignificant VOC and HAP storage tanks are less than 1,000 gallons (3.7 m^3).

(d) The wood furniture manufacturing and surface coating operations at this source are subject to the National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations (40 CFR 63, Subpart JJ), which is incorporated by reference as 326 IAC 20-14. This source is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and is located at a site that is a major source of HAPs. This source is an existing source because the wood furniture manufacturing and surface coating operations existed at this site prior to December 7, 1995.

The existing affected source associated with the production of wood furniture surface coating booths and wood furniture manufacturing operations, including Booths B9B-1 through B9B-5, Monorail #1, Monorail #2, EGB-1, and the UV Flatline, is subject to the

following portions of 40 CFR 63, Subpart JJ. Non-applicable portions of the NESHAP are not included in the permit.

(1) 40 CFR 63.800(a), (d)
(2) 40 CFR 63.801
(3) 40 CFR 63.802(a)
(4) 40 CFR 63.803(a) - (g)
(5) 40 CFR 63.803(h)(1) - (3), (h)(5), (h)(6)
(6) 40 CFR 63.803(i) - (l)
(7) 40 CFR 63.804(a)(1), (a)(2) and (a)(4)
(8) 40 CFR 63.804(b)
(9) 40 CFR 63.804(c)(1)
(10) 40 CFR 63.804(g)(1) - (g)(3), (g)(5), (g)(7) and (g)(8)
(11) 40 CFR 63.805(a)
(12) 40 CFR 63.806(a) - (e)
(13) 40 CFR 63.806(h) - (j)
(14) 40 CFR 63.807(a), (c), (e)
(15) 40 CFR 63.808
(16) Tables 2 through 6 to 40 CFR 63, Subpart JJ (the applicable portions).

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the affected facilities except when otherwise specified in 40 CFR 63, Subpart JJ.

(e) The requirements of 40 CFR 63, Subpart T (National Emission Standards for Halogenated Solvent Cleaning) are not included in this permit because the insignificant degreasing operation does not utilize any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent.

(f) The requirements of 40 CFR 63, Subpart ZZZZ (National Emission Standards for Reciprocating Internal Combustion Engines) are not included in this permit because insignificant internal combustion engines have a site-rating of less than 500 brake horsepower.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is not 1 of the 28 listed source categories, and was built in 1911, prior to the promulgation of PSD regulations. Because the source was constructed prior to the applicability of PSD regulations, the source did not require a PSD permit and was classified as an existing major source.

In 1999, the source installed Monorail Line #2, which had the potential to emit of VOC of 660 tons per year. The construction permit (CP 177-9892-00015 issued November 16, 1998) limited emissions of VOC from all new and existing surface coating facilities to less than 246 tons per year, which is less than the two hundred fifty (250) ton applicability threshold. In 2002, the equalizer process, which uses a water-based coating, was moved from one area to another, and required the construction of an additional booth, GB-1. Since the source kept the 246 ton per year limit on VOC for all surface coating facilities, PSD did not apply.

Pursuant to CP 177-9892-00015, issued on September 16, 1998:

(a) The input of VOC to all existing surface coating facilities, including spray booths, identified as B9B-1 through B9B-5, and EGB-1, Monorail Line #1, Monorail Line #2, and the UV Flatline shall be limited to less than 246 tons per twelve (12) consecutive month period.

(b) VOC input shall include any clean up solvent, minus any solvent collected and shipped offsite.

This usage limit is required to limit the potential to emit of VOC to less than 250 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

The installation of Monorail #2 in 1999 increased the potential to emit of PM and PM10 from the facility to 370 tons per year, which exceeds the applicability threshold for a major source. This was not identified in the original Part 70 operating permit (T177-5977-00015 issued September 16, 1997). Monorail #2 and the existing coating booths are equipped with particulate dry filters for controls. The operating permit (T177-5977-0015) limited the particulate from all coating booths per 326 IAC 6-3-2, and required that the dry filters be in operation at all times the coating booths are in operation, to comply with the limit. This effectively limited the spray booths to less than 250 tons per year. Therefore, the actual emissions from the coating booths have not exceeded the major source threshold.

To ensure PSD minor source status, the coatings applied by paint booths B9B-1 through B9B-5, Monorail #1, Monorail #2, and booth EGB-1 shall be limited such that total PM emissions shall not exceed 241 tons per twelve consecutive month period with compliance determined at the end of each month. The coatings applied by paint booths B9B-1 through B9B-5, Monorail #1, Monorail #2, and booth EGB-1 shall be limited such that the total PM10 emissions shall not exceed 241 tons per twelve consecutive month period with compliance determined at the end of each month. The transfer efficiency of paint booths B9B-1 through B9B-5, Monorail #1, Monorail #2, and booth EGB-1 shall not be less than 50%, and the control efficiency of the dry filters shall not be less than 90%.

The woodworking operation, controlled by baghouses BH-1 and BH-2 has the potential to emit greater than 250 tons per year. The operating permit (T177-5977-0015) limited the particulate from the woodworking operations per 326 IAC 6-3-2, and required that the baghouses BH-1 and BH-2, be in operation at all times the woodworking facilities are in operation. Therefore, the actual emissions from the woodworking operation have never exceeded the major source threshold.

To ensure PSD minor source status, the PM and PM10 emissions from the woodworking operations, controlled by baghouses BH-1 and BH-2, shall not exceed the following pound per hour limitations:

Facility	PM/PM10 limit (lb/hr)
BH-1	0.295
BH-2	0.206

These emission limits are required to limit the potential to emit of PM and PM10 to less than 3.1 tons per twelve (12) consecutive month period for the woodworking operation to less than 250 tons per twelve (12) consecutive month period for the entire source. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source submitted a Preventive Maintenance Plan (PMP) on May 31, 1996.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2005 and every 3 years after. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

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

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

326 IAC 6-4 (Fugitive Dust)

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).

State Rule Applicability – Surface Coating Operations

326 IAC 6.5-1-2 (Particulate Matter Limitations)

The wood furniture surface coating operations are subject to 326 IAC 6.5-1-2 (Particulate Matter Limitations) because the source is located in Wayne County and has the potential to emit at least one hundred (100) tons of particulate matter per year.

Pursuant to 326 IAC 6.5-1-2 (Particulate Matter Limitations), the particulate matter emissions from the surface coating operations shall not exceed three-hundreths (0.03) grain per dry standard cubic foot.

Pursuant to T177-5977-00015, particulate from the surface coating operations shall be controlled by a dry particulate filter, and the Permittee shall operate the control devices in accordance with the manufacturer's specifications.

326 IAC 6.5-10-1 (Particulate Matter Limitations; Wayne County)

The wood furniture surface coating operations are not subject to 326 IAC 6.5-10-1 (Particulate Matter Limitations; Wayne County) because the facility is not specifically listed in this rule.

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

(a) The surface coating booths identified as B9B-1 through B9B-5 and NMB-1, NMB-2, NMB-5, NMB-6, NMB-7, and NMB-8 are located in Wayne County, apply surface coatings to wood furniture and cabinets and were constructed prior to July 1, 1990. Therefore, the requirements of 326 IAC 8-2-12 do not apply.

(b) The surface coating booths identified as SMB-1 through SMB-10 apply surface coatings to wood furniture and cabinets, were constructed after July 1, 1990, and have actual emissions of greater than fifteen (15) pounds of VOC per day before add-on controls. Therefore, they are subject to 326 IAC 8-2-12.

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets by booths SMB-1 through SMB-10 shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application

Dip-and-Drain Application

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

This rule is not applicable to the UV flatline because it was installed before July 1, 1990, and Booth EGB-1, which uses a water-based coating and has actual VOC emissions of less than 15 lbs per day.

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

(a) Pursuant to T177-5977-00015, issued September 16, 1999, the surface coating booths B9B-1, B9B-2, NMB-1, NMB-2, NMB-5, NMB-6, NMB-7 and NMB-8 were constructed after January 1, 1980 and have a potential to emit VOC greater than twenty-five (25) tons per year. Therefore, these spray booths are subject to the requirements of 326 IAC 8-1-6. These emission units comply with the requirements of 326 IAC 8-2-12, by using HVLP or air assisted airless application methods, to meet the requirements of 326 IAC 8-1-6.

(b) Although constructed after January 1, 1980, the potential VOC emissions from the UV Flatline and EGB-1 are each less than to 25 tons per year; therefore, 326 IAC 8-1-6 does not apply to this facility.

(c) Although constructed after January 1, 1980, the surface coating spray booths SMB-1 through SMB-10 are subject to the provisions of 326 8-2-12. Therefore, these facilities are not subject to 326 IAC 8-1-6.

(d) The surface coating spray booths B9B-3 through B9B-5 were installed in 1967 and booths NMB-3 and NMB-4 were installed in 1977. Therefore, these booths are not subject to 326 IAC 8-1-6.

326 IAC 8-6-1 (Organic Solvent Emission Limitations)

This source was constructed prior to October 7, 1974; therefore, the limitations of 326 IAC 8-6-1 (Organic Solvent Emission Limitations) do not apply.

State Rule Applicability - Woodworking Operations

326 IAC 6.5-1-2 (Particulate Matter Limitations)

This source has the potential to emit greater than one hundred (100) tons per year particulate, and the facility is located in Wayne County. Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations), the particulate matter emissions from the woodworking operation shall not exceed three-hundreths (0.03) grain per dry standard cubic foot.

Pursuant to T177-5977-00015, particulate from the woodworking operations shall be controlled by baghouses BH-1 and BH-2, and the Permittee shall operate the control devices in accordance with the manufacturer's specifications.

State Rule Applicability - Insignificant Activities

326 IAC 6.5-1-2 (Particulate Matter Limitations)

The trimming, grinding, and machining operations, and the natural-gas fired ovens and air handlers, are subject to 326 IAC 6.5-1-2 (Particulate Matter Limitations) because the facility is located in Wayne County and has the potential to emit one hundred (100) tons of particulate matter per year. Pursuant to 326 IAC 6.5-1-2(a), the particulate matter emissions from the trimming, grinding, machining, and natural-gas fired combustion operations shall not exceed three-hundredths (0.03) grain per dry standard cubic foot.

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The degreasing operations are not subject to 326 IAC 8-3 because the source is located in Wayne County and the degreasing facility was constructed before January 1, 1980.

Testing Requirements

The Permittee will maintain records of the amount and VOC content of each coating applied. The Permittee will follow compliance determination and monitoring conditions to control particulate emissions and comply with PSD limits. [Note: No stack tests were required in their current Part 70 permit (T177-5977-00015, issued September 16, 1998).]

Compliance Requirements

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

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the approporiate corrective actions within a specific time period.

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

1. The surface coating operations have applicable compliance monitoring conditions as specified below:

   (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while one or more of the booths are in operation. Section C – Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

   (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. Section C – Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

   These monitoring conditions are necessary because the baghouses must operate properly to ensure compliance with 326 IAC 6.5-1-2(a), 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 2-7 (Part 70) and 40 CFR Part 64 (CAM).

2. The woodworking operations have applicable compliance monitoring conditions as specified below:

   (a) Visible emission notations of the woodworking stack exhaust shall be performed once per day during normal daylight operations when exhausting to the

atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

(f) An inspection shall be performed each calendar quarter of all bags controlling the process 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. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

(g) In the event that bag failure has been observed:

(1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in Section C - Response to Excursions or Exceedances shall be initiated. For any failure with corresponding response steps and timetable not described in Section C - Response to Excursions or Exceedances, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a violation of this permit.

(2) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouses for the woodworking operation must operate properly to ensure compliance with 326

IAC 6.5-1-2 (Nonattainment Area Limitations), 326 IAC 2-7 (Part 70) and 40 CFR Part 64 (CAM).

Conclusion

The operation of this stationary kitchen cabinet and miscellaneous wood fixture manufacturing operation shall be subject to the conditions of this Part 70 permit T177-18525-00015.

Appendix A: Emissions Calculations
VOC and Particulate
From Booths 1-5

Company Name: Masterbrand Cabinets, Inc. - Richmond Plant
Address : 701 South "N" Street, Richmond, Indiana 47374
Permit Number: 18525
Plt ID: 177-00015
Reviewer: ERG/TDP
Date: March 27, 2007

Booth ID	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	PTE of VOC (lb/hr)	PTE of VOC (lb/day)	PTE of VOC (tons/yr)	PTE of PM/PM10 (ton/yr)	Transfer Efficiency
Spray Booths: Top Coats	Aqua Plaz LF Clear	8.6	63.3%	50.8%	12.5%	52.5%	31.7%	0.05	25.0	2.26	1.08	1.34	32.3	5.89	8.7	50%
Booths: B9B-1, B9B-2, and	WW Rel Plaz	8.0	62.8%	0.0%	62.8%	0.0%	29.3%	0.05	25.0	4.99	4.99	6.2	150	27.3	8.1	50%
B9B-5	Matador 60 Turbo	10.9	23.7%	0.0%	23.7%	0.0%	63.4%	0.05	25.0	2.58	2.58	3.22	77	14.1	22.7	50%
	Catalyst 2750	7.3	85.4%	0.0%	85.4%	0.0%	7.42%	0.003	25.0	6.25	6.25	0.47	11.2	2.05	0.18	50%
	Rel Var Retarder	6.8	100%	0.0%	100.0%	0.0%	0.00%	0.005	25.0	6.75	6.75	0.84	20.3	3.70	0.00	50%
thinner:	Winter Topcoat Reducer	7.3	100%	0.0%	100.0%	0.0%	0.00%	0.006	25.0	7.26	7.26	1.09	26.1	4.77	0.00	50%
											Worst case coating:	**6.2**	**150**	**27.3**	**22.7**	
Spray Booths: Stains	Nat. Light Toner	6.9	93.2%	0.02%	93.2%	0.02%	4.41%	0.05	25.0	6.42	6.42	8.0	193	35.1	1.29	50%
Booths: B9B-1 through B9B-5	Burgundy Wipe Stain	8.2	69.2%	0.0%	69.2%	0.0%	79.1%	0.05	25.0	5.65	5.65	7.1	170	30.9	6.9	50%
	Nutmeg No-Wipe Stain	7.2	90.5%	0.0%	90.5%	0.0%	4.26%	0.05	25.0	6.55	6.55	8.2	196	35.8	1.87	50%
	Frost Toner	7.8	88.5%	0.00%	88.5%	0.00%	2.90%	0.05	25.0	6.87	6.87	8.6	206	37.6	2.44	50%
	Clear No-Wipe Stain	6.6	98.0%	0.00%	98.0%	0.00%	1.36%	0.002	25.0	6.44	6.44	0.32	7.7	1.41	0.01	50%
											Worst case coating:	**8.6**	**206**	**37.6**	**6.9**	
Spray Booths: Sealers	Rel Prime Sealer	7.6	72.6%	0.00%	72.6%	0.00%	20.2%	0.08	25.0	5.53	5.53	11.1	265	48.4	9.2	50%
Booths: B9B-1, B9B-2, and	Bernyl Surface White	10.8	32.4%	0.00%	32.4%	0.00%	48.7%	0.08	25.0	3.49	3.49	7.0	168	30.6	31.9	50%
B9B-5	Catalyst 2750	7.3	85.4%	0.00%	85.4%	0.00%	7.42%	0.003	25.0	6.25	6.25	0.47	11.2	2.05	0.18	50%
	Thinner 219	7.1	100%	0.00%	100.0%	0.00%	0.00%	0.004	25.0	7.13	7.13	0.71	17.1	3.12	0.00	50%
Spray Booths: Solvent	Reducer	7.3	100%	0.0%	100.0%	0.00%	0.00%	0.008	25.0	7.25	7.25	1.45	34.8	6.4	0.00	50%
											Worst case coating:	**11.1**	**265**	**48.4**	**31.9**	

State Potential Emissions **Worst Case PTE:** **113** **62**

METHODOLOGY

Controlled PTE PM (tons/yr): **6.2**
With 90% Control Efficiency
Using Dry Filters

Pounds of VOC per Gallon Coating less Water = Density (lb/gal) * Weight % Organics * 1/(1-Volume % water)
Pounds of VOC per Gallon Coating = Density (lb/gal) * Weight % Organics
PTE of VOC (lb/hr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
PTE of VOC (lb/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 24 hr/day
PTE of VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 8760 hr/yr * 1 ton/2000 lbs
PTE of PM/PM10 (tons/yr) = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer Efficiency %) * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emission Calculations
HAP Emissions
From Booths 1-5

Company Name: Masterbrand Cabinets, Inc. - Richmond Plant
Address: 701 South "N" Street, Richmond, Indiana 47374
Permit Number: 18525
Plt ID: 177-00015
Permit Reviewer: ERG/TDP
Date: March 27, 2007

Topcoats (booths B9B-1, B9B-2, B9B-5)

Material	Density (lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Aqua Plaz LF Clear	8.62	0.05	25.00	0.00%	0.00%	11.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	5.19	0.00	0.00	0.00	0.00	0.00
WW Rel Plaz	7.95	0.05	25.00	0.00%	0.00%	11.0%	0.00%	0.00%	0.00%	4.80%	0.30%	0.00	0.00	4.79	0.00	0.00	0.00	2.09	0.13
Matador 60 Turbo	10.9	0.05	25.00	0.00%	0.00%	0.00%	0.00%	0.00%	19.7%	0.00%	0.20%	0.00	0.00	0.00	0.00	0.00	11.7	0.00	0.12
Catalyst 2750	7.32	0.003	25.00	60.0%	0.00%	0.00%	0.00%	0.00%	30.0%	0.00%	0.00%	1.44	0.00	0.00	0.00	0.00	0.72	0.00	0.00
Rel Var Retarder	6.75	0.005	25.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winter Topcoat Reducer	7.26	0.006	25.00	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**4.77**	**0.00**	**5.19**	**0.00**	**0.00**	**11.7**	**2.09**	**0.13**

Stains (Booths B9B-1 through B9B-5)

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Nat. Light Toner	6.89	0.05	25.00	10.3%	62.7%	0.00%	2.30%	0.00%	0.00%	0.00%	0.00%	3.89	23.7	0.00	0.87	0.00	0.00	0.00	0.00
Burgundy Wipe Stain	8.17	0.05	25.00	3.23%	0.00%	0.01%	0.00%	0.00%	17.0%	3.86%	0.00%	1.44	0.00	0.00	0.00	0.00	7.6	1.73	0.00
Nutmeg No-Wipe Stain	7.23	0.05	25.00	16.8%	0.00%	0.00%	0.00%	0.00%	5.22%	0.00%	0.00%	6.7	0.00	0.00	0.00	0.00	2.07	0.00	0.00
Frost Toner	7.76	0.05	25.00	16.5%	7.70%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	7.0	3.27	0.00	0.01	0.00	0.00	0.00	0.00
Clear No-Wipe Stain	6.57	0.002	25.00	20.2%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**7.0**	**23.7**	**0.00**	**0.87**	**0.00**	**7.6**	**1.73**	**0.00**

Sealers (Booths B9B-1, B9B-2, and B9B-5)

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Rel Prime Sealer	7.62	0.08	25.00	14.9%	0.00%	10.7%	0.00%	0.00%	8.30%	2.00%	20.0%	9.9	0.00	7.14	0.00	0.00	5.54	1.34	13.4
Bernyl Surface White	10.8	0.08	25.00	0.00%	0.00%	0.00%	0.00%	0.00%	10.0%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	9.4	0.00	0.00
Catalyst 2750	7.32	0.003	25.00	0.00%	0.00%	0.00%	0.00%	0.00%	60.0%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00
Thinner 219	7.13	0.004	25.00	19.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**9.9**	**0.00**	**7.1**	**0.00**	**0.00**	**9.4**	**1.34**	**13.4**

Solvent (All Spray Booths)

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Reducer	7.25	0.008	25.00	0.00%	0.00%	0.00%	0.00%	1.50%	3.00%	0.50%	0.00%	0.00	0.00	0.00	0.00	0.10	0.19	0.03	0.00
											Worst Case Coating:	0.00	0.00	0.00	0.00	0.10	0.19	0.03	0.00

Total State Potential Emissions — **Worst Case PTE:** **21.7** **23.7** **12.3** **0.9** **0.1** **29.0** **5.2** **13.5**

METHODOLOGY

106
TOTAL HAPS

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

Appendix A: Emissions Calculations
VOC and Particulate
From Monorail #1

Company Name: Masterbrand Cabinets, Inc. - Richmond Plant
Address : 701 South "N" Street, Richmond, Indiana 47374
Permit Number: 18525
Plt ID: 177-00015
Reviewer: ERG/TDP
Date: March 27, 2007

Booth ID	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	PTE of VOC (lb/hr)	PTE of VOC (lb/day)	PTE of VOC (tons/yr)	PTE of PM/PM10 (ton/yr)	Transfer Efficiency
Spray Booths: Top Coats	Aqua Plaz LF Clear	8.6	63.3%	50.8%	12.5%	52.5%	31.7%	0.05	77.0	2.26	1.08	4.14	99.4	18.14	26.7	50%
Booths: NMB-7 and NMB-8	WW Rel Plaz	8.0	62.8%	0.0%	62.8%	0.0%	29.3%	0.05	77.0	4.99	4.99	19.2	461	84.1	25.0	50%
	Matador 60 Turbo	10.9	23.7%	0.0%	23.7%	0.0%	63.4%	0.05	77.0	2.58	2.58	9.93	238	43.5	70.1	50%
	Catalyst 2750	7.3	85.4%	0.0%	85.4%	0.0%	7.42%	0.003	77.0	6.25	6.25	1.44	34.6	6.32	0.54	50%
	Rel Var Retarder	6.8	100%	0.0%	100.0%	0.0%	0.00%	0.005	77.0	6.75	6.75	2.60	62.4	11.38	0.00	50%
thinner:	Winter Topcoat Reducer	7.3	100%	0.0%	100.0%	0.0%	0.00%	0.006	77.0	7.26	7.26	3.35	80.5	14.69	0.00	50%
											Worst Case Coating:	**19.2**	**461**	**84.1**	**70.1**	
Spray Booths: Stains	Nat. Light Toner	6.9	93.2%	0.02%	93.2%	0.02%	4.41%	0.05	77.0	6.42	6.42	24.7	593	108	3.96	50%
Booths: NMB-1 through	Burgundy Wipe Stain	8.2	69.2%	0.0%	69.2%	0.0%	79.1%	0.05	77.0	5.65	5.65	21.8	522	95.3	21.2	50%
NMB-4	Nutmeg No-Wipe Stain	7.2	90.5%	0.0%	90.5%	0.0%	4.26%	0.05	77.0	6.55	6.55	25.2	605	110	5.77	50%
	Frost Toner	7.8	88.5%	0.00%	88.5%	0.00%	2.90%	0.05	77.0	6.87	6.87	26.4	635	116	7.52	50%
thinner:	Clear No-Wipe Stain	6.6	98.0%	0.00%	98.0%	0.00%	1.36%	0.002	77.0	6.44	6.44	0.99	23.8	4.34	0.04	50%
											Worst Case Coating:	**26.4**	**635**	**116**	**21.2**	
Spray Booths: Sealers	Rel Prime Sealer	7.6	72.6%	0.00%	72.6%	0.00%	20.2%	0.08	77.0	5.53	5.53	34.1	818	149	28.2	50%
Booths: NMB-5 and NMB-6	Bernyl Surface White	10.8	32.4%	0.00%	32.4%	0.00%	48.7%	0.08	77.0	3.49	3.49	21.5	517	94.3	98.3	50%
	Catalyst 2750	7.3	85.4%	0.00%	85.4%	0.00%	7.42%	0.003	77.0	6.25	6.25	1.44	34.6	6.32	0.54	50%
thinner:	Thinner 219	7.1	100%	0.00%	100.0%	0.00%	0.00%	0.004	77.0	7.13	7.13	2.20	52.7	9.62	0.00	50%
											Worst Case Coating:	**34.1**	**818**	**149**	**98.3**	
Spray Booths: Solvent	Reducer	7.3	100%	0.0%	100.0%	0.00%	0.00%	0.008	77.0	7.25	7.25	4.47	107	19.6	0.00	50%
											Worst Case Coating:	**4.47**	**107**	**19.6**	**0.00**	

State Potential Emissions **Worst Case PTE: 369 190**

METHODOLOGY

Controlled PTE PM (tons/yr): **19.0**

With 90% Control Efficiency
Using Dry Filters

Pounds of VOC per Gallon Coating less Water = Density (lb/gal) * Weight % Organics * 1/(1-Volume % water)
Pounds of VOC per Gallon Coating = Density (lb/gal) * Weight % Organics
PTE of VOC (lb/hr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
PTE of VOC (lb/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 24 hr/day
PTE of VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 8760 hr/yr * 1 ton/2000 lbs
PTE of PM/PM10 (tons/yr) = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer Efficiency %) * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emission Calculations
HAP Emissions
From Monorail #1

Company Name: Masterbrand Cabinets, Inc. - Richmond Plant
Address: 701 South "N" Street, Richmond, Indiana 47374
Permit Number: 18525
Plt ID: 177-00015
Permit Reviewer: ERG/TDP
Date: March 27, 2007

Topcoats (booths NMB-7 and NMB-8)

Material	Density (lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Aqua Plaz LF Clear	8.62	0.05	77.00	0.00%	0.00%	11.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	15.99	0.00	0.00	0.00	0.00	0.00
WW Rel Plaz	7.95	0.05	77.00	0.00%	0.00%	11.0%	0.00%	0.00%	0.00%	4.80%	0.30%	0.00	0.00	14.75	0.00	0.00	0.00	6.43	0.40
Matador 60 Turbo	10.9	0.05	77.00	0.00%	0.00%	0.00%	0.00%	0.00%	19.7%	0.00%	0.20%	0.00	0.00	0.00	0.00	0.00	36.2	0.00	0.37
Catalyst 2750	7.32	0.003	77.00	60.0%	0.00%	0.00%	0.00%	0.00%	30.0%	0.00%	0.00%	4.44	0.00	0.00	0.00	0.00	2.22	0.00	0.00
Rel Var Retarder	6.75	0.005	77.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winter Topcoat Reducer	7.26	0.006	77.00	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**14.69**	**0.00**	**15.99**	**0.00**	**0.00**	**36.2**	**6.43**	**0.40**

Stains (Booths NMB-1 through NMB-4)

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Nat. Light Toner	6.89	0.05	77.00	10.3%	62.7%	0.00%	2.30%	0.00%	0.00%	0.00%	0.00%	11.97	72.8	0.00	2.67	0.00	0.00	0.00	0.00
Burgundy Wipe Stain	8.17	0.05	77.00	3.23%	0.00%	0.01%	0.00%	0.00%	17.0%	3.86%	0.00%	4.45	0.00	0.01	0.00	0.00	23.4	5.32	0.00
Nutmeg No-Wipe Stain	7.23	0.05	77.00	16.8%	0.00%	0.00%	0.00%	0.00%	5.22%	0.00%	0.00%	20.5	0.00	0.00	0.00	0.00	6.36	0.00	0.00
Frost Toner	7.76	0.05	77.00	16.5%	7.70%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	21.6	10.08	0.00	0.03	0.00	0.00	0.00	0.00
Clear No-Wipe Stain	6.57	0.002	77.00	20.2%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**21.6**	**72.8**	**0.01**	**2.67**	**0.00**	**23.4**	**5.32**	**0.00**

Sealers (Booths NMB-5 and NMB-6)

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Rel Prime Sealer	7.62	0.08	77.00	14.9%	0.00%	10.7%	0.00%	0.00%	8.30%	2.00%	20.0%	30.6	0.00	22.00	0.00	0.00	17.06	4.11	41.1
Bernyl Surface White	10.8	0.08	77.00	0.00%	0.00%	0.00%	0.00%	0.00%	10.0%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	29.1	0.00	0.00
Catalyst 2750	7.32	0.003	77.00	0.00%	0.00%	0.00%	0.00%	0.00%	60.0%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	4.44	0.00	0.00
Thinner 219	7.13	0.004	77.00	19.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	30.6	0.00	22.0	0.00	0.00	29.1	4.11	41.1

Solvent (All Spray Booths)

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Reducer	7.25	0.008	77.00	0.00%	0.00%	0.00%	0.00%	1.50%	3.00%	0.50%	0.00%	0.00	0.00	0.00	0.00	0.29	0.59	0.10	0.00
											Worst Case Coating:	0.00	0.00	0.00	0.00	0.29	0.59	0.10	0.00

Total State Potential Emissions **Worst Case PTE:** **66.9** **72.8** **38.0** **2.7** **0.3** **89.2** **16.0** **41.5**

METHODOLOGY

327
TOTAL HAPS

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

Appendix A: Emissions Calculations
VOC and Particulate
From Monorail Line #2

Company Name: Masterbrand Cabinets, Inc. - Richmond Plant
Address : 701 South "N" Street, Richmond, Indiana 47374
Permit Number: 18525
Plt ID: 177-00015
Reviewer: ERG/TDP
Date: March 27, 2007

Booth ID	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	PTE of VOC (lb/hr)	PTE of VOC (lb/day)	PTE of VOC (ton/yr)	PTE of PM/PM10 (ton/yr)	Transfer Efficiency
Spray Booths: Top Coats	Aqua Plaz LF Clear	8.6	63.3%	50.8%	12.5%	52.5%	31.7%	0.05000	60.0	2.26	1.08	3.23	77.5	14.1	20.8	50%
2 booths: SMB-8 and SMB-9	WW Rel Plaz	8.0	62.8%	0.0%	62.8%	0.0%	29.3%	0.05000	60.0	4.99	4.99	15.0	359	65.6	19.4	50%
	Matador 60 Turbo	10.9	23.7%	0.0%	23.7%	0.0%	63.4%	0.05000	60.0	2.58	2.58	7.74	186	33.9	54.6	50%
	Catalyst 2750	7.3	85.4%	0.0%	85.4%	0.0%	7.42%	0.00300	60.0	6.25	6.25	1.12	27.0	4.93	0.42	50%
	Rel Var Retarder	6.8	100%	0.0%	100%	0.0%	0.00%	0.00500	60.0	6.75	6.75	2.03	48.6	8.87	0.00	50%
thinner:	Winter Topcoat Reducer	7.3	100%	0.0%	100%	0.0%	0.00%	0.00600	60.0	7.26	7.26	2.61	62.7	11.4	0.00	50%
											Worst Case Coating:	**15.0**	**359**	**65.6**	**54.6**	
Spray Booths: Stains	Nat. Light Toner	6.9	93.2%	0.02%	93.2%	0.02%	4.41%	0.05000	60.0	6.42	6.42	19.3	462	84.3	3.09	50%
6 Booths: SMB-1 through	Burgundy Wipe Stain	8.2	69.2%	0.0%	69.2%	0.0%	79.1%	0.05000	60.0	5.65	5.65	17.0	407	74.3	16.5	50%
SMB-4 and SMB-10	Nutmeg No-Wipe Stain	7.2	90.5%	0.0%	90.5%	0.0%	4.26%	0.05000	60.0	6.55	6.55	19.6	471	86.0	4.50	50%
	Frost Toner	7.8	88.5%	0.00%	88.5%	0.00%	2.90%	0.05000	60.0	6.87	6.87	20.6	495	90.3	5.86	50%
thinner:	Clear No-Wipe Stain	6.6	98.0%	0.00%	98.0%	0.00%	1.36%	0.00200	60.0	6.44	6.44	0.77	18.6	3.39	0.03	50%
											Worst Case Coating:	**20.6**	**495**	**90.3**	**16.5**	
Spray Booths: Sealers	Rel Prime Sealer	7.6	72.6%	0.00%	72.6%	0.00%	20.2%	0.08000	60.0	5.53	5.53	26.5	637	116	22.0	50%
3 booths SMB-5 through	Bernyl Surface White	10.8	32.4%	0.00%	32.4%	0.00%	48.7%	0.08000	60.0	3.49	3.49	16.8	402	73.5	76.6	50%
SMB-7	Catalyst 2750	7.3	85.4%	0.00%	85.4%	0.00%	7.42%	0.00300	60.0	6.25	6.25	1.12	27.0	4.93	0.42	50%
thinner:	Thinner 219	7.1	100%	0.00%	100%	0.00%	0.00%	0.00400	60.0	7.13	7.13	1.71	41.1	7.50	0.00	50%
											Worst Case Coating:	**26.5**	**637**	**116**	**76.6**	
9 Spray Booths: SMB-3 through SMB-10	Reducer	7.3	100%	0.00%	100%	0.00%	0.00%	0.00800	60.0	7.25	7.25	3.48	83.5	15.2	0.00	100%
											Worst Case Coating:	**3.48**	**83.5**	**15.2**	**0.00**	

Worst Case PTE: 287 148

Controlled PTE PM (tons/yr): **14.8**
With 90% Control Efficiency
Using Dry Filters

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = Density (lb/gal) * Weight % Organics * 1/(1-Volume % water)
Pounds of VOC per Gallon Coating = Density (lb/gal) * Weight % Organics
PTE of VOC (lb/hr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
PTE of VOC (lb/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 24 hr/day
PTE of VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 8760 hr/yr * 1 ton/2000 lbs
PTE of PM/PM10 (tons/yr) = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer Efficiency %) * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emission Calculations
HAP Emission Calculations from Monorail #2

Company Name: Masterbrand Cabinets, Inc. - Richmond Plant
Address: 701 South "N" Street, Richmond, Indiana 47374
Permit Number: 18525
Plt ID: 177-00015
Permit Reviewer: ERG/TDP
Date: March 27, 2007

Topcoats (booths SMB-8 and SMB-9)

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/yr) Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Aqua Plaz LF Clear	8.62	0.05	60.0	0.00%	0.00%	11.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	12.5	0.00	0.00	0.00	0.00	0.00
WW Rel Plaz	7.95	0.05	60.0	0.00%	0.00%	11.0%	0.00%	0.00%	0.00%	4.80%	0.30%	0.00	0.00	11.5	0.00	0.00	0.00	5.01	0.31
Matador 60 Turbo	10.89	0.05	60.0	0.00%	0.00%	0.00%	0.00%	0.00%	19.7%	0.00%	0.20%	0.00	0.00	0.00	0.00	0.00	28.2	0.00	0.29
Catalyst 2750	7.32	0.003	60.0	60.0%	0.00%	0.00%	0.00%	0.00%	30.0%	0.00%	0.00%	3.46	0.00	0.00	0.00	0.00	1.73	0.00	0.00
Rel Var Retarder	6.75	0.005	60.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vinter Topcoat Reduce	7.26	0.006	60.0	100%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**11.45**	**0.00**	**12.5**	**0.00**	**0.00**	**28.2**	**5.01**	**0.31**

Stains (booths SMB-1 through SMB-4 and SMB-10)

Material	Density (Lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/yr) Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Nat. Light Toner	6.89	0.05	60.0	10.3%	62.7%	0.00%	2.30%	0.00%	0.00%	0.00%	0.00%	9.33	56.8	0.00	2.08	0.00	0.00	0.00	0.00
Burgundy Wipe Stain	8.17	0.05	60.0	3.23%	0.00%	0.01%	0.00%	0.00%	17.0%	3.86%	0.00%	3.47	0.00	0.01	0.00	0.00	18.2	4.14	0.00
Nutmeg No-Wipe Stair	7.23	0.05	60.0	16.8%	0.00%	0.00%	0.00%	0.00%	5.22%	0.00%	0.00%	16.0	0.00	0.00	0.00	0.00	4.96	0.00	0.00
Frost Toner	7.76	0.05	60.0	16.5%	7.70%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	16.8	7.85	0.00	0.02	0.00	0.00	0.00	0.00
Clear No-Wipe Stain	6.57	0.002	60.0	20.2%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**16.8**	**56.8**	**0.01**	**2.08**	**0.00**	**18.2**	**4.14**	**0.00**

Sealers (booths SMB-5 through SMB-7)

Material	Density (Lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/yr) Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Rel Prime Sealer	7.62	0.08	60.0	14.9%	0.00%	10.7%	0.00%	0.00%	8.30%	2.00%	20.0%	23.9	0.00	17.1	0.00	0.00	13.3	3.20	32.0
Bernyl Surface White	10.78	0.08	60.0	0.00%	0.00%	0.00%	0.00%	0.00%	10.0%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	22.7	0.00	0.00
Catalyst 2750	7.32	0.003	60.0	0.00%	0.00%	0.00%	0.00%	0.00%	60.0%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	3.46	0.00	0.00
Thinner 219	7.13	0.004	60.0	19.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**23.9**	**0.00**	**17.1**	**0.00**	**0.00**	**22.7**	**3.20**	**32.0**

Solvent (booths SMB-3 through SMB-4)

Material	Density (Lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/yr) Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Reducer	7.25	0.008	60.0	0.00%	0.00%	0.00%	0.00%	1.50%	3.00%	0.50%	0.00%	0.00	0.00	0.00	0.00	0.23	0.46	0.08	0.00
											Worst Case Coating:	**0.00**	**0.00**	**0.00**	**0.00**	**0.23**	**0.46**	**0.08**	**0.00**

Total State Potential Emissions — **Worst Case PTE:** **52.1** **56.8** **29.6** **2.08** **0.23** **69.5** **12.4** **32.4**

METHODOLOGY

255 TOTAL HAPS

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

Appendix A: Emissions Calculations
VOC and Particulate
From UV Flatline

Company Name: Masterbrand Cabinets, Inc. - Richmond Plant
Address : 701 South "N" Street, Richmond, Indiana 47374
Permit Number: 18525
Plt ID: 177-00015
Reviewer: ERG/TDP
Date: March 27, 2007

Booth ID	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	PTE of VOC (lb/hr)	PTE of VOC (lb/day)	PTE of VOC (tons/yr)	PTE of PM/PM10 (ton/yr)	Transfer Efficiency
Booths: UV Flatline Roller Coaters 1&2	Yellow Oxide Vinyl Paste	10.1	53.6%	0.00%	53.6%	0.00%	20.5%	0.002	8.0	5.42	5.42	0.09	2.1	0.38	0.00	100%
	Cinnamon Flatline Stain	6.9	94.0%	0.00%	94.0%	0.00%	3.97%	0.002	8.0	6.49	6.49	0.10	2.5	0.45	0.00	100%
	Lt. Oak Flatline Stain	6.9	94.8%	0.00%	94.8%	0.00%	3.61%	0.002	8.0	6.51	6.51	0.10	2.5	0.46	0.00	100%
	WCI Me. Oak Flatline Stain	7.1	89.8%	0.00%	89.8%	0.00%	5.46%	0.002	8.0	6.40	6.40	0.10	2.5	0.45	0.00	100%
	Water Base Light Oak Flatline Stain	8.5	80.9%	27.9%	53.1%	28.3%	11.4%	0.002	8.0	6.26	4.49	0.07	1.72	0.31	0.00	100%
											Worst Case Coating:	**0.10**	**2.50**	**0.46**	**0.00**	
Spray Booths: Sealers UV Flatline Roller Coater 5	UV Sealer	9.2	0.17%	0.0%	0.2%	0.00%	99.7%	0.002	8.0	0.02	0.02	0.00	0.01	0.00	0.00	100%
Spray Booths: Solvent UV Flatline	Clean-up Thinner	7.2	100%	0.0%	100.0%	0.00%	0.00%	0.006	8.0	7.15	7.15	0.34	8.2	1.50	0.00	50%
											Worst Case PTE:	**0.45**	**10.7**	**2.0**	**0.00**	

Controlled PTE PM (tons/yr): **0.00**
With 90% Control Efficiency Using Dry Filters

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = Density (lb/gal) * Weight % Organics * 1/(1-Volume % water)
Pounds of VOC per Gallon Coating = Density (lb/gal) * Weight % Organics
PTE of VOC (lb/hr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
PTE of VOC (lb/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 24 hr/day
PTE of VOC (tons/yr) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * 8760 hr/yr * 1 ton/2000 lbs
PTE of PM/PM10 (tons/yr) = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer Efficiency %) * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emission Calculations
HAP Emissions
From UV Flatline

Company Name: Masterbrand Cabinets, Inc. - Richmond Plant
Address: 701 South "N" Street, Richmond, Indiana 47374
Permit Number: 18525
Plt ID: 177-00015
Permit Reviewer: ERG/TDP
Date: March 27, 2007

Stains (UV Flatline Roller Coaters 1&2)

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Yellow Oxide Vinyl Paste	10.1	0.002	8.00	9.28%	29.8%	0.00%	0.00%	0.00%	0.09%	0.02%	0.00%	0.07	0.21	0.00	0.00	0.00	0.00	0.00	0.00
Cinnamon Flatline Stain	6.9	0.002	8.00	0.00%	0.00%	2.12%	0.00%	0.00%	4.42%	1.04%	0.00%	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.00
Lt. Oak Flatline Stain	6.9	0.002	8.00	0.00%	0.00%	2.33%	0.00%	0.00%	4.46%	1.05%	0.00%	0.00	0.00	0.01	0.00	0.00	0.02	0.01	0.00
WCI Me. Oak Flatline Stain	7.1	0.002	8.00	0.00%	0.00%	2.04%	0.00%	0.00%	3.96%	0.93%	0.00%	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00
ter Base Light Oak Flatline St	8.5	0.002	8.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**0.07**	**0.21**	**0.01**	**0.00**	**0.00**	**0.02**	**0.01**	**0.00**

Sealers (UV Flatline Roller Coater 5)

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
UV Sealer	9.2	0.002	8.00	19.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**0.12**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Solvent

Material	Density (lb/Gal)	Gallons of Material (gal/yr)	Maximum (unit/hr)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl Ketone	Weight % Cumene	Weight % Xylene	Weight % Ethylbenzene	Weight % Formaldehyde	Potential to Emit (tons/year)							
												Toluene	MEK	Methanol	M.Isobutyl Ketone	Cumene	Xylene	Ethylbenzene	Formaldehyde
Clean-Up Thinner	7.25	0.008	8.00	19.0%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
											Worst Case Coating:	**0.39**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Total State Potential Emissions **Worst Case PTE:** **0.57** **0.21** **0.02** **0.00** **0.00** **0.04** **0.01** **0.00**

METHODOLOGY

0.86
TOTAL HAPS

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

Appendix A: Emissions Calculations
Natural Gas Combustion Only
Monorail #2 Ovens & Air Handlers

Company Name: **Masterbrand Cabinets, Inc. - Richmond Plant**
Address : **701 South "N" Street, Richmond, Indiana 47374**
Permit Number: **18525**
Plt ID: **177-00015**
Reviewer: **ERG/TDP**
Date: **March 27, 2007**

Heat Input Capacity*** MMBtu/hr	Potential Throughput MMCF/yr
129	1126

	Pollutant					
	PM*	PM10*	SO_2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100	5.5	84.0
Potential to Emit in tons/yr	4.28	4.28	0.34	56.3	3.10	47.3

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100 lb/MMCf.
***Estimated, worst case capacity of all existing natural gas combustion facilities at the source, including drying ovens and air handlers.
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

Methodology

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr *1 MMCF/1,000 MMBtu
PTE (tons/yr) = Potential Throughput (MMCF/yr) * Emission Factor (lb/MMCF)/2,000 lb/to

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

Company Name: **Masterbrand Cabinets, Inc. - Richmond Plant**
Address City IN Zip: **701 South "N" Street, Richmond, Indiana 47374**
Permit Number: **18525**
Plt ID: **177-00015**
Reviewer: **ERG/TDP**
Date: **March 27, 2007**

	HAPs - Organics				
	Benzene	Dichlorobenzen	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential to Emit in tons/yr	1.182E-03	6.754E-04	4.221E-02	1.013E+00	1.914E-03

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential to Emit in tons/yr	2.814E-04	6.191E-04	7.880E-04	2.139E-04	1.182E-03

Methodology is the same as page 1.

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

Appendix A: Emissions Calculations
Woodworking Particulate

Company Name: **Masterbrand Cabinets, Inc. - Richmond Plant**
Address : **701 South "N" Street, Richmond, Indiana 47374**
Permit Number: **18525**
Plt ID: **177-00015**
Reviewer: **ERG/TDP**
Date: **March 27, 2007**

1. PM Emissions before control:

Amount of lumber cut: 3100 lbs/hr
Amount of sawdust generated: 240 lbs/hr

Maximum potential emissions before control: 1051 tons/yr PM*

2. PM emissions after control:

Baghouse B-WW-1	86,000 acfm x 0.0004 grains/acf / 7000 grains/lb x 60 mi	0.295	lb PM/hr =	1.29	tons/yr
Baghouse B-WW-2	60,000 acfm x 0.0004 grains/acf / 7000 grains/lb x 60 mi	0.206	lb PM/hr =	0.90	tons/yr
	Total PM Emissions from sawmill:	**0.501**	**lb PM/hr =**	**2.19**	**tons/yr**

*No PM rate was specified in the application. Therefore, all sawdust reported was presumed to be PM for these calculations.