NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Modification to a Part 70 Operating Permit

for MasterBrand Cabinets, Inc. in Dubois County

Significant Source Modification No.: 037-41205-00051
Significant Permit Modification No.: 037-41274-00051

The Indiana Department of Environmental Management (IDEM) has received an application from MasterBrand Cabinets, Inc., located at 614 W. 3rd Street, Ferdinand, Indiana 47532, for a significant modification of its Part 70 Operating Permit issued on February 25, 2015. If approved by IDEM’s Office of Air Quality (OAQ), this proposed modification would allow MasterBrand Cabinets, Inc. to make certain changes at its existing source. MasterBrand Cabinets, Inc. has applied to construct one automated spray booth, replace one topcoat booth which coats pieces for Line A, and modify two spray booths.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g. changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

A copy of the permit application and IDEM's preliminary findings are available at:

Ferdinand Branch Library
112 E 16th Street
Ferdinand, IN 47532

and

IDEM Southwest Regional Office
114 South 7th Street
P.O. Box 128
Petersburg, IN 47567-0128

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

A copy of the preliminary findings is also available via IDEM’s Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

How can you participate in this process?

The date that this notice is posted on IDEM’s website (https://www.in.gov/idem/5474.htm) marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.
You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM’s mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SSM 037-41205-00051 and SPM 037-41274-00051 in all correspondence.

**Comments should be sent to:**

Natalie Moore  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for Natalie Moore or (317) 233-8279  
Or dial directly: (317) 233-8279  
Fax: (317) 232-6749 attn: Natalie Moore  
E-mail: nmoore@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: [http://www.in.gov/idem/airquality/2356.htm](http://www.in.gov/idem/airquality/2356.htm); and the Citizens’ Guide to IDEM on the Internet at: [http://www.in.gov/idem/6900.htm](http://www.in.gov/idem/6900.htm).

**What will happen after IDEM makes a decision?**

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM’s response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM’s decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.
If you have any questions, please contact Natalie Moore of my staff at the above address.

Madhurima Das
Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality
Ms. Sally Gaines  
MasterBrand Cabinets, Inc.  
614 W. 3rd Street  
Ferdinand, IN 47532

Re: 037-41274-00051  
Significant Permit Modification

Dear Ms. Gaines:

MasterBrand Cabinets, Inc. was issued Part 70 Operating Permit Renewal No. T037-33447-00051 on February 25, 2015 for a stationary wood kitchen cabinet and bath cabinet manufacturing plant located at 614 W. 3rd Street, Ferdinand, Indiana 47532. An application requesting changes to this permit was received on March 14, 2019. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

Please find attached the entire Part 70 Operating Permit as modified. The permit references the below listed attachment(s). Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

Attachment B: 40 CFR 60, Subpart JJJJ, New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines
Attachment C: 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Previously issued approvals for this source containing these attachments are available on the Internet at: [link]

Previously issued approvals for this source are also available via IDEM's Virtual File Cabinet (VFC.) Please go to: [link] and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: [link]

A copy of the permit is available on the Internet at: [link]. A copy of the permit is also available via IDEM’s Virtual File Cabinet (VFC.) Please go to: [link] and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: [link]; and the Citizens’ Guide to IDEM on the Internet at: [link].

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.
If you have any questions regarding this matter, please contact Natalie Moore, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 233-8279 or (800) 451-6027, and ask for Natalie Moore or (317) 233-8279.

Sincerely,

Madhurima D. Moulik, Ph.D., Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit and Technical Support Document
cc: File - Dubois County
    Dubois County Health Department
    U.S. EPA, Region 5
    Compliance and Enforcement Branch
    IDEM Southwest Regional Office
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

DRAFT

**Part 70 Operating Permit Renewal**

**OFFICE OF AIR QUALITY**

**MasterBrand Cabinets, Inc.**

614 W 3rd Street
Ferdinand, Indiana 47532

(herien 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.

<table>
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<tr>
<th>Operation Permit No.</th>
<th>T037-33447-00051</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master Agency Interest ID.</td>
<td>14777</td>
</tr>
<tr>
<td>Issued by: Original Signed by</td>
<td>Nathan C. Bell, Section Chief</td>
</tr>
<tr>
<td>Permits Branch</td>
<td>Office of Air Quality</td>
</tr>
<tr>
<td>Issuance Date:</td>
<td>February 25, 2015</td>
</tr>
<tr>
<td>Expiration Date:</td>
<td>February 25, 2020</td>
</tr>
</tbody>
</table>

Significant Permit Modification No. 037-35873-00051, issued on September 3, 2015
Significant Permit Modification No.: 037-36360-00051, issued on November 18, 2015
Significant Permit Modification No.: 037-37819-00051, issued on February 6, 2017
Significant Permit Modification No.: 037-38212-00051, issued on December 28, 2017
Significant Permit Modification No.: 037-39871-00051, issued on October 16, 2018
Administrative Amendment No. 037-41526-00051, issued on June 5, 2019

Significant Permit Modification No.: 037-41274-00051

| Issued by: | Madhurima D. Moulik, Ph.D., Section Chief |
| Permits Branch | Office of Air Quality |
| Issuance Date: | |
| Expiration Date: | February 25, 2020 |
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Attachment C: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) [40 CFR Part 63, Subpart ZZZZ]
SECTION A

SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary wood kitchen and bath cabinet manufacturing plant.

<table>
<thead>
<tr>
<th>Source Address:</th>
<th>614 W 3rd Street, Ferdinand, Indiana 47532</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Source Phone Number:</td>
<td>812-367-3348</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>2434 (Wood Kitchen and Bath Cabinets)</td>
</tr>
<tr>
<td>County Location:</td>
<td>Dubois</td>
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<tr>
<td>Source Location Status:</td>
<td>Attainment for all criteria pollutants</td>
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<tr>
<td>Source Status:</td>
<td>Part 70 Operating Permit Program, Major Source, under PSD Rules, Major Source, Section 112 of the Clean Air Act, Not 1 of 28 Source Categories</td>
</tr>
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A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(14)]

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

(a) One (1) conventional surface coating line, constructed in 1973. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The conventional surface coating line is comprised of the following surface coating facilities:

(1) One (1) toner booth, identified as CLB-1, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-1;

(2) One (1) stain booth, identified as CLB-2, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-2;

(3) One (1) sealer booth, identified as CLB-3, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-3 and CLS-4;

(4) One (1) top coat booth, identified as CLB-4, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-5 and CLS-6;
(5) One (1) parts booth, identified as CLB-5, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-7 and CLS-8;

(6) One (1) parts booth, identified as CLB-6, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-9; and

(7) One (1) natural gas-fired oven identified as OV-1, approved for construction in 2015, with a maximum heat input capacity of 1.2 MMBtu per hour, and exhausting to stack OVS-1.

(b) One (1) finishing line, identified as Line A, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line A finishing line consists of the following facilities:

(1) Two (2) toner spray booths, identified as LAB-1 and LAB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) Two (2) stain spray booths, identified as LAB-3 and LAB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using the RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(3) One (1) topcoat booth, identified as LAB-7, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-7.

(4) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8.

(5) Two (2) sanding operations (associated with Line A), controlled by a cartridge filter type dust collector DC-1, and exhausting 22,500 cubic feet per minute through stack DCS-1A and 22,500 cubic feet per minute through stack DCS-1B.

(6) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(c) One (1) finishing line, identified as Line B, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture
or wood furniture components. The Line B finishing line consists of the following facilities:

1. One (1) color match spray booth, identified as LBB-1, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

   (The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

2. One (1) toner spray booth, identified as LBB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

   (The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

3. Two (2) sanding operations (associated with Line B), controlled by a cartridge filter type dust collector DC-1, and exhausting 22,500 cubic feet per minute through stack DCS-1A and 22,500 cubic feet per minute through stack DCS-1B.

(d) One (1) finishing line, identified as Flatline A, approved in 2017 for construction. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Flatline A finishing line consists of the following facilities:

1. One (1) topcoat/opaque spray booth, identified as FLA-1, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a Regenerative Thermal Oxidizer, identified as RTO-1, exhausting to stack RTOS-1.

2. One (1) topcoat/opaque spray booth, identified as FLA-2, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a Regenerative Thermal Oxidizer, identified as RTO-1, exhausting to stack RTOS-1.

3. Two (2) sanding booths, identified as FLASB-1 and FLASB-2, each with a maximum capacity of 1,500 units per hour, particulate emissions controlled by a cartridge filter dust collector, identified as DC-1, with two exhaust stacks, identified as DCS-1A and DCS-1B.

4. Two (2) drying ovens, identified as FLAOV-1 and FLAOV-2, heated by hot water generated from the two (2) 1.5 MMBtu/hour natural gas-fired boilers, VOC emissions from the drying ovens are controlled by a regenerative thermal oxidizer (RTO) identified as RTO-1, exhausting from stack RTO-1.

(e) One (1) finishing line, identified as Flatline B, approved in 2017 for construction. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Flatline B finishing line consists of the following facilities:

1. One (1) topcoat/opaque spray booth, identified as FLB-1, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting to stack RTOS-2.
(2) One (1) topcoat/opaque spray booth, identified as FLB-2, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting to stack RTOS-2.

(3) Two (2) sanding booths, identified as FLBSB-1 and FLBSB-2, each with a maximum capacity of 1,500 units per hour, particulate emissions controlled by a cartridge filter dust collector, identified as DC-1, with two exhaust stacks, each with a maximum outlet grain loading of 0.002161 grains per cubic foot and an exhaust rate of 7,000 ACFM, identified as DCS-1A and DCS-1B.

(4) Two (2) drying ovens, identified as FLBOV-1 and FLBOV-2, heated by hot water generated from the two (2) 1.5 MMBtu/hour natural gas-fired boilers, VOC emissions from the drying ovens are controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting from stack RTO-2.

(f) Solvent/Cleanup Usage.

(g) Woodworking equipment controlled by integral baghouses, including:

(1) One (1) woodworking cell, identified as WW-1, constructed in 1968, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-1, and exhausting either internally or to stack BHS-1;

(2) One (1) woodworking cell, identified as WW-2, constructed in 1998, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-2, and exhausting either internally or to stack BHS-2;

(3) One (1) woodworking cell, identified as WW-3, constructed in 1968, controlled by a 35,000 cubic feet per minute baghouse, identified as BH-3, and exhausting either internally or to stack BHS-3.

(4) One (1) woodworking cell, identified as WW-4, constructed in 1997, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-4, and exhausting either internally or to stack BHS-4;

(5) One (1) woodworking cell, identified as WW-5, constructed in 1986, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-5, and exhausting either internally or to stack BHS-5;

(6) One (1) woodworking cell, identified as WW-6, constructed in 1986, controlled by a 48,000 cubic feet per minute baghouse, identified as BH-6, and exhausting either internally or to stack BHS-6.

(7) One (1) woodworking cell, identified as WW-7, constructed in 2005, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-7, and exhausting either internally or to stack BHS-7.

(8) One (1) woodworking cell, identified as WW-8, constructed in 2011, controlled by one (1) 35,000 cubic feet per minute baghouse, identified as BH-8, and exhausting either internally or to stack BHS-8.

(9) One (1) woodworking cell, identified as POD-4, approved in 2015 for construction, controlled by one (1) 61,000 cubic feet per minute baghouse, identified as BH-9, and exhausting either internally or to stack BHS-9.
(10) One (1) wood working cell, identified as WW-10, constructed in 2018, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-10 and exhausting through stack BHS-10.

(h) One (1) off-line parts booth with an electric convection oven, approved in 2015 for construction, identified as OLB-1, with a maximum capacity of 100 units per hour, using dry filters as control, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, and exhausting to stacks OLS-1 and OLS-2.

The booth is part of an existing affected source under the provisions of 40 CFR 63, Subpart JJ.

(i) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019 for modification, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in 2019 for modification, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) automated spray booth with an electric oven, identified as STB-21, approved in 2019 for construction, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting to stack STS-7.

This unit is an affected source under 40 CFR 63, Subpart JJ.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

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

(a) The following equipment related to maintenance activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.5]

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

(c) Emission units with PM and PM_{10} emissions less than five (5) tons per year, SO_{2}, NO_{x}, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) natural gas-fired oven, identified as OV-2, with a maximum heat input capacity of 1 MMBtu per hour, and exhausting at stack OVS-2. [326 IAC 6.5]

(d) Reserved.

(e) Reserved.
(f) One (1) regenerative thermal oxidizer, identified as RTO-2 utilized for VOC control, constructed in 2008, with a maximum heat input capacity of 8.576 MMBtu/hr and a maximum flow rate of 30,000 acfm, exhausting to stack RTOS-2.

(g) One (1) regenerative thermal oxidizer (RTO), approved in 2017 for construction, identified as RTO-1, with a maximum heat input capacity of 16.0 MMBtu/hour, exhausting to stack RTOS-1.

(h) One (1) end coat booth, identified as UVPB-1, constructed in 1994, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack UVPS-1.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(i) One (1) UV Stickline, identified as UVC-2, constructed in 1994, utilizing roll coating application, and exhausting internally.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) UV Flatline, identified as UVC-3, constructed in 1994, utilizing roll coating application, and exhausting internally.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) UV Stickline, identified as UVC-4, constructed in 1999, utilizing roll coating application, and exhausting internally.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(l) One (1) UV-cured mist coater booth, identified as UVMC-1, constructed in 2010, with a maximum capacity of 378 wood moldings per hour, and exhausting to stack UVS-1.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(m) One (1) UV oven, identified as OV-41, approved in 2015 for construction, equipped in conjunction with UV Flatline UVC-3.

(n) Two (2) halogen ovens, identified as Line A Stain Oven and Line B Stain Oven.

(o) One (1) infrared oven on the conventional line, identified as DriQuick Infrared Oven.

(p) One (1) UV oven, identified as Moulding Cell UV Oven.

(q) One (1) electric oven, identified as Moulding Cell Electric Oven.

LINE A Associated Insignificant Activities

(r) One (1) halogen oven, identified as OV-3, equipped in conjunction with Line A, controlled by RTO-2, and exhausting through stack RTOS-2.

(s) Four (4) UV ovens, identified as OV-5, OV-7, OV-9, and OV-12, equipped in conjunction with Line A.

(t) One (1) halogen oven, identified as OV-11, equipped in conjunction with Line A.

(u) One (1) infrared oven, identified as OV-14, equipped in conjunction with Line A.
(v) One (1) UV oven, identified as OV-40, constructed in 2012, equipped in conjunction with Finishing Line A.

LINE B Associated Insignificant Activities

(w) One (1) halogen oven, identified as OV-13, equipped in conjunction with Line B, controlled by existing RTO-2, and exhausting through stack RTOS-2.

(x) Reserved.

(y) One (1) halogen oven, identified as OV-21 (“Flash Tunnel”), equipped in conjunction with Line B.

(z) One (1) natural gas-fired boiler, providing hot water to the two (2) drying ovens associated with Flatline A, approved for construction in 2017, with a maximum heat input capacity of 1.5 MMBtu/hour, emissions are uncontrolled, exhausting to stack LAS-9 [326 IAC 6-2]

(aa) One (1) natural gas-fired boiler, providing hot water to the two (2) drying ovens associated with Flatline B, approved for construction in 2017, with a maximum heat input capacity of 1.5 MMBtu/hour, emissions are uncontrolled, exhausting to stack LBS-9 [326 IAC 6-2]

Line A & B Associated Insignificant Activities

(bb) One (1) natural gas fired drying oven, identified as OV-3/13, with a maximum heat input of 2.0 MMBtu/hour, approved in 2017 to replace one (1) existing one (1) halogen oven, identified as OV-13.

For each UV, halogen, electric, and infrared oven listed in units (l) through (x), any potential emissions of VOC and/or HAP from the drying of surface coatings in the oven are accounted for at the associated surface coating booth/line for that oven.

(cc) Two (2) edge banding operations, used to apply veneer to wood panels, using roll-on coating application method, constructed in 2018, with a total nominal capacity of 28.6 pound of adhesive per hour, without control and exhausting inside.

(dd) One (1) natural gas-fired air make up unit, constructed in 2018 and with a maximum heat input capacity of 0.7 MMBtu/hr.

(ee) One (1) natural gas-fired spark ignition engine for emergency generator, identified as NG-GEN, constructed in 2018 and with a rating of 70 KW (93.9 HP).

Under NESHAP, Subpart ZZZZ, NG-GEN is considered a new stationary RICE.

Under NSPS, Subpart JJJJ, NG-GEN is considered an affected facility.

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, T037-33447-00051, 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] [IC 13-17-12]
Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

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

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

(c) A "responsible official" is defined at 326 IAC 2-7-1(35).

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 and Enforcement 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

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;

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

The Permittee shall implement the PMPs.

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

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

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

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

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
(d) 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 and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
(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)(8) 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.

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 T037-33447-00051 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 permit, all previous registrations and permits are superseded by this 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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.16 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(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

Request for renewal shall be submitted to:

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

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

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

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

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source’s failure to have a permit is not a violation of 326 IAC 2-7 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, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

(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:
Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.18 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 or notice 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.19 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) or (c) without a prior permit revision, if each of the following conditions is met:

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

(2) Any 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
 Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). 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) and (c)(1).

(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(37)) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.20 Source Modification Requirement [326 IAC 2-7-10.5]
A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 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.22 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.23 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.24 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 OPERATIONS CONDITION

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 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

C.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 except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.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). 326 IAC 6-4-2(4) is not federally enforceable.

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. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

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

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

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

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

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

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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)][40 CFR 64][326 IAC 3-8]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(c) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

C.10 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. The analog instrument shall be capable of measuring values outside of the normal range.

(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.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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

(a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(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.12 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.13 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

(l) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

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

(1) initial inspection and evaluation;
(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

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

(1) monitoring results;

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

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

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

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

(II) CAM Response to excursions or exceedances.

(a) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.

(b) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not
limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a Quality Improvement Plan (QIP). The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(c) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

1. Failed to address the cause of the control device performance problems; or

2. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) CAM recordkeeping requirements.

1. The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(c) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

2. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

C.14 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 submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.
(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.

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

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.15 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]

Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year 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(33) ("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 IGNCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.16 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. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.

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

(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

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

(BB) The dates analyses were performed.

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

(DD) The analytical techniques or methods used.

(EE) The results of such analyses.

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

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the
remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

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

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64] [326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

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

Stratospheric Ozone Protection

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

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with applicable standards for recycling and emissions reduction.
SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) conventional surface coating line, constructed in 1973. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The conventional surface coating line is comprised of the following surface coating facilities:

(1) One (1) toner booth, identified as CLB-1, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-1;

(2) One (1) stain booth, identified as CLB-2, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-2;

(3) One (1) sealer booth, identified as CLB-3, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-3 and CLS-4;

(4) One (1) top coat booth, identified as CLB-4, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-5 and CLS-6;

(5) One (1) parts booth, identified as CLB-5, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-7 and CLS-8;

(6) One (1) parts booth, identified as CLB-6, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-9; and

(b) One (1) finishing line, identified as Line A, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line A finishing line consists of the following facilities:

(1) Two (2) toner spray booths, identified as LAB-1 and LAB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) Two (2) stain spray booths, identified as LAB-3 and LAB-4, utilizing high volume low pressure (HVLP), air assisted airless or equivalent spray application equipment, using dry filters for particulate control and using the RTO-2 for VOC control, and exhausting through stack RTOS-2

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)
(3) One (1) topcoat booth, identified as LAB-7, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-7.

(4) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8.

(6) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(c) One (1) finishing line, identified as Line B, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line B finishing line consists of the following facilities:

(1) One (1) color match spray booth, identified as LBB-1, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) One (1) toner spray booth, identified as LBB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(h) One (1) off-line parts booth with an electric convection oven, approved in 2015 for construction, identified as OLB-1, with a maximum capacity of 100 units per hour, using dry filters as control, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, and exhausting to stacks OLS-1 and OLS-2.

The booth is part of an existing affected source under the provisions of 40 CFR 63, Subpart JJ.

(i) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019 for modification, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in 2019 for modification, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment.
equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) automated spray booth with an electric oven, identified as STB-21, approved in 2019 for construction, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting to stack STS-7.

This unit is an affected source under 40 CFR 63, Subpart JJ.

Insignificant Activities:

(g) One (1) regenerative thermal oxidizer (RTO), approved in 2017 for construction, identified as RTO-1, with a maximum heat input capacity of 16.0 MMBtu/hour, exhausting to stack RTOS-1.

(h) One (1) end coat booth, identified as UVPB-1, constructed in 1994, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack UVPS-1.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(i) One (1) UV Stickline, identified as UVC-2, constructed in 1994, utilizing roll coating application, and exhausting internally.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) UV Flatline, identified as UVC-3, constructed in 1994, utilizing roll coating application, and exhausting internally.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) UV Stickline, identified as UVC-4, constructed in 1999, utilizing roll coating application, and exhausting internally.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(l) One (1) UV-cured mist coater booth, identified as UVMC-1, constructed in 2010, with a maximum capacity of 378 wood moldings per hour, and exhausting to stack UVS-1.

This unit is an affected source under 40 CFR 63 Subpart JJ.

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

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

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

(a) Pursuant to Significant Source Modification No. 037-20223-00051 (issued August 26, 2005) and Significant Permit Modification No. 037-20407-00051 (issued September 15, 2005) the VOC and particulate matter emissions from the two (2) finishing lines (Lines A and B) have been limited in order to render the requirements of 326 IAC 2-2 (PSD) not
applicable. In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the Permittee shall comply with the following:

(1) The input of VOC to Line A (LAB-1 through LAB-7) and Line B (LBB-1 through LBB-2) shall be limited such that the VOC emissions shall be less than three hundred thirty-one (331) tons per twelve (12) consecutive month period with compliance determined at the end of each month. When using the RTO (RTO-2) to comply with this limitation, the following formula shall be used to determine compliance:

\[
i \text{VOC Emissions (tons/month)} = [ (1 - (DRE \times E_{cap})) \times X ] + Y
\]

Where: \(i\) = VOC emissions for month in tons per month.

- \(E_{cap}\) = Averaged Capture Efficiency for Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.
- \(DRE\) = Averaged Destruction Removal Efficiency for Spray Booth LAB1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.
- \(X\) = Total monthly VOC Input to Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4.
- \(Y\) = Total monthly VOC Input to Spray Booth LAB-7.

(2) The PM/PM_{10} emissions from Line A (LAB-1 through LAB-7, LBB-3 and LBB-4) and Line B (LBB-1 through LBB-2) shall not exceed 2.43 tons/yr. The Permittee shall demonstrate compliance with this limit by using dry filters for each booth and vent the emissions from booths LAB-1 through LAB-4 and LBB-1 through LBB-4 to the RTO-2. The cartridge/dry filters, shall be in operation at all times when these emission units are in operation.

Compliance with the above limits shall ensure that the emissions increase from the modification permitted in Significant Source Modification No. 037-20223-00051 (issued August 26, 2005) and Significant Permit Modification No. 037-20407-00051 (issued September 15, 2005), is less than forty (40) tons per year of VOC, twenty-five (25) tons per year of PM, and fifteen (15) tons per year of PM10, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

(b) Pursuant to Significant Source Modification No. 037-35863-00051 and Significant Permit Modification No. 037-35873-00051 and in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the VOC input to the booth (OLB-1), including coatings, dilution solvents, and cleaning solvents, shall not exceed 39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit shall limit VOC emissions from the modification permitted in Significant Source Modification No. 037-35863-00051 and Significant Permit Modification No. 037-35873-00051 to less than forty (40) tons per twelve (12) month consecutive period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

D.1.2 Particulate Emission Limitations [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(h), the one (1) conventional surface coating line, two (2) finishing lines (Lines A and B), one (1) manual spray booth (STB-19), two (2) automated spray booths (STB-20 and STB-21), one (1) UV-cured mist coater booth (UVMC-1), and one (1) off-line parts booth (OLB-1) shall be controlled by a dry particulate filter, water wash, or an equivalent control
device and the Permittee shall operate the control device in accordance with manufacturer’s specifications.

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

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), when applying surface coatings to wood furniture and cabinets in the two (2) finishing lines (Lines A and B), one (1) manual spray booth (STB-19), two (2) automated spray booths (STB-20 and STB-21), one (1) end coating booth (UVPB-1), two (2) UV sticklines (UVC-2 and UVC-4), one (1) UV flatline (UVC-3), and one (1) off-line parts booth (OLB-1), the Permittee shall apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) or more 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 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B – Preventive Maintenance Plan contains the Permittee’s obligation with regard to the plans required by this condition.

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

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-2][326 IAC 8-1-4]

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

D.1.6 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

(a) Until new RTO-1 replaces existing RTO-2, the Permittee shall perform VOC destruction efficiency testing of RTO-2 and VOC capture efficiency of spray booths, LAB-1, LAB-2, LBB-2; LAB-3, LAB-4, LBB-1, LBB-3 and LBB-4, in order to demonstrate compliance with Condition D.1.1(a), utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Until new RTO-1 replaces existing RTO-2, VOC capture efficiency testing for the RTO-2 shall be performed no later than thirty (30) days after every reconfiguration or change in the design of the equipment is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of this equipment, which include any of the following:
(1) Modification to the coating lines, LAB-1, LAB-2, LBB-2; LAB-3, LAB-4, LBB-1, LBB-3, LBB-4, of this Section D.1 and topcoat/opaque spray booths FLA-1 and FLA-2 and associated drying ovens, FLAOV-1 and FLAOV-2 in Section D.4.

(2) Increasing or decreasing the volumetric flow rate from the drying ovens, and

(3) Changing the static duct pressure.

(c) Not later than 180 days after new RTO-1 replaces existing RTO-2, the Permittee shall perform VOC destruction efficiency testing of RTO-1 and VOC capture efficiency of spray booths, LAB-1, LAB-2, LBB-2; LAB-3, LAB-4, LBB-1, LBB-3, LBB-4, in order to demonstrate compliance with Condition D.1.1(a), utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(d) Not later than 180 days after new RTO-1 replaces existing RTO-2, VOC capture efficiency testing for the RTO-1 shall be performed no later than thirty (30) days after every reconfiguration or change in the design of the equipment is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of this equipment, which include any of the following:

(1) Modification to the coating lines, LAB-1, LAB-2, LBB-2; LAB-3, LAB-4, LBB-1, LBB-3, LBB-4, of this Section D.1 and topcoat/opaque spray booths FLA-1 and FLA-2 and associated drying ovens, FLAOV-1 and FLAOV-2 in Section D.4.

(2) Increasing or decreasing the volumetric flow rate from the drying ovens, and

(3) Changing the static duct pressure.

These tests shall be performed using methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

D.1.7 VOC Control

(a) In order to comply with Condition D.1.1(a), the thermal oxidizer shall be in operation and control emissions from the spray booths LAB-1 through LAB-4 and LBB-1 through LBB-4 at all times that the source is using the RTO-2 to comply with the VOC emission limitation established in D.1.1(a).

(b) When using the RTO-2 to comply with Condition D.1.1(a), the emissions from spray booths LAB-1 through LAB-4 and LBB-1 through LBB-4 shall be controlled by RTO-2 with a destruction efficiency determined by Condition D.1.6.

D.1.8 Particulate Control

In order to comply with Condition D.1.1 and D.1.2, the dry filters shall be operating at all times when the one (1) conventional surface coating line, two (2) finishing lines (Lines A and B), one (1) manual spray booth (STB-19), two (2) automated spray booths (STB-20 and STB-21), one (1) UV-cured mist coater booth (UVMC-1), and one (1) off-line parts booth (OLB-1) are in operation.

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

D.1.9 Regenerative Thermal Oxidizer (RTO) Temperature [40 CFR 64.2 (CAM)]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer (RTO-2) for measuring operating temperature. For the purpose of this
condition, continuous means no less than once per fifteen (15) minute. The output of this system shall be recorded as a 3-hour average.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1(a).

(c) From the date of startup of the new RTO-1 in controlling the Finishing Line A and Finishing Line B toner spray booths, LAB-1, LAB-2 and LBB-2; stain spray booths, LAB-3, LAB-4; color match pray booth LBB-1 and sealer spray booths LBB-3 and LBB-4, until the stack test results are available, the Permittee shall operate the RTO-2 at or above the 3-hour average temperature of 1,400°F.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer, RTO-2 at or above the 3-hour average temperature as observed during the compliant stack test.

(d) If a 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour temperature that falls below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.10 Parametric Monitoring-Thermal Oxidizer Duct Pressure or Fan Amperage [40 CFR 64.2 (CAM)]

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1(a), as approved by IDEM.</td>
</tr>
<tr>
<td>(b)</td>
<td>The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer, identified as RTO-2 is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.</td>
</tr>
<tr>
<td>(c)</td>
<td>When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.</td>
</tr>
<tr>
<td>(d)</td>
<td>The instruments used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.</td>
</tr>
</tbody>
</table>

D.1.11 Dry Filter Monitoring

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry particulate filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (CLS-1 through CLS-9, RTOS-2, LAS-5 through LAS-8, STS-5 through STS-7, and UVS-1) while the one (1) conventional surface coating line, two (2) finishing lines (Lines A and B), one (1) manual spray booth (STB-19), two (2) automated spray booths (STB-20 and STB-21), one (1) UV-cured mist coater booth (UVMC-1), and one (1) off-line parts booth (OLB-1) are in operation. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.</td>
</tr>
</tbody>
</table>
Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground, weather permitting. If a noticeable change in overspray emission, or evidence of overspray emission is observed at any stack exhaust, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.12 Record Keeping Requirement

(a) To document the compliance status with Conditions D.1.1(a) and (b), the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limitations established Condition D.1.1(a) and (b):

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

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

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

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

(3) The total VOC input and VOC emissions for spray booths LAB-1 through LAB-4 and LBB-1 through LBB-4 for each month and each compliance period.

(4) The total VOC input and VOC emissions for spray booth LAB-7 for each month and each compliance period.

(5) The total VOC input for off-line parts booth (OLB-1) for each month and each compliance period.

(b) To document the compliance status with Condition D.1.9, the Permittee shall maintain continuous temperature records for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(c) To document the compliance status with Condition D.1.10, the Permittee shall maintain daily records of the duct pressure or fan amperage for the thermal oxidizer.

(d) To document compliance with Condition D.1.11, the Permittee shall maintain a log of weekly overspray observations, and daily and monthly inspections.

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

D.1.13 Reporting Requirements

Quarterly reports of VOC emissions to document the compliance status with Conditions D.1.1(a) and (b) shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
### SECTION D.2  EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description:

**Emissions Unit Description:**

(b) One (1) finishing line, identified as Line A, approved for construction in 2005 and completed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line A finishing line consists of the following facilities:

<table>
<thead>
<tr>
<th>Facility Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Two (2) sanding operations (associated with Line A), controlled by a cartridge filter type dust collector DC-1, and exhausting 22,500 cubic feet per minute through stack DCS-1A and 22,500 cubic feet per minute through stack DCS-1B.</td>
</tr>
</tbody>
</table>

(c) One (1) finishing line, identified as Line B, approved for construction in 2005. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line B finishing line consists of the following facilities:

<table>
<thead>
<tr>
<th>Facility Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(6) Two (2) sanding operations (associated with Line B), controlled by a cartridge filter type dust collector DC-1, and exhausting 22,500 cubic feet per minute through stack DCS-1A and 22,500 cubic feet per minute through stack DCS-1B.</td>
</tr>
</tbody>
</table>

(g) Woodworking equipment controlled by integral baghouses, including:

<table>
<thead>
<tr>
<th>Facility Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) One (1) woodworking cell, identified as WW-1, constructed in 1968, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-1, and exhausting either internally or to stack BHS-1;</td>
</tr>
<tr>
<td>(2) One (1) woodworking cell, identified as WW-2, constructed in 1998, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-2, and exhausting either internally or to stack BHS-2;</td>
</tr>
<tr>
<td>(3) One (1) woodworking cell, identified as WW-3, constructed in 1968, controlled by a 35,000 cubic feet per minute baghouse, identified as BH-3, and exhausting either internally or to stack BHS-3.</td>
</tr>
<tr>
<td>(4) One (1) woodworking cell, identified as WW-4, constructed in 1997, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-4, and exhausting either internally or to stack BHS-4;</td>
</tr>
<tr>
<td>(5) One (1) woodworking cell, identified as WW-5, constructed in 1986, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-5, and exhausting either internally or to stack BHS-5;</td>
</tr>
<tr>
<td>(6) One (1) woodworking cell, identified as WW-6, constructed in 1986, controlled by a 48,000 cubic feet per minute baghouse, identified as BH-6, and exhausting either internally or to stack BHS-6.</td>
</tr>
<tr>
<td>(7) One (1) woodworking cell, identified as WW-7, to be constructed in 2005, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-7, and exhausting either internally or to stack BHS-7.</td>
</tr>
<tr>
<td>(8) One (1) woodworking cell, identified as WW-8, constructed in 2011, controlled by one (1) 35,000 cubic feet per minute baghouse, identified as BH-8, and exhausting either internally or to stack BHS-8.</td>
</tr>
</tbody>
</table>
(9) One (1) woodworking cell, identified as POD-4, approved in 2015 for construction, controlled by one (1) 61,000 cubic feet per minute baghouse, identified as BH-9, and exhausting internally or to stack BHS-9.

(10) One (1) wood working cell, identified as WW-10, constructed in 2018, controlled by a 61,000 cubic feet per minute baghouse, identified as BH-10 and exhausting through stack BHS-10.

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

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

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

In order to assure that the requirements of 326 IAC 2-2 (PSD) do not apply, the integral baghouses BH-2, BH-4, BH-5, BH-6, BH-7, BH-8, BH-9, BH-10 and dust collector DC-1 shall be in operation and control emissions from the woodworking operations at all times the associated unit is in operation.

Compliance with this condition shall assure that the emissions increase from the construction and operation of WW-2 in 1998, WW-4 in 1997, and WW-5 and WW-6 in 1986, is each less than twenty-five (25) tons per year of PM, and fifteen (15) tons per year of PM10, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Compliance with this condition shall assure that the emissions increase from the modification permitted in Significant Source Modification No. 037-20223-00051, issued August 26, 2005, and Significant Permit Modification No. 037-20407-00051, issued September 15, 2005, consisting of the construction and operation of WW-7, is less than twenty-five (25) tons per year of PM, and fifteen (15) tons per year of PM10, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Compliance with this condition shall assure that the emissions increase from the modification permitted in Minor Source Modification No. 037-29721-00051, issued November 12, 2010, and Significant Permit Modification No. 037-29730-00051, issued December 29, 2010, is less than twenty-five (25) tons per year of PM, fifteen (15) tons per year of PM10, and ten (10) tons per year of PM2.5, consisting of the construction and operation of WW-8 (combined with the emissions from STB-20 and UVMC-1) and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Compliance with this condition shall assure that the emissions increase from the modification permitted in this Part 70 Permit Renewal No. T037-33447-00051, is less than twenty-five (25) tons per year of PM, fifteen (15) tons per year of PM10, and ten (10) tons per year of PM2.5, consisting of the construction and operation of POD-4, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

Compliance with this condition shall assure that the emissions increase from the SPM No. 037-39871-00051, is less than twenty-five (25) tons per year of PM, fifteen (15) tons per year of PM10, and ten (10) tons per year of PM2.5, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to SPM No. 037-39871-00051.

D.2.2 Particulate Matter Emission Limitations [326 IAC 6.5-1]

Pursuant to 326 IAC 6.5-1 (Particulate Matter Limitations Except Lake County), the particulate matter emissions from the woodworking operations (WW-1, WW-2, WW-3, WW-4, WW-5, WW-6, WW-7, WW-8, POD-4 and WW-10), and the four (4) sanding operations (two (2) associated with Line A and two (2) associated with Line B) shall not exceed three-hundredths (0.03) grain per dry standard cubic foot (dscf) of exhaust air.
D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligations with regard to the preventive maintenance plan required by this condition.

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

D.2.4 Particulate Matter Control (PM and PM10)

In order to comply with Conditions D.2.1, and D.2.2, the baghouses and cartridge/dry filters for PM, PM10, and PM2.5 control shall be in operation and control emissions from the woodworking facilities (WW-1, WW-2, WW-3, WW-4, WW-5, WW-6, WW-7, WW-8, POD-4 and WW-10) and the four (4) sanding operations associated with Lines A and B at all times that the facilities are in operation.

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

D.2.5 Visible Emissions Notations [40 CFR 64.2 (CAM)]

(a) Visible emission notations of the baghouse stack exhaust from stacks BHS-1 through BHS-10 and stacks DCS-1A and DCS-1B 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.6 Broken or Failed Bag Detection

In the event that bag failure has been observed:

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

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

Bag failure can be indicated by a significant drop in the baghouse pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces, or triboflows.
Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the baghouse exhausts when venting to the atmosphere. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the process did not operate that day or the process was venting indoors).

(b) Section C - General Record Keeping Requirements contains the Permittee’s obligations with regard to the records required by this condition.
SECTION D.3  EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) conventional surface coating line, constructed in 1973. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The conventional surface coating line is comprised of the following surface coating facilities:

(7) One (1) natural gas-fired oven identified as OV-1, approved for construction in 2015, with a maximum heat input capacity of 1.2 MMBtu per hour, and exhausting to stack OVS-1.

Insignificant Activities:

(c) Emission units with PM and PM10 emissions less than five (5) tons per year, SO2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) natural gas-fired oven, identified as OV-2, with a maximum heat input capacity of 1 MMBtu per hour, and exhausting at stack OVS-2. [326 IAC 6.5]

(f) One (1) Regenerative thermal oxidizer utilized for VOC control, constructed in 2008, with a maximum heat input capacity of 8.576 MMBtu/hr and a maximum flow rate of 30,000 acfm.

(dd) One (1) natural gas-fired air make up unit, constructed in 2018 and with a maximum heat input capacity of 0.7 MMBtu/hr.

(ee) One (1) natural gas-fired spark ignition engine for emergency generator, identified as NG-GEN, constructed in 2018 and with a rating of 70 KW (93.9 HP).

Under NESHAP, Subpart ZZZZ, NG-GEN is considered a new stationary RICE.

Under NSPS, Subpart JJJJ, NG-GEN is considered an affected facility.

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

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

D.3.1 Particulate Matter (PM) Limitations [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Particulate Matter Limitations Except Lake County), particulate matter (PM) emissions from each of the natural gas combustion units and NG-GEN shall not exceed 0.03 grains per dry standard cubic foot (gr/dscf).
SECTION D.4 EMISSION UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) One (1) finishing line, identified as Flatline A, approved in 2017 for construction. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Flatline A finishing line consists of the following facilities:

1. One (1) topcoat/opaque spray booth, identified as FLA-1, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a Regenerative Thermal Oxidizer, identified as RTO-1, exhausting to stack RTOS-1.

2. One (1) topcoat/opaque spray booth, identified as FLA-2, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a Regenerative Thermal Oxidizer, identified as RTO-1, exhausting to stack RTOS-1.

3. Two (2) sanding booths, identified as FLASB-1 and FLASB-2, each with a maximum capacity of 1,500 units per hour, particulate emissions controlled by a cartridge filter dust collector, identified as DC-1, with two exhaust stacks, identified as DCS-1A and DCS-1B.

4. Two (2) drying ovens, identified as FLAOV-1 and FLAOV-2, heated by hot water generated from the two (2) 1.5 MMBtu/hour natural gas-fired boilers, VOC emissions from drying ovens are controlled by a regenerative thermal oxidizer (RTO) identified as RTO-1, exhausting from stack RTOS-1.

(e) One (1) finishing line, identified as Flatline B, approved in 2017 for construction. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Flatline B finishing line consists of the following facilities:

1. One (1) topcoat/opaque spray booth, identified as FLB-1, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting to stack RTOS-2.

2. One (1) topcoat/opaque spray booth, identified as FLB-2, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting to stack RTOS-2.

3. Two (2) sanding booths, identified as FLBSB-1 and FLBSB-2, each with a maximum capacity of 1,500 units per hour, particulate emissions controlled by a cartridge filter dust collector, identified as DC-1, with two exhaust stacks, each with a maximum outlet grain loading of 0.002161 grains per cubic foot and an exhaust rate of 7,000 ACFM, identified as DCS-1A and DCS-1B.

4. Two (2) drying ovens, identified as FLBOV-1 and FLBOV-2, heated by hot water generated from the two (2) 1.5 MMBtu/hour natural gas-fired boilers, VOC emissions from the drying ovens are controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting from stack RTOS-2.
(f) Solvent/Cleanup Usage.

Insignificant activities:

(f) One (1) regenerative thermal oxidizer, identified as RTO-2, utilized for VOC control, constructed in 2008, with a maximum heat input capacity of 8.576 MMBtu/hr and a maximum flow rate of 30,000 acfm, exhausting to stack RTOS-2.

(g) One (1) regenerative thermal oxidizer (RTO), approved in 2017 for construction, identified as RTO-1, with a maximum heat input capacity of 16.0 MMBtu/hour, exhausting to stack RTOS-1.

LINE A Associated Insignificant Activities

(r) One (1) halogen oven, identified as OV-3, equipped in conjunction with Line A, controlled by RTO-2, and exhausting through stack RTOS-2.

LINE B Associated Insignificant Activities

(w) One (1) halogen oven, identified as OV-13, equipped in conjunction with Line B, controlled by existing RTO-2, and exhausting through stack RTOS-2.

(z) One (1) natural gas-fired boiler, providing hot water to the two (2) drying ovens associated with Flatline A, approved for construction in 2017, with a maximum heat input capacity of 1.5 MMBtu/hour, emissions are uncontrolled, exhausting to stack LAS-9 [326 IAC 6-2]

(aa) One (1) natural gas-fired boiler, providing hot water to the two (2) drying ovens associated with Flatline B, approved for construction in 2017, with a maximum heat input capacity of 1.5 MMBtu/hour, emissions are uncontrolled, exhausting to stack LBS-9 [326 IAC 6-2]

Line A & B Associated Insignificant Activities

(bb) One (1) natural gas fired drying oven, identified as OV-3/13, with a maximum heat input of 2.0 MMBtu/hour, approved in 2017 to replace one (1) existing one (1) halogen oven, identified as OV-13.

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

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

D.4.1 Prevention of Significant Deterioration (PSD) - Best Available Control Technology (BACT) for Volatile Organic Compounds (VOC) [326 IAC 2-2-3]

Pursuant to 326 IAC 2-2-3 (Control Technology Review; Requirements), the Permittee shall comply with the PSD BACT requirements for Volatile Organic Compounds (VOC) for the following emission units:

(a) The VOC content of the topcoat coatings used "as applied" from the two (2) topcoat/opaque spray booths, identified as FLA-1 and FLA-2 at the Finishing Line A Flatline A shall not exceed 4.5 pounds/gallon of coating.

(b) The VOC content of the opaque coatings used "as applied" from the two (2) topcoat/opaque spray booths, identified as FLA-1 and FLA-2 at the Finishing Line A Flatline A shall not exceed 5.3 pounds/gallon of coating.

(c) The VOC content of the topcoat coatings used "as applied" from the two (2) topcoat/opaque spray booths, identified as FLB-1 and FLB-2 at the Finishing Line A Flatline A shall not exceed 4.5 pounds/gallon of coating.
(d) The VOC content of the opaque coatings used “as applied” from the two (2) topcoat/opaque spray booths, identified as FLB-1 and FLB-2 at the Finishing Line B Flatline B shall not exceed 5.3 pounds/gallon of coating.

(e) The two (2) topcoat/opaque spray booths, identified as FLA-1 and FLA-2 at the Finishing Line A Flatline A and the two (2) topcoat/opaque spray booths, identified as FLB-1 and FLB-2 at the Finishing Line B Flatline B shall utilize HVLP, air assisted airless (or demonstrated equivalent) application equipment in coating topcoat and opaque materials.

(f) VOC emissions from the two (2) topcoat/opaque spray booths, identified as FLA-1 and FLA-2 at the Finishing Line A Flatline A and associated drying ovens; and the two (2) topcoat/opaque spray booths, identified as FLB-1 and FLB-2 at the Finishing Line B Flatline B and associated drying ovens shall be controlled by Regenerative Thermal Oxidizer at 98% destruction efficiency and an overall control of 83%.

(g) The following good work practices must be implemented:

1. Solvents containing no more than 8.0 percent by weight of VOC must be used 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.

2. Requirements for storage of both fresh and used organic solvent in closed containers.

3. Requirement to pump solvent used for line cleaning into closed containers.

4. Requirement to collect solvent used for gun cleaning in closed containers.

5. Requirement to control emissions from wash-off by using closed tanks.

6. Requirements to minimize spills of any VOC-containing materials and to clean up any such spills immediately.

7. Requirements to minimize emissions of VOC during the cleaning of storage, mixing and conveying equipment.

8. Requirements to keep vessels that contain VOC-containing materials closed except when specifically in use.

9. Requirements to convey VOC-containing materials in closed containers or pipes;

10. Requirement to maintain a Work Practice Implementation Plan.

11. Requirement to maintain and implement a Leak inspection and maintenance plan for VOC.

(h) The VOC emissions from the 16 MMBtu/hour Regenerative Thermal Oxidizer (RTO), identified as RTO-1 shall not exceed 0.005 pound/MMBtu.

(i) The VOC emissions from the two (2) 1.5 MMBtu/hour boilers shall each not exceed 0.005 pound/MMBtu.

(j) Implementation of good combustion practices, which includes proper care and maintenance of the natural gas burner systems for the two (2) boilers and RTO-1.
D.4.2 Volatile Organic Compounds (VOC) Limitations [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), when applying surface coatings to kitchen cabinets from the two (2) topcoat/opaque spray booths at the Finishing Line A Flatline A and from the two (2) topcoat/opaque spray booths at the Finishing Line B Flatline B, the Permittee shall apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) or more 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.4.3 Particulate Emission Limitations [326 IAC 6.5-1-2]

(a) Pursuant to 326 IAC 6.5-1-2(h), the two (2) topcoat/opaque spray booths, identified as FLA-1 and FLA-2 at the Finishing Line A Flatline A and associated drying ovens; and the two (2) topcoat/opaque spray booths, identified as FLB-1 and FLB-2 at the Finishing Line B Flatline B shall be controlled by a dry particulate filter, water wash, or an equivalent control device and the Permittee shall operate the control device in accordance with manufacturer's specifications.

(b) Pursuant to 326 IAC 6.5-1-2(a), the Particulate Matter emissions from the two (2) Flatline A topcoat/opaque sanding booths, identified as FLASB-1 and FLASB-2; and the two (2) Flatline B topcoat/opaque sanding booths, identified as FLBSB-1 and FLBSB-2, shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

D.4.4 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Particulate emission from each of the two (2) 1.5 MMBtu/hour natural gas-fired boilers shall not exceed 0.6 pound/MMBtu.

D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(12)] [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and control devices. Section B – Preventive Maintenance Plan contains the Permittee’s obligation with regard to the plans required by this condition.

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

D.4.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the VOC input limitation contained in Condition D.4.1(a) through (d) shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the “as supplied” and “as applied” VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
D.4.7 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

(a) Not later than 180 days after the startup of the new RTO-1, the Permittee shall perform VOC destruction efficiency testing of RTO-1 and VOC capture efficiency of the Flatline A - topcoat/opaque spray booths, FLA-1 and FLA-2, and drying ovens FLAOV-1 and FLAOV-2; Flatline B - topcoat/opaque spray booths, FLB-1 and FLB-2, and drying ovens FLBOV-1 and FLBOV-2; utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

These tests shall be performed using methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

D.4.8 Volatile Organic Compounds (VOC) Control

In order to comply with Condition D.4.1(f), the Permittee shall operate the regenerative thermal oxidizers, RTO-1 associated with the topcoat/opaque spray booths, FLA-1 and FLA-2, and drying ovens FLAOV-1, FLAOV-2; and RTO-2 associated with the topcoat/opaque spray booths, FLB-1, FLB-2 and drying ovens FLBOV-1, FLBOV-2, at all times the respective facilities are in operation.

D.4.9 Particulate Matter Control

In order to comply with Condition D.4.3, each of the four (4) cartridge filter dust collectors associated with the two (2) Flatline A topcoat/opaque sanding booths, identified as FLASB-1 and FLASB-2; and two (2) Flatline B topcoat/opaque sanding booths, identified as FLBSB-1 and FLBSB-2, shall be in operation at all times when the corresponding sander is in operation.

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

D.4.10 Regenerative Thermal Oxidizer Temperature [326 IAC 2-7-5(3)] [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer, identified as RTO-1 for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average.

(b) The Permittee shall determine the 3-hour average temperature of RTO-2 from the most recent valid stack test that demonstrates compliance with limits in Condition D.4.1(f).

(c) From the date of start-up of RTO-2 in controlling Flatline B - topcoat/opaque spray booths, FLB-1, FLB-2 and drying ovens FLBOV-1, FLBOV-2 until the stack test results are available, the Permittee shall operate the thermal oxidizer, RTO-2 at or above the 3-hour average temperature of 1,400 °F.

(d) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer, RTO-2 at or above the 3-hour average temperature as observed during the latest compliant stack test.

(e) If a 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A 3-hour temperature that falls below the above mentioned temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.4.11 Parametric Monitoring - Thermal Oxidizer Duct Pressure or Fan Amperage [40 CFR 64]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage for RTO-1 from the most recent valid stack test that demonstrates compliance with limits in
Condition D.4.1(c).

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer, identified as RTO-1, is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

(c) When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.4.12 Dry Filter Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry particulate filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the topcoat/opaque booths stack, RTOS-1 and topcoat/opaque booths stack, RTOS-2 while the booths are in operation. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground, weather permitting. If a noticeable change in overspray emission, or evidence of overspray emission is observed at any stack exhaust, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.4.13 Record Keeping Requirement

(a) To document the compliance status with Conditions D.4.1(a) through (d), the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limitations established Conditions D.4.1(a) through (d):

(1) The VOC content of each coating material, i.e. topcoat and opaque used "as applied".

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

(A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) or certified product data sheets (CPDS) 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.

(b) To document the compliance status with Conditions D.4.1(f) and D.4.10, the Permittee shall maintain continuous temperature records for the thermal oxidizers, RTO-1 and
RTO-2 and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(c) To document the compliance status with Condition D.4.11, the Permittee shall maintain daily records of the duct pressure or fan amperage for the thermal oxidizer.

(d) To document compliance with Condition D.4.12, the Permittee shall maintain a log of weekly overspray observations, and daily and monthly inspections.

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

D.4.14 Reporting Requirements
Quarterly reports of monthly coatings used "as applied" from the two (2) topcoat/opaque spray booths, identified as FLA-1 and FLA-2 and the two (2) topcoat/opaque spray booths, identified as FLB-1 and FLB-2 to document the compliance status with Conditions D.4.1(a) and (b) shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee do require a certification that meets the requirements of 326 IAC 2 7 6(1) by a "responsible official" as defined by 326 IAC 2 7 1(35).
SECTION E.1

NESHAP

Emissions Unit Description:

(a) One (1) conventional surface coating line, constructed in 1973. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The conventional surface coating line is comprised of the following surface coating facilities:

1. One (1) toner booth, identified as CLB-1, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-1;

2. One (1) stain booth, identified as CLB-2, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-2;

3. One (1) sealer booth, identified as CLB-3, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-3 and CLS-4;

4. One (1) top coat booth, identified as CLB-4, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-5 and CLS-6;

5. One (1) parts booth, identified as CLB-5, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stacks CLS-7 and CLS-8;

6. One (1) parts booth, identified as CLB-6, with a maximum capacity of 225 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack CLS-9; and

(b) One (1) finishing line, identified as Line A, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line A finishing line consists of the following facilities:

1. Two (2) toner spray booths, identified as LAB-1 and LAB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-1 for VOC control, and exhausting through stack RTOS-1.

2. Two (2) stain spray booths, identified as LAB-3 and LAB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-1 for VOC control, and exhausting through stack RTOS-1.

3. One (1) topcoat booth, identified as LAB-7, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV
curable coatings and dry filters for particulate control, and exhausting through stack LAS-7.

(4) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8.

(6) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(c) One (1) finishing line, identified as Line B, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line B finishing line consists of the following facilities:

(1) One (1) color match spray booth, identified as LBB-1, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) One (1) toner spray booth, identified as LBB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(d) One (1) finishing line, identified as Flatline A, approved in 2017 for construction. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Flatline A finishing line consists of the following facilities:

(1) One (1) topcoat/opaque spray booth, identified as FLA-1, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a Regenerative Thermal Oxidizer, identified as RTO-1, exhausting to stack RTOS-1.

(2) One (1) topcoat/opaque spray booth, identified as FLA-2, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a Regenerative Thermal Oxidizer, identified as RTO-1, exhausting to stack RTOS-1.

(e) One (1) finishing line, identified as Flatline B, approved in 2017 for construction. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Flatline B finishing line consists of the following facilities:
One (1) topcoat/opaque spray booth, identified as FLB-1, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting to stack RTOS-2.

One (1) topcoat/opaque spray booth, identified as FLB-2, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting to stack RTOS-2.

(f) Solvent/Cleanup Usage.

(h) One (1) off-line parts booth with an electric convection oven, approved in 2015 for construction, identified as OLB-1, with a maximum capacity of 100 units per hour, using dry filters as control, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, and exhausting to stacks OLS-1 and OLS-2.

The booth is part of an existing affected source under the provisions of 40 CFR 63, Subpart JJ.

(i) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019 for modification, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in 2019 for modification, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) automated spray booth with an electric oven, identified as STB-21, approved in 2019 for construction, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting to stack STS-7.

This unit is an affected source under 40 CFR 63, Subpart JJ.

Insignificant Activities:

(h) One (1) end coat booth, identified as UVPB-1, constructed in 1994, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack UVPS-1.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(i) One (1) UV Stickline, identified as UVC-2, constructed in 1994, utilizing roll coating application, and exhausting internally.
This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) UV Flatline, identified as UVC-3, constructed in 1994, utilizing roll coating application, and exhausting internally.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) UV Stickline, identified as UVC-4, constructed in 1999, utilizing roll coating application, and exhausting internally.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(l) One (1) UV-cured mist coater booth, identified as UVMC-1, constructed in 2010, with a maximum capacity of 378 wood moldings per hour, and exhausting to stack UVS-1.

This unit is an affected source under 40 CFR 63 Subpart JJ.

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

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


(a) Pursuant to 40 CFR 63.1 the Permittee shall comply with the provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1, for the emission units listed above, except as otherwise specified in 40 CFR 63, Subpart JJ.

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

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

E.1.2 National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations [40 CFR 63, Subpart JJ] [326 IAC 20-14]

The Permittee shall comply with the following provisions of 40 CFR 63, Subpart JJ (included as Attachment A to the operating permit), which are incorporated by reference as 326 IAC 20-14, for the emission units listed above:

(1) 40 CFR 63.800(a), (e), (g), and (i)
(2) 40 CFR 63.801
(3) 40 CFR 63.802(a), (c)
(4) 40 CFR 63.803(a) through (c), (f) through (l)
(5) 40 CFR 63.804
(6) 40 CFR 63.805
(7) 40 CFR 63.806
(8) 40 CFR 63.807
(9) 40 CFR 63.808
(10) Table 1 to Subpart JJ of Part 63—General Provisions Applicability to Subpart JJ
(11) Table 2 to Subpart JJ of Part 63—List of Volatile Hazardous Air Pollutants
(12) Table 3 to Subpart JJ of Part 63—Summary of Emission Limits
Table 4 to Subpart JJ of Part 63—Pollutants Excluded From Use in Cleaning and Washoff Solvents

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

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

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

E.1.3 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

In order to demonstrate compliance with Condition E.1.2, the Permittee shall perform the testing required under 40 CFR 63, Subpart JJ, utilizing methods as approved by the Commissioner, at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.
SECTION E.2  NSPS

**Emissions Unit Description:**

Insignificant Activities:

(ee) One (1) natural gas-fired spark ignition engine for emergency generator, identified as NG-GEN, constructed in 2018 and with a rating of 70 KW (93.9 HP).

Under NESHAP, Subpart ZZZZ, NG-GEN is considered a new stationary RICE.

Under NSPS, Subpart JJJJ, NG-GEN is considered an affected facility.

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

**New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

**E.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]**

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for NG-GEN listed above, except as otherwise specified in 40 CFR Part 60, Subpart JJJJ.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

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

**E.2.2 Standards of Performance for Stationary Spark Ignition Internal Combustion Engines [326 IAC 12] [40 CFR Part 60, Subpart JJJJ]**

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart JJJJ (included as Attachment B to the operating permit), which are incorporated by reference as 326 IAC 12, for NG-GEN listed above:

1. 40 CFR 60.4230 (a)(4)
2. 40 CFR 60.4233 (d)
3. 40 CFR 60.4234
5. 40 CFR 60.4243 (b) and (d)
7. 40 CFR 60.4245 (a)
8. 40 CFR 60.4246
SECTION E.3  NESHAP

Emissions Unit Description:

(ee) One (1) natural gas-fired spark ignition engine for emergency generator, identified as NG-GEN, constructed in 2018 and with a rating of 70 KW (93.9 HP).

Under NESHAP, Subpart ZZZZ, NG-GEN is considered a new stationary RICE.

Under NSPS, Subpart JJJJ, NG-GEN is considered an affected facility.

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

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


(a) Pursuant to 40 CFR 63.1 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, for NG-GEN listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

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

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

E.3.2 National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment C to the operating permit), which are incorporated by reference as 326 IAC 20-82, for NG-GEN listed above:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585(a) and (b)
(3) 40 CFR 63.6590(a)(2)(ii) and (c)(6)
(4) 40 CFR 63.6595
(5) 40 CFR 63.6605
(6) 40 CFR 63.6665
(7) 40 CFR 63.6670
(8) 40 CFR 63.6675
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:
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) daytime 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

| 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, SO₂, VOC, NOₓ, 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: ___________________________________________________________
**Part 70 Quarterly Report**

Source Name: MasterBrand Cabinets, Inc.
Source Address: 614 W 3rd Street, Ferdinand, Indiana 47532
Part 70 Permit No.: T037-33447-00051
Facility: Finishing Lines (Lines A and B)
Parameter: VOC Emissions

**Limit:**

The input of VOC to Line A (LAB-1 through LAB-7) and Line B (LBB-1 through LBB-2) shall be limited such that the VOC emissions shall be less than three hundred thirty-one (331) tons per twelve (12) consecutive month period with compliance determined at the end of each month. When using the RTO (RTO-2) to comply with this limitation, the following formula shall be used to determine compliance:

\[ i = (1 - DRE \times Ecap) \times X + Y \]

Where:
- **i** = VOC emissions for month in tons per month.
- **Ecap** = Averaged Capture Efficiency for Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.
- **DRE** = Averaged Destruction Removal Efficiency for Spray Booth LAB1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.
- **X** = Total monthly VOC Input to Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4.
- **Y** = Total monthly VOC Input to Spray Booth LAB-7.

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- □ No deviation occurred in this quarter.
- □ Deviation/s occurred in this quarter.
  Deviation has been reported on: _______________________

Submitted by: ____________________________________________________________
Title / Position: ___________________________________________________________
Signature: _______________________________________________________________
Date: ___________________________________________________________________
Phone: _________________________________________________________________
Part 70 Quarterly Report

Source Name: MasterBrand Cabinets, Inc.
Source Address: 614 W 3rd Street, Ferdinand, Indiana 47532
Part 70 Permit No.: T037-33447-00051
Facility: Off-line Parts Booth (OLB-1)
Parameter: VOC Emissions
Limit: The VOC input to the booth (OLB-1), including coatings, dilution solvents, and cleaning solvents, shall not exceed 39 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

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- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
  Deviation has been reported on: ___________________

Submitted by: _____________________________________________________
Title / Position: ____________________________________________________
Signature: ________________________________________________________
Date: ____________________________________________________________
Phone: ___________________________________________________________
**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**COMPLIANCE AND ENFORCEMENT BRANCH**

**Part 70 Quarterly Report**

Source Name: MasterBrand Cabinets, Inc.  
Source Address: 614 W 3rd Street, Ferdinand, Indiana 47532  
Part 70 Permit No.: T037-33447-00051  
Facility: Topcoat/Opaque Spray booths, identified as FLA-1, FLA-2, FLB-1 and FLB-2  
Parameter: VOC Emissions  
Limit: The VOC content of the topcoat coatings used "as applied" at topcoat/opaque spray booths, FLA-1, FLA-2, FLB-1 and FLB-2 shall not exceed 4.5 pounds/gallon of coating.  
The VOC content of the opaque coatings used "as applied" at topcoat/opaque spray booths, FLA-1, FLA-2, FLB-1 and FLB-2 shall not exceed 5.3 pounds/gallon of coating.

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<th>Month:</th>
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<th>VOC Content of Topcoat and Opaque Coatings Used (pounds of VOC/gallon as applied)</th>
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☐ No deviation occurred in this month.  
☐ Deviation/s occurred in this month.  
Deviation has been reported on: ____________________________

Submitted by: ____________________________  
Title/Position: ____________________________  
Signature: ____________________________  
Date: ____________________________  
Phone: ____________________________
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: MasterBrand Cabinets, Inc.
Source Address: 614 W 3rd Street, Ferdinand, Indiana 47532
Part 70 Permit No.: T037-33447-00051

Months: ___________ to ____________ Year: _____________

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B – Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C - General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked “No deviations occurred this reporting period”.

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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</tr>
<tr>
<td>Probable Cause of Deviation:</td>
<td></td>
</tr>
<tr>
<td>Response Steps Taken:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permit Requirement (specify permit condition #)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Deviation:</td>
<td>Duration of Deviation:</td>
</tr>
<tr>
<td>Number of Deviations:</td>
<td></td>
</tr>
<tr>
<td>Probable Cause of Deviation:</td>
<td></td>
</tr>
<tr>
<td>Response Steps Taken:</td>
<td></td>
</tr>
</tbody>
</table>

Form Completed by: _______________________________________________________
Title / Position: ___________________________________________________________
Date: ___________________________________________________________________
Phone: _________________________________________________________________
Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification and Significant Permit Modification

**Source Description and Location**

<table>
<thead>
<tr>
<th>Source Name:</th>
<th>MasterBrand Cabinets, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Location:</td>
<td>614 W 3rd Street, Ferdinand, Indiana 47532</td>
</tr>
<tr>
<td>County:</td>
<td>Dubois</td>
</tr>
<tr>
<td>SIC Code:</td>
<td>2434 (Wood Kitchen and Bath Cabinets)</td>
</tr>
<tr>
<td>Operation Permit No.:</td>
<td>T037-33447-00051</td>
</tr>
<tr>
<td>Operation Permit Issuance Date:</td>
<td>February 25, 2015</td>
</tr>
<tr>
<td>Significant Source Modification No.:</td>
<td>037-41205-00051</td>
</tr>
<tr>
<td>Significant Permit Modification No.:</td>
<td>037-41274-00051</td>
</tr>
<tr>
<td>Permit Reviewer:</td>
<td>Natalie Moore</td>
</tr>
</tbody>
</table>

**Existing Approvals**

The source was issued Part 70 Operating Permit Renewal No. T037-33447-00051 on February 25, 2015. The source has since received the following approvals:

<table>
<thead>
<tr>
<th>Permit Type</th>
<th>Permit Number</th>
<th>Issuance Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant Source Modification</td>
<td>037-35863-00051</td>
<td>August 18, 2015</td>
</tr>
<tr>
<td>Significant Permit Modification</td>
<td>037-35873-00051</td>
<td>September 3, 2015</td>
</tr>
<tr>
<td>Administrative Amendment</td>
<td>037-36360-00051</td>
<td>November 18, 2015</td>
</tr>
<tr>
<td>Significant Permit Modification</td>
<td>037-37819-00051</td>
<td>February 6, 2017</td>
</tr>
<tr>
<td>Significant Source Modification (Major PSD)</td>
<td>037-38193-00051</td>
<td>December 6, 2017</td>
</tr>
<tr>
<td>Significant Permit Modification</td>
<td>037-38212-00051</td>
<td>December 28, 2017</td>
</tr>
<tr>
<td>Significant Permit Modification</td>
<td>037-39871-00051</td>
<td>October 16, 2018</td>
</tr>
<tr>
<td>Administrative Amendment</td>
<td>037-41526-00051</td>
<td>June 5, 2019</td>
</tr>
</tbody>
</table>

The source submitted an application for a Part 70 Operating Permit Renewal on May 28, 2019. At this time, the application is under review.
County Attainment Status

The source is located in Dubois County.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO\textsubscript{2}</td>
<td>Better than national standards.</td>
</tr>
<tr>
<td>CO</td>
<td>Unclassifiable or attainment effective November 15, 1990.</td>
</tr>
<tr>
<td>O\textsubscript{3}</td>
<td>Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.\textsuperscript{1}</td>
</tr>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>Unclassifiable or attainment effective April 15, 2015, for the annual PM\textsubscript{2.5} standard.</td>
</tr>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM\textsubscript{2.5} standard.</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>Unclassifiable effective November 15, 1990.</td>
</tr>
<tr>
<td>NO\textsubscript{2}</td>
<td>Unclassifiable or attainment effective January 29, 2012, for the 2010 NO\textsubscript{2} standard.</td>
</tr>
<tr>
<td>Pb</td>
<td>Unclassifiable or attainment effective December 31, 2011.</td>
</tr>
</tbody>
</table>

\textsuperscript{1}Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard, which was revoked effective June 15, 2005.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NO\textsubscript{x}) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO\textsubscript{x} emissions are considered when evaluating the rule applicability relating to ozone. Dubois County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO\textsubscript{x} emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM\textsubscript{2.5}

Dubois County has been classified as attainment for PM\textsubscript{2.5}. Therefore, direct PM\textsubscript{2.5}, SO\textsubscript{2}, and NO\textsubscript{x} emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants

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

Fugitive Emissions

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit applicability and source status under Section 112 of the Clean Air Act (CAA).

Greenhouse Gas (GHG) Emissions

On June 23, 2014, in the case of Utility Air Regulatory Group v. EPA, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no
longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

### Source Status - Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Source-Wide Emissions Prior to Modification (ton/year)</th>
<th>PM(^1)</th>
<th>PM(_{10})(^1)</th>
<th>PM(_{2.5})(^{1,2})</th>
<th>SO(_2)</th>
<th>NO(_x)</th>
<th>VOC</th>
<th>CO</th>
<th>GHG</th>
<th>Single HAP(^3)</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire Source Excluding Fugitive Emissions*</td>
<td>3,137</td>
<td>3,094</td>
<td>4,428</td>
<td>0.08</td>
<td>14.66</td>
<td>&lt; 2,822</td>
<td>11.77</td>
<td>&gt; 16,658</td>
<td>&gt; 309</td>
<td>&gt; 593</td>
</tr>
<tr>
<td>Title V Major Source Thresholds</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100,000 CO(_{2})e</td>
<td>10</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>100,000 CO(_{2})e</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)Under the Part 70 Permit program (40 CFR 70), PM\(_{10}\) and PM\(_{2.5}\), not particulate matter (PM), are each considered as a "regulated air pollutant."

\(^{2}\)PM\(_{2.5}\) listed is direct PM\(_{2.5}\).

\(^{3}\)Single highest source-wide HAP.

*Fugitive HAP emissions are always included in the source-wide emissions.

Woodworking controls are integral.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because PSD regulated pollutants, PM, PM\(_{10}\), PM\(_{2.5}\), and VOC, are each emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are equal to or greater than ten (10) tons per year for a single HAP and equal to or greater than twenty-five (25) tons per year for a combination of HAPs.

(c) These emissions are based on the TSD of Significant Permit Modification No. 037-39871-00051, issued on October 16, 2018.

### Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by MasterBrand Cabinets, Inc. on March 14, 2019, relating to the construction of one automated spray booth, the replacement of one topcoat booth which coats pieces for Line A, and the modification of two spray booths.

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

(a) One (1) automated spray booth with an electric oven, identified as STB-21, approved in 2019 for construction, with a maximum capacity of 900 units per hour, utilizing high volume low pressure...
(HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting to stack STS-7.

This unit is an affected source under 40 CFR 63, Subpart JJ.

(b) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8.

This unit is an affected source under 40 CFR 63, Subpart JJ.

[Note: A previously permitted topcoat booth, identified currently as LAB-8 in the permit is being removed and will be deleted from the permit]

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

(c) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019 for modification, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(d) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in 2019 for modification, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

As part of this permitting action, the following emission units are being removed from the permit:

(a) One (1) topcoat booth, identified as LAB-8, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8.

(b) Four (4) UV ovens, identified as OV-15, OV-17, OV-19, and OV-22, equipped in conjunction with Line B.

**“Integral Part of the Process” Determination**

In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge (“ALJ”) Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations was calculated after control for purposes of determining permitting level and applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

**Enforcement Issues**

There are no pending enforcement actions related to this modification.
### Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

#### Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit 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, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP</th>
<th>Total HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAB-8</td>
<td>46.90</td>
<td>46.90</td>
<td>46.90</td>
<td>-</td>
<td>-</td>
<td>1.71</td>
<td>-</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td>STB-21</td>
<td>137.61</td>
<td>137.61</td>
<td>137.61</td>
<td>-</td>
<td>-</td>
<td>21.72</td>
<td>-</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td><strong>Total PTE Before Controls of the New Emission Units:</strong></td>
<td><strong>184.51</strong></td>
<td><strong>184.51</strong></td>
<td><strong>184.51</strong></td>
<td>-</td>
<td>-</td>
<td><strong>23.43</strong></td>
<td>-</td>
<td><strong>1.77</strong></td>
<td><strong>1.77</strong></td>
</tr>
</tbody>
</table>

1PM2.5 listed is direct PM2.5.
2Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the modification.

<table>
<thead>
<tr>
<th>Process / Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP</th>
<th>Total HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PTE Increase of the Modified Emission Units (ton/year)</strong></td>
<td><strong>PM</strong></td>
<td><strong>PM10</strong></td>
<td><strong>PM2.5</strong></td>
<td><strong>SO2</strong></td>
<td><strong>NOx</strong></td>
<td><strong>VOC</strong></td>
<td><strong>CO</strong></td>
<td><strong>Single HAP</strong></td>
<td><strong>Total HAP</strong></td>
</tr>
<tr>
<td>PTE Before Modification (STB-19)</td>
<td>0.24</td>
<td>0.24</td>
<td>0.24</td>
<td>-</td>
<td>-</td>
<td>0.21</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PTE After Modification (STB-19)</td>
<td>28.48</td>
<td>28.48</td>
<td>28.48</td>
<td>-</td>
<td>-</td>
<td>4.49</td>
<td>-</td>
<td>0.23</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>PTE Increase (STB-19)</strong></td>
<td>28.24</td>
<td>28.24</td>
<td>28.24</td>
<td>-</td>
<td>-</td>
<td>4.28</td>
<td>-</td>
<td>0.23</td>
<td>0.23</td>
</tr>
<tr>
<td>PTE Before Modification (STB-20)</td>
<td>4.92</td>
<td>4.92</td>
<td>4.92</td>
<td>-</td>
<td>-</td>
<td>6.04</td>
<td>-</td>
<td>2.53</td>
<td>5.32</td>
</tr>
<tr>
<td>PTE After Modification (STB-20)</td>
<td>137.61</td>
<td>137.61</td>
<td>137.61</td>
<td>-</td>
<td>-</td>
<td>21.72</td>
<td>-</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td><strong>PTE Increase (STB-20)</strong></td>
<td>132.69</td>
<td>132.69</td>
<td>132.69</td>
<td>-</td>
<td>-</td>
<td>15.68</td>
<td>-</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total PTE Increase of the Modified Emission Units</strong></td>
<td><strong>160.93</strong></td>
<td><strong>160.93</strong></td>
<td><strong>160.93</strong></td>
<td>-</td>
<td>-</td>
<td><strong>19.96</strong></td>
<td>-</td>
<td><strong>0.23</strong></td>
<td><strong>0.23</strong></td>
</tr>
</tbody>
</table>

1PM2.5 listed is direct PM2.5.
2Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the modification.
### PTE Increases Due to the Modification (ton/year)

<table>
<thead>
<tr>
<th></th>
<th>PM</th>
<th>PM\textsubscript{10}</th>
<th>PM\textsubscript{2.5}\textsuperscript{1}</th>
<th>SO\textsubscript{2}</th>
<th>NO\textsubscript{x}</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP\textsuperscript{2}</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE Before Controls of the New Emission Units</td>
<td>184.51</td>
<td>184.51</td>
<td>184.51</td>
<td>-</td>
<td>-</td>
<td>23.43</td>
<td>-</td>
<td>1.77</td>
<td>1.77</td>
</tr>
<tr>
<td>Total PTE Increase of the Modified Emission Units</td>
<td>160.93</td>
<td>160.93</td>
<td>160.93</td>
<td>-</td>
<td>-</td>
<td>19.96</td>
<td>-</td>
<td>0.23</td>
<td>0.23</td>
</tr>
<tr>
<td>Total PTE of the Modification</td>
<td>345.44</td>
<td>345.44</td>
<td>345.44</td>
<td>-</td>
<td>-</td>
<td>43.39</td>
<td>-</td>
<td>2.00</td>
<td>2.00</td>
</tr>
</tbody>
</table>

\textsuperscript{1}PM\textsubscript{2.5} listed is direct PM\textsubscript{2.5}.

\textsuperscript{2}Single highest HAP.

Appendix A of this TSD reflects the detailed potential emissions of the modification.

(a) **Approval to Construct**

Pursuant to 326 IAC 2-7-10.5(g)(4), a Significant Source Modification is required because this modification has the potential to emit PM/PM\textsubscript{10}/direct PM\textsubscript{2.5} and VOC at greater than or equal to twenty-five (25) tons per year, each.

(b) **Approval to Operate**

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment.

### Project Aggregation

On December 6, 2017, IDEM issued PSD/SSM No. 037-38193-00051 for a modification that included Finishing Lines/Flat Lines A and B (Topcoat Opaque Booths). In this application, the Permittee has submitted information confirming that this proposed project is a stand-alone project and has no physical relation to the previous project permitted under PSD/SSM No. 037-38193-00051. The two (2) modifications are funded by separate capital projects. The proposed project does not "debottleneck" any processes upstream or downstream units.

### Permit Level Determination - PSD Emissions Increase

(a) **"Hybrid" Applicability Test: ATP and ATPA**

Since this project involves the construction of new emissions unit (and/or emissions units considered new for this evaluation) and existing emissions units, a Hybrid applicability test, specified in 326 IAC 2-2-2(d)(5), is used to determine if the project results in a Significant Emissions Increase. A Hybrid applicability test uses both the Actual to Potential (ATP) test for new emissions units and Actual to Projected Actual (ATPA) test for existing emissions units affected by the modification.

The source has provided information and emission calculations as part of the application for this Hybrid test. IDEM, OAQ reviewed the emission calculations provided by the source to verify the emissions factors and methodology used, but has not made any determination regarding the validity and accuracy of certain information such as actual throughput, actual usage and actual hours of operation.

(b) **New Emissions Units and Existing Emissions Units Affected by the Modification**

This project involves both new emissions units and existing emissions units affected by the modification.
(1) New Emissions Unit
Pursuant to 326 IAC 2-2-1(t)(1), a new emissions unit is any emissions unit that is, or will
be, newly constructed and that has existed for less than two (2) years from the date the
emissions unit first operated.

(2) Existing Emissions Unit Affected by the Modification
The following emissions units will be considered existing for the purpose of this ATPA
test:
(A) Replacement emissions units. A new emissions unit, that replaces an existing
emissions unit and is identical to or functionally equivalent to the replaced
emissions unit is a replacement unit. A replacement emissions unit is an existing
emissions unit. [326 IAC 2-2-1(tt)]
(B) Modified emissions units.

The following proposed emissions unit is considered as a new emissions unit for this evaluation.

(1) One (1) automated spray booth with an electric oven, identified as STB-21, approved in
2019 for construction, with a maximum capacity of 900 units per hour, utilizing high
volume low pressure (HVLP), air assisted airless, or equivalent spray application
equipment, with particulate emissions controlled by a dry filter, and exhausting to stack
STS-7.

The following proposed replacement unit will be considered as a modified existing emissions unit
for this evaluation.

(1) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a
maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing
high volume low pressure (HVLP), air assisted airless, or equivalent spray application
equipment, using UV curable coatings and dry filters for particulate control, and
exhausting through stack LAS-8.

The following emissions units will be considered as modified existing emissions units for this
evaluation.

(1) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019
for modification, with a maximum capacity of 220 units per hour, utilizing high
volume low pressure (HVLP), air assisted airless, or equivalent spray application
equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

(2) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in
2019 for modification, with a maximum capacity of 900 units per hour, utilizing high
volume low pressure (HVLP), air assisted airless, or equivalent spray application
equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

(c) Baseline Actual Emissions
(1) New Emissions Unit
For a new emissions unit, the baseline actual emissions for purposes of determining the
Emissions Increase that will result from the initial construction and operation of the unit
shall equal zero (0) and thereafter, for all other purposes, shall equal the unit's potential
to emit.

(2) Existing Emissions Units
The baseline actual emissions from the existing emissions units involved in this ATPA
applicability test are based on their emissions from January 2017 through December
2018.
(d) **Hybrid Test: ATP and ATPA Summary**

The Emissions Increase of the project is the sum of the Emissions Increase for **each emissions unit**, calculated using the Actual to Potential (ATP) test for the new emissions units and the Actual to Projected Actual (ATPA) test for existing emissions units.

**Hybrid Applicability Test** = ATP\(_{(\text{new unit})}\) + ATPA\(_{(\text{existing unit})}\)

(e) **Actual to Potential (ATP) Summary**

An Actual to Potential (ATP) applicability test has been conducted for the new emissions units and/or the emissions units considered new for this evaluation.

\[ \text{ATP}_{(\text{new unit})} = \text{PTE}_{(\text{new unit})} - \text{Baseline Emissions}_{(\text{new unit})} \]

(f) **Actual to Projected Actual (ATPA) Summary**

An Actual to Projected Actual (ATPA) applicability test has been conducted for the existing emissions units.

Pursuant to 326 IAC 2-2-1(pp)(2)(A)(iii), when calculating Projected Actual Emissions, the source may exclude, in calculating any increase in emissions that result from the particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project, including any increased utilization due to product demand growth.

\[ \text{ATPA}_{(\text{existing unit})} = \left( \text{Projected Actual Emissions} - \text{Could Have Accommodated Emissions/Demand Growth Exclusions} \right) - \text{Baseline Emissions} \]

See Appendix A of this Technical Support Document for detailed emission calculations.

<table>
<thead>
<tr>
<th>New Emissions Unit ATP (tons/year)</th>
<th>PM</th>
<th>PM(_{10})</th>
<th>PM(_{2.5})</th>
<th>SO(_{2})</th>
<th>NO(_{X})</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>STB-21 (ATP)</td>
<td>6.88</td>
<td>6.88</td>
<td>6.88</td>
<td>-</td>
<td>-</td>
<td>21.72</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing Emissions Units ATPA (tons/year)</th>
<th>PM</th>
<th>PM(_{10})</th>
<th>PM(_{2.5})</th>
<th>SO(_{2})</th>
<th>NO(_{X})</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>STB-19</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Actual Emissions</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
<td>-</td>
<td>-</td>
<td>3.54</td>
<td>-</td>
</tr>
<tr>
<td>Baseline Actual Emissions</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>-</td>
<td>-</td>
<td>0.12</td>
<td>-</td>
</tr>
<tr>
<td>Additional Emissions that could have been accommodated/Demand Growth Exclusions</td>
<td>0.49</td>
<td>0.49</td>
<td>0.49</td>
<td>-</td>
<td>-</td>
<td>4.59</td>
<td>-</td>
</tr>
<tr>
<td><strong>ATPA</strong></td>
<td>0.27</td>
<td>0.27</td>
<td>0.27</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>STB-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Actual Emissions</td>
<td>1.52</td>
<td>1.52</td>
<td>1.52</td>
<td>-</td>
<td>-</td>
<td>6.70</td>
<td>-</td>
</tr>
<tr>
<td>Baseline Actual Emissions</td>
<td>0.24</td>
<td>0.24</td>
<td>0.24</td>
<td>-</td>
<td>-</td>
<td>2.22</td>
<td>-</td>
</tr>
</tbody>
</table>
### Existing Emissions Units ATPA (tons/year)

<table>
<thead>
<tr>
<th>Process/Emissions Unit</th>
<th>PM</th>
<th>PM$_{10}$</th>
<th>PM$_{2.5}$</th>
<th>SO$_2$</th>
<th>NO$_X$</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Emissions that could have been accommodated/Demand Growth Exclusions</td>
<td>0.62</td>
<td>0.62</td>
<td>0.62</td>
<td>-</td>
<td>-</td>
<td>5.81</td>
<td>-</td>
</tr>
<tr>
<td>ATPA</td>
<td>0.67</td>
<td>0.67</td>
<td>0.67</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>LAB-8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Actual Emissions</td>
<td>2.34</td>
<td>2.34</td>
<td>2.34</td>
<td>-</td>
<td>-</td>
<td>1.71</td>
<td>-</td>
</tr>
<tr>
<td>Baseline Actual Emissions</td>
<td>0.56</td>
<td>0.56</td>
<td>0.56</td>
<td>-</td>
<td>-</td>
<td>1.52</td>
<td>-</td>
</tr>
<tr>
<td>Additional Emissions that could have been accommodated/Demand Growth Exclusions</td>
<td>1.18</td>
<td>1.18</td>
<td>1.18</td>
<td>-</td>
<td>-</td>
<td>3.22</td>
<td>-</td>
</tr>
<tr>
<td>ATPA</td>
<td>0.61</td>
<td>0.61</td>
<td>0.61</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

### Project Emissions Increase (tons/year)

<table>
<thead>
<tr>
<th>Process/Emissions Unit</th>
<th>PM</th>
<th>PM$_{10}$</th>
<th>PM$_{2.5}$*</th>
<th>SO$_2$</th>
<th>NO$_X$</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>STB-19 (ATPA)</td>
<td>0.27</td>
<td>0.27</td>
<td>0.27</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>STB-20 (ATPA)</td>
<td>0.67</td>
<td>0.67</td>
<td>0.67</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>STB-21 (ATP)</td>
<td>6.88</td>
<td>6.88</td>
<td>6.88</td>
<td>-</td>
<td>-</td>
<td>21.72</td>
<td>-</td>
</tr>
<tr>
<td>LAB-8</td>
<td>0.61</td>
<td>0.61</td>
<td>0.61</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Project Emissions Increase</td>
<td>8.43</td>
<td>8.43</td>
<td>8.43</td>
<td>-</td>
<td>-</td>
<td>21.72</td>
<td>-</td>
</tr>
<tr>
<td>Significant Levels</td>
<td>25</td>
<td>15</td>
<td>10</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>100</td>
</tr>
</tbody>
</table>

*PM$_{2.5}$ listed is direct PM$_{2.5}$.

### Conclusion

The Permittee has provided information as part of the application for this approval that based on Hybrid test in 326 IAC 2-2-2 that this modification to an existing major PSD stationary source will not be major because the Emissions Increase of each PSD regulated pollutant is less than the PSD significant levels levels (i.e., the modification does not cause a Significant Emissions Increase). The applicant will be required to keep records and report in accordance with 326 IAC 2-2-8 (Prevention of Significant Deterioration (PSD) Requirements: Source Obligation).

### PTE of the Entire Source After Issuance of the Part 70 Modification

The table below summarizes the after issuance source-wide potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 source and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.
Source-Wide Emissions After Issuance (ton/year)

<table>
<thead>
<tr>
<th></th>
<th>PM¹</th>
<th>PM₁₀¹</th>
<th>PM₂.₅¹,₂</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
<th>Single HAP³</th>
<th>Total HAPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PTE of Entire</td>
<td>3,435</td>
<td>3,392</td>
<td>4,775</td>
<td>0.08</td>
<td>14.66</td>
<td>&lt; 2,864</td>
<td>11.77</td>
<td>&gt; 322</td>
<td>&gt; 589</td>
</tr>
<tr>
<td>Source Excluding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fugitives*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Title V Major Source</td>
<td>NA</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>Thresholds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSD Major Source</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Thresholds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Under the Part 70 Permit program (40 CFR 70), PM₁₀ and PM₂.₅, not particulate matter (PM), are each considered as a “regulated air pollutant.”
²PM₂.₅ listed is direct PM₂.₅.
³Single highest source-wide HAP is Xylene.
*Fugitive HAP emissions are always included in the source-wide emissions.
Woodworking controls are integral.

(a) This existing major PSD stationary source will continue to be major under 326 IAC 2-2 because at least one pollutant, PM, PM₁₀, PM₂.₅, and VOC, has emissions equal to or greater than the PSD major source threshold.

(b) This existing major source of HAP will continue to be a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions will continue to be equal to or greater than ten (10) tons per year for any single HAP and/or equal to or greater than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Federal Rule Applicability Determination

Due to the modification at this source, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

(a) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60, Subpart EE (326 IAC 12), are not included in the permit, since this source is not a surface coating operation for metal furniture, as defined in §60.311. Metal parts used are purchased pre-finished and are not coated at the source.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(a) This source is 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, because this source manufactures wood furniture or wood furniture components and is a major source of HAPs as defined in §63.2. The facilities subject to this rule include the following:

(1) One (1) automated spray booth with an electric oven, identified as STB-21, approved in 2019 for construction, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting to stack STS-7.
This unit is an affected source under 40 CFR 63, Subpart JJ.

(2) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8.

This unit is an affected source under 40 CFR 63, Subpart JJ.

(3) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019 for modification, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(4) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in 2019 for modification, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

This source is subject to the following portions of Subpart JJ:

(1) 40 CFR 63.800(a), (e), (g), and (i)
(2) 40 CFR 63.801
(3) 40 CFR 63.802(a), (c)
(4) 40 CFR 63.803(a) through (c), (f) through (l)
(5) 40 CFR 63.804
(6) 40 CFR 63.805
(7) 40 CFR 63.806
(8) 40 CFR 63.807
(9) 40 CFR 63.808
(10) Table 1 to Subpart JJ of Part 63—General Provisions Applicability to Subpart JJ
(11) Table 2 to Subpart JJ of Part 63—List of Volatile Hazardous Air Pollutants
(12) Table 3 to Subpart JJ of Part 63—Summary of Emission Limits
(13) Table 4 to Subpart JJ of Part 63—Pollutants Excluded From Use in Cleaning and Washoff Solvents
(14) Table 5 to Subpart JJ of Part 63—List of VHAP of Potential Concern Identified by Industry
(15) Table 6 to Subpart JJ of Part 63—VHAP of Potential Concern

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

(b) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs): Plywood and Composite Wood Products, 40 CFR 63, Subpart DDDD are not included in the permit for this source, since this source does not manufacture the plywood or composite wood products utilized in the production of wood furniture products.

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR 63, Subpart MMMM (326
IAC 20-80), are not included in the permit, since this source does not coat metal parts or products. Metal parts used are purchased pre-finished and are not coated at the source.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Wood Building Products, 40 CFR 63, Subpart QQQQ (326 IAC 20-79), are not included in the permit, since surface coating of wood furniture subject to 40 CFR 63, Subpart JJ is not subject to the requirements of 40 CFR 63, Subpart QQQQ, pursuant to §63.4681(c)(2).

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Surface Coating of Metal Furniture, 40 CFR 63, Subpart RRRR (326 IAC 20-78), are not included in the permit, since this source does not coat metal furniture. Metal parts used are purchased pre-finished and are not coated at the source.

(f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Wood Preserving Area Sources, 40 CFR 63, Subpart QQQQQ not included in the permit, since this source does not use pressure or thermal impregnation of chemicals into wood to preserve wood.

(g) There are no other National Emission Standards for Hazardous Air Pollutants under 40 CFR 63, 326 IAC 14 and 326 IAC 20 included for this proposed modification.

**Compliance Assurance Monitoring (CAM):**

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each pollutant-specific emission unit that meets the following criteria:

1. has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;

2. is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and

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

(b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.

The following table is used to identify the applicability of CAM to new and modified emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

<table>
<thead>
<tr>
<th>Emission Unit/Pollutant</th>
<th>Control Device</th>
<th>Applicable Emission Limitation</th>
<th>Uncontrolled PTE (tons/year)</th>
<th>Controlled PTE (tons/year)</th>
<th>CAM Applicable (Y/N)</th>
<th>Large Unit (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STB-19 / PM*</td>
<td>DF</td>
<td>326 IAC 6.5</td>
<td>&lt;100</td>
<td>&lt;100</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>STB-20 / PM*</td>
<td>DF</td>
<td>326 IAC 6.5</td>
<td>&gt;100</td>
<td>&lt;100</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>STB-21 / PM*</td>
<td>DF</td>
<td>326 IAC 6.5</td>
<td>&gt;100</td>
<td>&lt;100</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Finishing Line A - LAB-8/ PM*</td>
<td>DF</td>
<td>326 IAC 6.5</td>
<td>&lt;100</td>
<td>&lt;100</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
### Emission Unit/Pollutant

<table>
<thead>
<tr>
<th>Control Device</th>
<th>Applicable Emission Limitation</th>
<th>Uncontrolled PTE (tons/year)</th>
<th>Controlled PTE (tons/year)</th>
<th>CAM Applicable (Y/N)</th>
<th>Large Unit (Y/N)</th>
</tr>
</thead>
</table>

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for criteria pollutants (PM10, PM2.5, SO2, NOX, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.

Under the Part 70 Permit program (40 CFR 70), PM is not a regulated pollutant.

PM* For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.

N ¹ CAM does not apply for PM10 because the uncontrolled PTE of PM10 is less than the major source threshold.

Controls: BH = Baghouse, C = Cyclone, DC = Dust Collection System, DF = Dry Filter, RTO = Regenerative or Recuperative Thermal Oxidizer, WS = Wet Scrubber, ESP = Electrostatic Precipitator

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to STB-20 and STB-21, which are each considered as an "other unit," for PM10 upon issuance of the Part 70 Permit Renewal. A CAM plan must be submitted as part of the Part 70 Operating Permit Renewal application.

---

### State Rule Applicability - Entire Source

Due to this modification, state rule applicability has been reviewed as follows:

#### 326 IAC 2-2 (PSD)

PSD applicability is discussed under the Permit Level Determination - PSD Emissions Increase sections of this document.

#### 2005 Modification

Pursuant to Significant Source Modification No. 037-20223-00051 (issued August 26, 2005) and Significant Permit Modification No. 037-20407-00051 (issued September 15, 2005) the VOC and particulate matter emissions from the two (2) finishing lines (Lines A and B) have been limited in order to render the requirements of 326 IAC 2-2 (PSD) not applicable. In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the Permittee shall comply with the following:

1. The input of VOC to Line A (LAB-1 through LAB-7) and Line B (LBB-1 through LBB-2) shall be limited such that the VOC emissions shall be less than three hundred thirty-one (331) tons per twelve (12) consecutive month period with compliance determined at the end of each month. When using the RTO (RTO-2) to comply with this limitation, the following formula shall be used to determine compliance:

   \[
   i = \left(1 - (\text{DRE} \times \text{Ecap})\right) X + Y
   \]

   Where: \( i \) = VOC emissions for month in tons per month.

   \( \text{Ecap} \) = Averaged Capture Efficiency for Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.

   \( \text{DRE} \) = Averaged Destruction Removal Efficiency for Spray Booth LAB1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.

   \( X \) = Total monthly VOC Input to Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4.

   \( Y \) = Total monthly VOC Input to Spray Booth LAB-7.
The PM/PM\textsubscript{10} emissions from Line A (LAB-1 through LAB-7, LBB-3 and LBB-4) and Line B (LBB-1 through LBB-2) shall not exceed 2.43 tons/yr. The Permittee shall demonstrate compliance with this limit by using dry filters for each booth and vent the emissions from booths LAB-1 through LAB-4 and LBB-1 through LBB-4 to the RTO-2. The cartridge/dry filters, shall be in operation at all times when these emission units are in operation.

Compliance with the above limits shall ensure that the emissions increase from the modification permitted in Significant Source Modification No. 037-20223-00051 (issued August 26, 2005) and Significant Permit Modification No. 037-20407-00051 (issued September 15, 2005), is less than forty (40) tons per year of VOC, twenty-five (25) tons per year of PM, and fifteen (15) tons per year of PM\textsubscript{10}, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The provisions of 326 IAC 2-4.1 apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants (HAP), as defined in 40 CFR 63.41, after July 27, 1997, unless the major source has been specifically regulated under or exempted from regulation under a NESHAP that was issued pursuant to Section 112(d), 112(h), or 112(j) of the Clean Air Act (CAA) and incorporated under 40 CFR 63. On and after June 29, 1998, 326 IAC 2-4.1 is intended to implement the requirements of Section 112(g)(2)(B) of the Clean Air Act (CAA).

The operation of Line A, Line B, STB-19, STB-20, and STB-21 (constructed in 2003 or later) will emit greater than ten (10) tons per year and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 would apply to Line A, Line B, STB-19, STB-20, and STB-21. However, pursuant to 326 IAC 2-4.1-1(b)(2), because this source is specifically regulated under NESHAP 40 CFR 63, Subpart JJ, which was issued pursuant to Section 112(d), 112(h), or 112(j) of the CAA, this source is exempt from the requirements of 326 IAC 2-4.1.

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. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 2-7-6(5) (Annual Compliance Certification)
The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certifications that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

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

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

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3), this source is not subject to the requirements of 326 IAC 6-3-2, since it is subject to the requirements of 326 IAC 6.5 (Particulate Matter Limitations Except Lake County).

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

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
This source (located in Dubois County) is located in one of the counties listed in 326 IAC 6.5, but is not one of the sources specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10. The source-wide PTE of PM is 10 tons per year or more. Therefore, this source is subject to the requirements of 326 IAC 6.5-1-2 because the source-wide actual emissions of PM can be 10 tons per year or more.

326 IAC 6.8 (Particulate Matter Limitations for Lake County)
Pursuant to 326 IAC 6.8-1-1(a), this source (located in Dubois County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

326 IAC 6.8-10 (Lake County: Fugitive Particulate Matter)
Pursuant to 326 IAC 6.8-10-1, this source (located in Dubois County) is not subject to the requirements of 326 IAC 6.8-10 because it is not located in Lake County.

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State Rule Applicability – Individual Facilities

Due to this modification, state rule applicability has been reviewed as follows:

**Finishing Line (Line A - LAB-8), Manual Spray Booth (STB-19), and Automated Spray Booths (STB-20 and STB-21)**

326 IAC 6.5 (PM Limitations Except Lake County)
As discussed in the State Rule Applicability - Entire Source, this source is subject to the requirements of 326 IAC 6.5. Pursuant to 326 IAC 6.5-1-2(h), the one (1) finishing line (Line A), one (1) manual spray booth (STB-19), and two (2) automated spray booths (STB-20 and STB-21) shall each be controlled by a dry particulate filter, water wash, or an equivalent control device, and the Permittee shall operate the control device in accordance with the manufacturer's specifications.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The one (1) finishing line (Line A), one (1) manual spray booth (STB-19), and two (2) automated spray booths (STB-20 and STB-21) are not subject to the requirements of 326 IAC 8-1-6 because they are regulated by other rules in 326 IAC 8. The one (1) finishing line (Line A), one (1) manual spray booth (STB-19), and two (2) automated spray booths (STB-20 and STB-21) are subject to the requirements of 326 IAC 8-2-12.

326 IAC 8-2-9 (Miscellaneous Metal and Plastic Parts Coating Operations)
Pursuant to 326 IAC 8-2-9(a), the one (1) finishing line (Line A), one (1) manual spray booth (STB-19), and two (2) automated spray booths (STB-20 and STB-21) are not subject to the requirements of 326 IAC 8-2-9, since they do not coat metal or plastic parts. This source performs surface coating of wood kitchen cabinets.

326 IAC 8-2-10 (Flat Wood Panels; Manufacturing Operations)
Pursuant to 326 IAC 8-2-10(a), the one (1) finishing line (Line A), one (1) manual spray booth (STB-19), and two (2) automated spray booths (STB-20 and STB-21) are not subject to the requirements of 326 IAC
8-2-10, since they do not coat printed interior panels, hardwood particleboard, natural finish hardwood plywood panels, hardboard, exterior siding, or tileboard. This source performs surface coating of wood kitchen cabinets.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)
Pursuant to 326 IAC 8-2-1(a)(4) and 326 IAC 8-2-12(a), Line A, STB-19, STB-20, and STB-21 are each subject to the requirements of 326 IAC 8-2-12, since they were each constructed after July 1, 1990, have the potential to emit greater than fifteen pounds of VOC per day before add-on controls, and coat wood kitchen cabinets.

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), when applying surface coatings to wood furniture and cabinets in the one (1) finishing line (Line A), one (1) manual spray booth (STB-19), and two (2) automated spray booths (STB-20 and STB-21), the Permittee shall apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) or more of the following application methods:

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

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

### Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

(a) The Compliance Determination Requirements applicable to this modification are as follows:

The one (1) manual spray booth (STB-19), two (2) automated spray booths (STB-20 and STB-21), and one (1) topcoat booth (LAB-8) have the following compliance determination requirements:

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

(2) In order to comply with the permit, the dry filters shall be operating at all times when the one (1) conventional surface coating line, one (1) finishing line (Line A), one (1) manual spray booth (STB-19), and two (2) automated spray booths (STB-20 and STB-21) are in operation.

(b) There are no Testing Requirements applicable to this modification.

(c) The Compliance Monitoring Requirements applicable to this proposed modification are as follows:

<table>
<thead>
<tr>
<th>Control Device</th>
<th>Type of Parametric Monitoring</th>
<th>Frequency</th>
<th>Range or Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Filters for LAB-8, STB-19, STB-20, and STB-21</td>
<td>Dry Filter Inspections</td>
<td>Daily</td>
<td>Verify the placement, integrity, and particle loading of the filters</td>
</tr>
<tr>
<td></td>
<td>Observations for stack overspray</td>
<td>Weekly</td>
<td>Verify if there is an overspray condition that should result in a response</td>
</tr>
<tr>
<td></td>
<td>Inspections for stack emissions and presence of overspray</td>
<td>Monthly</td>
<td>Verify if there is a noticeable change in overspray emissions or evidence of overspray</td>
</tr>
</tbody>
</table>

These monitoring conditions are necessary because the dry filters for LAB-8, STB-19, STB-20, and STB-21 must operate properly to assure compliance with 326 IAC 6.5 (Particulate Emissions Limitations Except Lake County).

### Proposed Changes

As part of this permit approval, the permit may contain new or different permit conditions and some conditions from previously issued permits/approvals may have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes.

The following changes listed below are due to the proposed modification. Deleted language appears as strikethrough text and new language appears as **bold** text (these changes may include Title I changes):

(1) Conditions A.2, A.3, and Sections D.1 and E.1 have been modified to add the new emission units, LAB-8 and STB-21, and modify the descriptions of the modified emission units, STB-19 and STB-20.

(2) The descriptions of Finishing Lines A and B have been revised to reflect the current operational flow. Spray booths LBB-3 and LBB-4 are downstream of emission units in Line A and will be listed accordingly. Line B description has been revised to clarify that it includes spray booths LBB-1 and LBB-2 only.

(3) Section D.1 has been modified to include the new requirements for the new and modified emission units.

(4) Sections D.1 and D.4 have been revised to clarify descriptions and IDs of the existing RTO and a new permitted RTO, which has not been installed yet. Currently, Finish Line A and Finish Line B exhaust to existing RTO which was renamed from RTO-2 to RTO-1 in SSM 037-38212-00051 but will be renamed as RTO-2 for clarification purposes. The flat line A is scheduled to be exhausted to new RTO (which will be identified as RTO-1) after construction of flat line A and RTO-1. Flat
line B (upon construction) is scheduled to be exhausted to existing RTO (which will be identified as RTO-2).

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]

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

(b) One (1) finishing line, identified as Line A, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line A finishing line consists of the following facilities:

(1) Two (2) toner spray booths, identified as LAB-1 and LAB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-42 for VOC control, and exhausting through stack RTOS-42.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) Two (2) stain spray booths, identified as LAB-3 and LAB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using the RTO-42 for VOC control, and exhausting through stack RTOS-42.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(3) Two (2) topcoat booths, identified as LAB-7 and LAB-8, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stacks LAS-7 and LAS-8, respectively.

(4) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8.

(45) Two (2) sanding operations (associated with Line A), controlled by a cartridge filter type dust collector DC-1, and exhausting 22,500 cubic feet per minute through stack DCS-1A and 22,500 cubic feet per minute through stack DCS-1B.

(6) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

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(c) One (1) finishing line, identified as Line B, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line B finishing line consists of the following facilities:
(1) One (1) color match spray booth, identified as LBB-1, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-42 for VOC control, and exhausting through stack RTOS-42.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) One (1) toner spray booth, identified as LBB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-42 for VOC control, and exhausting through stack RTOS-42.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(3) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-1 for VOC control, and exhausting through stack RTOS-1.

(The existing RTO-2 will be utilized until the project is fully implemented.)

(4) Two (2) sanding operations (associated with Line B), controlled by a cartridge filter type dust collector DC-1, and exhausting 22,500 cubic feet per minute through stack DCS-1A and 22,500 cubic feet per minute through stack DCS-1B.

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(h) One (1) off-line parts booth with an electric convection oven, approved in 2015 for construction, identified as OLB-1, with a maximum capacity of 100 units per hour, using dry filters as control, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, and exhausting to stacks OLS-1 and OLS-2.

The booth is part of an existing affected source under the provisions of 40 CFR 63, Subpart JJ.

(i) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019 for modification, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in 2019 for modification, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) automated spray booth with an electric oven, identified as STB-21, approved in 2019 for construction, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting to stack STS-7.
This unit is an affected source under 40 CFR 63, Subpart JJ.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

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

(a) The following equipment related to maintenance activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. [326 IAC 6.5]

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

(c) Emission units with PM and PM\textsubscript{10} emissions less than five (5) tons per year, SO\textsubscript{2}, NO\textsubscript{x}, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) natural gas-fired oven, identified as OV-2, with a maximum heat input capacity of 1 MMBtu per hour, and exhausting at stack OVS-2. [326 IAC 6.5]

(d) One (1) manual spray booth, identified as STB-19 constructed in 2003, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5. This unit is an affected source under 40 CFR 63 Subpart JJ. Reserved.

(e) One (1) automated spray booth, identified as STB-20, approved in 2016 for construction, with a maximum capacity of 378 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6. This unit is an affected source under 40 CFR 63 Subpart JJ. Reserved.

(f) One (1) regenerative thermal oxidizer, identified as RTO-2 utilized for VOC control, constructed in 2008, with a maximum heat input capacity of 8.576 MMBtu/hr and a maximum flow rate of 30,000 acfm, exhausting to stack RTOS-2.

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LINE A Associated Insignificant Activities

(r) One (1) halogen oven, identified as OV-3, equipped in conjunction with Line A, controlled by RTO-2, and exhausting through stack RTOS-1 RTOS-2.

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LINE B Associated Insignificant Activities

(w) One (1) halogen oven, identified as OV-13, equipped in conjunction with Line B, controlled by existing RTO-2, and exhausting through stack RTOS-1 RTOS-2.

(x) Four (4) UV ovens, identified as OV-15, OV-17, OV-19, and OV-22, equipped in conjunction with Line B. Reserved.

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SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS
Emissions Unit Description:

(a) One (1) conventional surface coating line, constructed in 1973. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The conventional surface coating line is comprised of the following surface coating facilities:

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(b) One (1) finishing line, identified as Line A, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line A finishing line consists of the following facilities:

(1) Two (2) toner spray booths, identified as LAB-1 and LAB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-12 for VOC control, and exhausting through stack RTOS-12.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) Two (2) stain spray booths, identified as LAB-3 and LAB-4, utilizing high volume low pressure (HVLP), air assisted airless or equivalent spray application equipment, using dry filters for particulate control and using the RTO-12 for VOC control, and exhausting through stack RTOS-12.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(3) Two (2) topcoat booths, identified as LAB-7 and LAB-8, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control, and exhausting through stacks LAS-7 and LAS-8, respectively.

(4) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8.

(6) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(c) One (1) finishing line, identified as Line B, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line B finishing line consists of the following facilities:

(1) One (1) color match spray booth, identified as LBB-1, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-12 for VOC control, and exhausting through stack RTOS-42.
(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) One (1) toner spray booth, identified as LBB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-1 for VOC control, and exhausting through stack RTOS-1.

(3) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-1 for VOC control, and exhausting through stack RTOS-1.

(h) One (1) off-line parts booth with an electric convection oven, approved in 2015 for construction, identified as OLB-1, with a maximum capacity of 100 units per hour, using dry filters as control, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, and exhausting to stacks OLS-1 and OLS-2.

The booth is part of an existing affected source under the provisions of 40 CFR 63, Subpart JJ.

(i) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019 for modification, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in 2019 for modification, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) automated spray booth with an electric oven, identified as STB-21, approved in 2019 for construction, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting to stack STS-7.

This unit is an affected source under 40 CFR 63, Subpart JJ.

Insignificant Activities:

(d) One (1) manual spray booth, identified as STB-19 constructed in 2003, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.
(e) One (1) automated spray booth, identified as STB-20, approved in 2016 for construction, with a maximum capacity of 378 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

*****

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

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

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

(a) Pursuant to Significant Source Modification No. 037-20223-00051 (issued August 26, 2005) and Significant Permit Modification No. 037-20407-00051 (issued September 15, 2005) the VOC and particulate matter emissions from the two (2) finishing lines (Lines A and B) have been limited in order to render the requirements of 326 IAC 2-2 (PSD) not applicable. In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable, the Permittee shall comply with the following:

(1) The input of VOC to Line A (LAB-1 through LAB-78) and Line B (LBB-1 through LBB-28) shall be limited such that the VOC emissions shall be less than three hundred thirty-one (331) tons per twelve (12) consecutive month period with compliance determined at the end of each month. When using the RTO (RTO-2) to comply with this limitation, the following formula shall be used to determine compliance:

\[ i (\text{VOC Emissions (tons/month)}) = \left[ (1 - (\text{DRE} \times \text{Ecap})) \times X \right] + Y \]

Where: \( i \) = VOC emissions for month in tons per month.

\( \text{Ecap} \) = Averaged Capture Efficiency for Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.

\( \text{DRE} \) = Averaged Destruction Removal Efficiency for Spray Booth LAB1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.

\( X \) = Total monthly VOC Input to Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4.

\( Y \) = Total monthly VOC Input to Spray Booths LAB-5 through LAB-78 and LBB-5 through LBB-28.

(2) The PM/PM\text{_{10}} emissions from Line A (LAB-1 through LAB-78, LBB-3 and LBB-4) and Line B (LBB-1 through LBB-28) shall not exceed 2.43 tons/yr. The Permittee shall demonstrate compliance with this limit by using dry filters for each booth and vent the emissions from booths LAB-1 through LAB-4 and LBB-1 through LBB-4 to the RTO-21. The cartridge/dry filters, shall be in operation at all times when these emission units are in operation.

Compliance with the above limits shall ensure that the emissions increase from the modification permitted in Significant Source Modification No. 037-20223-00051 (issued August 26, 2005) and Significant Permit Modification No. 037-20407-00051 (issued
September 15, 2005), is less than forty (40) tons per year of VOC, twenty-five (25) tons per year of PM, and fifteen (15) tons per year of PM10, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

*****

D.1.2 Particulate Emission Limitations [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(h), the one (1) conventional surface coating line, two (2) finishing lines (Lines A and B), one (1) manual spray booth (STB-19), two (2) automated spray booths (STB-20 and STB-21), one (1) UV-cured mist coater booth (UVMC-1), and one (1) off-line parts booth (OLB-1) shall be controlled by a dry particulate filter, water wash, or an equivalent control device and the Permittee shall operate the control device in accordance with manufacturer’s specifications.

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

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), when applying surface coatings to wood furniture and cabinets in the two (2) finishing lines (Lines A and B), one (1) manual spray booth (STB-19), two (2) automated spray booths (STB-20 and STB-21), one (1) end coating booth (UVPB-1), two (2) UV sticklines (UVC-2 and UVC-4), one (1) UV flatline (UVC-3), and one (1) off-line parts booth (OLB-1), the Permittee shall apply all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one (1) or more 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.

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D.1.6 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

(a) Not later than 180 days after the startup of the new RTO-1, in controlling the Finishing Line A and Finishing Line B toner spray booths, LAB-1, LAB-2 and LBB-2; stain spray booths, LAB-3, LAB-4; color match spray booth LBB-1 and sealer spray booths LBB-3 and LBB-4, the Until new RTO-1 replaces existing RTO-2, the Permittee shall perform VOC destruction efficiency testing of RTO-24 and VOC capture efficiency of spray booths, LAB-1, LAB-2, LBB-2; LAB-3, LAB-4, LBB-1, LBB-3 and LBB-4, in order to demonstrate compliance with Condition D.1.1(a), utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Until new RTO-1 replaces existing RTO-2, the VOC capture efficiency testing for the RTO-24 shall be performed no later than thirty (30) days after every reconfiguration or change in the design of the equipment is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of this equipment, which include any of the following:
(1) Modification to the coating lines, LAB-1, LAB-2, LBB-2;LAB-3, LAB-4, LBB-1, LBB-3, LBB-4, of this Section D.1 and topcoat/opaque spray booths FLA-1 and FLA-2 and associated drying ovens, FLAOV-1 and FLAOV-2 in Section D.4.

(2) Increasing or decreasing the volumetric flow rate from the drying ovens, and

(3) Changing the static duct pressure.

(c) Not later than 180 days after new RTO-1 replaces existing RTO-2, the Permittee shall perform VOC destruction efficiency testing of RTO-1 and VOC capture efficiency of spray booths, LAB-1, LAB-2, LBB-2; LAB-3, LAB-4, LBB-1, LBB-3 and LBB-4, in order to demonstrate compliance with Condition D.1.1(a), utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(d) Not later than 180 days after new RTO-1 replaces existing RTO-2, VOC capture efficiency testing for the RTO-1 shall be performed no later than thirty (30) days after every reconfiguration or change in the design of the equipment is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of this equipment, which include any of the following:

(1) Modification to the coating lines, LAB-1, LAB-2, LBB-2;LAB-3, LAB-4, LBB-1, LBB-3, LBB-4, of this Section D.1 and topcoat/opaque spray booths FLA-1 and FLA-2 and associated drying ovens, FLAOV-1 and FLAOV-2 in Section D.4.

(2) Increasing or decreasing the volumetric flow rate from the drying ovens, and

(3) Changing the static duct pressure.

These tests shall be performed using methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

D.1.7 VOC Control

(a) In order to comply with Condition D.1.1(a), the thermal oxidizer shall be in operation and control emissions from the spray booths LAB-1 through LAB-4 and LBB-1 through LBB-4 at all times that the source is using the RTO-42 to comply with the VOC emission limitation established in D.1.1(a).

(b) When using the RTO-24 to comply with Condition D.1.1(a), the emissions from spray booths LAB-1 through LAB-4 and LBB-1 through LBB-4 shall be controlled by RTO-24 with a destruction efficiency determined by Condition D.1.6.

D.1.8 Particulate Control

In order to comply with Condition D.1.1 and D.1.2, the dry filters shall be operating at all times when the one (1) conventional surface coating line, two (2) finishing lines (Lines A and B), one (1) manual spray booth (STB-19), two (2) automated spray booths (STB-20 and STB-21), one (1) UV-cured mist coater booth (UVMC-1), and one (1) off-line parts booth (OLB-1) are in operation.
Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.9 Regenerative Thermal Oxidizer (RTO) Temperature [40 CFR 64.2 (CAM)]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer (RTO-24) for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minute. The output of this system shall be recorded as a 3-hour average.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1(a).

(c) From the date of startup of the new RTO-1 in controlling the Finishing Line A and Finishing Line B toner spray booths, LAB-1, LAB-2 and LBB-2; stain spray booths, LAB-3, LAB-4; color match spray booth LBB-1 and sealer spray booths LBB-3 and LBB-4, until the stack test results are available, the Permittee shall operate the RTO-24 at or above the 3-hour average temperature of 1,400°F.

(d) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer, RTO-24 at or above the 3-hour average temperature as observed during the compliant stack test.

D.1.10 Parametric Monitoring-Thermal Oxidizer Duct Pressure or Fan Amperage [40 CFR 64.2 (CAM)]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1(a), as approved by IDEM.

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer, identified as RTO-21 is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

(c) When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A 3-hour temperature that falls below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.11 Dry Filter Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry particulate filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (CLS-1 through CLS-9, RTOS-24, LAS-5 through LAS-8, LBS-5 through LBS-8, STS-6 through STS-7, and UVS-1) while the one (1) conventional surface coating line, two (2) finishing lines (Lines A and B), one (1) manual spray booth (STB-19, two (2) automated spray booths (STB-20 and STB-21), one (1) UV-cured mist coater booth (UMC-1), and
one (1) off-line parts booth (OLB-1) are in operation. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.1.12 Record Keeping Requirement

<table>
<thead>
<tr>
<th>(a)</th>
<th>To document the compliance status with Conditions D.1.1(a) and (b), the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limitations established Condition D.1.1(a) and (b):</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>The VOC content of each coating material and solvent used.</td>
</tr>
<tr>
<td>(2)</td>
<td>The amount of coating material and solvent less water used on monthly basis.</td>
</tr>
<tr>
<td>(A)</td>
<td>Records shall include purchase orders, invoices, and material safety data sheets (MSDS) or certified product data sheets (CPDS) necessary to verify the type and amount used.</td>
</tr>
<tr>
<td>(B)</td>
<td>Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.</td>
</tr>
<tr>
<td>(3)</td>
<td>The total VOC input and VOC emissions for spray booths LAB-1 through LAB-4 and LBB-1 through LBB-4 for each month and each compliance period.</td>
</tr>
<tr>
<td>(4)</td>
<td>The total VOC input and VOC emissions for spray booths LAB-5 through LAB-8 and LBB-5 through LBB-8 for each month and each compliance period.</td>
</tr>
</tbody>
</table>

SECTION D.4 EMISSION UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) One (1) finishing line, identified as Flatline A, approved in 2017 for construction. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Flatline A finishing line consists of the following facilities:

(1) One (1) topcoat/opaque spray booth, identified as FLA-1, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a Regenerative Thermal Oxidizer, identified as RTO-1, exhausting to stack RTOS-1.

(2) One (1) topcoat/opaque spray booth, identified as FLA-2, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a Regenerative Thermal Oxidizer, identified as RTO-1, exhausting to stack RTOS-1.

(3) Two (2) sanding booths, identified as FLASB-1 and FLASB-2, each with a maximum capacity of 1,500 units per hour, particulate emissions controlled by a cartridge filter dust collector, identified as DC-1, with two exhaust stacks, identified as DCS-1A and DCS-1B.
(4) Two (2) drying ovens, identified as FLAOV-1 and FLAOV-2, heated by hot water generated from the two (2) 1.5 MMBtu/hour natural gas-fired boilers, VOC emissions from drying ovens are controlled by a regenerative thermal oxidizer (RTO) identified as RTO-1, exhausting from stack RTOS-1.

(e) One (1) finishing line, identified as Flatline B, approved in 2017 for construction. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Flatline B finishing line consists of the following facilities:

(1) One (1) topcoat/opaque spray booth, identified as FLB-1, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting to stack RTOS-2.

(2) One (1) topcoat/opaque spray booth, identified as FLB-2, with a maximum capacity of 1,500 units per hour, utilizing HVLP, air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by dry filters, and VOC emissions controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting to stack RTOS-2.

(3) Two (2) sanding booths, identified as FLBSB-1 and FLBSB-2, each with a maximum capacity of 1,500 units per hour, particulate emissions controlled by a cartridge filter dust collector, identified as DC-1, with two exhaust stacks, each with a maximum outlet grain loading of 0.002161 grains per cubic foot and an exhaust rate of 7,000 ACFM, identified as DCS-1A and DCS-1B.

(4) Two (2) drying ovens, identified as FLBOV-1 and FLBOV-2, heated by hot water generated from the two (2) 1.5 MMBtu/hour natural gas-fired boilers, VOC emissions from the drying ovens are controlled by a regenerative thermal oxidizer (RTO) identified as RTO-2, exhausting from stack RTOS-2.

(f) Solvent/Cleanup Usage.

Insignificant activities:

(f) One (1) regenerative thermal oxidizer, identified as RTO-2, utilized for VOC control, constructed in 2008, with a maximum heat input capacity of 8.576 MMBtu/hr and a maximum flow rate of 30,000 acfm, exhausting to stack RTOS-2.

(g) One (1) regenerative thermal oxidizer (RTO), approved in 2017 for construction, identified as RTO-1, with a maximum heat input capacity of 16.0 MMBtu/hour, exhausting to stack RTOS-1.

LINE A Associated Insignificant Activities

(r) One (1) halogen oven, identified as OV-3, equipped in conjunction with Line A, controlled by RTO-2, and exhausting through stack RTOS-2.

LINE B Associated Insignificant Activities

(w) One (1) halogen oven, identified as OV-13, equipped in conjunction with Line B, controlled by existing RTO-2, and exhausting through stack RTOS-2.

(z) One (1) natural gas-fired boiler, providing hot water to the two (2) drying ovens associated with Flatline A, approved for construction in 2017, with a maximum heat input capacity of 1.5 MMBtu/hour, emissions are uncontrolled, exhausting to stack LAS-9 [326 IAC 6-2]
(aa) One (1) natural gas-fired boiler, providing hot water to the two (2) drying ovens associated with Flatline B, approved for construction in 2017, with a maximum heat input capacity of 1.5 MMBtu/hour, emissions are uncontrolled, exhausting to stack LBS-9 [326 IAC 6-2]

Line A & B Associated Insignificant Activities

(bb) One (1) natural gas fired drying oven, identified as OV-3/13, with a maximum heat input of 2.0 MMBtu/hour, approved in 2017 to replace one (1) existing one (1) halogen oven, identified as OV-13.

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

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D.4.7 Testing Requirements [326 IAC 2-1.1-11] [326 IAC 2-7-6(1)]

(a) Not later than 180 days after the startup of the new RTO-1, associated with the Flatline A topcoat/opaque spray booths, FLA-1 FLA-2, and drying ovens FLAOV-1, FLAOV-2; and not later than 180 days after the startup of the existing RTO-2 in controlling the Flatline B topcoat/opaque spray booths, FLB-1, FLB-2, and drying ovens FLBOV-1, FLBOV-2, the Permittee shall perform VOC destruction efficiency testing of both RTO-1 and RTO-2 and VOC capture efficiency of the Flatline A - topcoat/opaque spray booths, FLA-1 and FLA-2, and drying ovens FLAOV-1, and FLAOV-2; Flatline B - topcoat/opaque spray booths, FLB-1, and FLB-2, and drying ovens FLBOV-1, and FLBOV-2; utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) The VOC capture efficiency testing for the RTO-2 shall be performed no later than thirty (30) days after every reconfiguration or change in the design of that equipment is made and for those instances where operating parameters indicate that a fundamental change has taken place in the operation of this equipment, which include any of the following:

(1) Modification to the topcoat/opaque spray booths, FLB-1, FLB-2, and associated drying ovens, FLBOV-1 and FLBOV-2.

(2) Increasing or decreasing the volumetric flow rate from the drying ovens, and

(3) Changing the static duct pressure.

These tests shall be performed using methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C – Performance Testing contains the Permittee’s obligation with regard to the performance testing required by this condition.

D.4.8 Volatile Organic Compounds (VOC) Control

In order to comply with Condition D.4.1(f), the Permittee shall operate the regenerative thermal oxidizers, RTO-1 associated with the topcoat/opaque spray booths, FLA-1 and FLA-2, and drying ovens FLAOV-1, FLAOV-2; and RTO-2 associated with the topcoat/opaque spray booths, FLB-1, FLB-2 and drying ovens FLBOV-1, FLBOV-2, at all times the respective facilities are in operation.

D.4.9 Particulate Matter Control

In order to comply with Condition D.4.3, each of the four (4) cartridge filter dust collectors associated with the two (2) Flatline A topcoat/opaque sanding booths, identified as FLASB-1 and
FLASB-2; and two (2) Flatline B topcoat/opaque sanding booths, identified as FLBSB-1 and FLBSB-2, shall be in operation at all times when the corresponding sander is in operation.

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

D.4.10 Regenerative Thermal Oxidizer Temperature [326 IAC 2-7-5(3)] [40 CFR 64]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer, identified as RTO-2 for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average.

(b) The Permittee shall determine the 3-hour average temperature of RTO-2 from the most recent valid stack test that demonstrates compliance with limits in Condition D.4.1(f).

(c) From the date of start-up of RTO-2 in controlling Flatline B - topcoat/opaque spray booths, FLB-1, FLB-2 and drying ovens FLBOV-1, FLBOV-2 until the stack test results are available, the Permittee shall operate the thermal oxidizer, RTO-2 at or above the 3-hour average temperature of 1,400 °F.

(d) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer, RTO-2 at or above the 3-hour average temperature as observed during the latest compliant stack test.

(e) If a 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A 3-hour temperature that falls below the above mentioned temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.4.11 Parametric Monitoring - Thermal Oxidizer Duct Pressure or Fan Amperage [40 CFR 64]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage for RTO-12 from the most recent valid stack test that demonstrates compliance with limits in Condition D.4.1(c).

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer, identified as RTO-12, is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

(c) When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. A reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

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

D.4.12 Dry Filter Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the dry particulate filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the topcoat/opaque booths stack, RTOS-1 and topcoat/opaque booths stack, RTOSs-2 while the booths are in operation. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation
(b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground, weather permitting. If a noticeable change in overspray emission, or evidence of overspray emission is observed at any stack exhaust, the Permittee shall take reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee’s obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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SECTION E.1 NESHAP

<table>
<thead>
<tr>
<th>Emissions Unit Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) One (1) conventional surface coating line, constructed in 1973. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The conventional surface coating line is comprised of the following surface coating facilities:</td>
</tr>
</tbody>
</table>

| (b) One (1) finishing line, identified as Line A, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line A finishing line consists of the following facilities: |

| (1) Two (2) toner spray booths, identified as LAB-1 and LAB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-1 for VOC control, and exhausting through stack RTOS-1. |
| (2) Two (2) stain spray booths, identified as LAB-3 and LAB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-1 for VOC control, and exhausting through stack RTOS-1. |
| (3) Two (2) topcoat booths, identified as LAB-7 and LAB-8, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stacks LAS-7 and LAS-8, respectively. |
| (4) One (1) topcoat booth, identified as LAB-8, approved in 2019 for construction, with a maximum capacity of 4.1 gallons of paint per hour, coating pieces for Line A, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using UV curable coatings and dry filters for particulate control, and exhausting through stack LAS-8. |
| (5) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2. |
(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(c) One (1) finishing line, identified as Line B, constructed in 2008. Under 40 CFR 63, Subpart JJ, this is an affected facility that is engaged in the manufacture of wood furniture or wood furniture components. The Line B finishing line consists of the following facilities:

1. One (1) color match spray booth, identified as LBB-1, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(2) One (1) toner spray booth, identified as LBB-2, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-2 for VOC control, and exhausting through stack RTOS-2.

(The existing RTO-2 will be utilized until the new RTO-1 is constructed.)

(3) Two (2) sealer spray booths, identified as LBB-3 and LBB-4, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, using dry filters for particulate control and using RTO-1 for VOC control, and exhausting through stack RTOS-1.

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(h) One (1) off-line parts booth with an electric convection oven, approved in 2015 for construction, identified as OLB-1, with a maximum capacity of 100 units per hour, using dry filters as control, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, and exhausting to stacks OLS-1 and OLS-2.

The booth is part of an existing affected source under the provisions of 40 CFR 63, Subpart JJ.

(i) One (1) manual spray booth, identified as STB-19 constructed in 2003, approved in 2019 for modification, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(j) One (1) automated spray booth, identified as STB-20, constructed in 2016, approved in 2019 for modification, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(k) One (1) automated spray booth with an electric oven, identified as STB-21, approved in 2019 for construction, with a maximum capacity of 900 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting to stack STS-7.
This unit is an affected source under 40 CFR 63, Subpart JJ.

Insignificant Activities:

(d) One (1) manual spray booth, identified as STB-19 constructed in 2003, with a maximum capacity of 220 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-5.

This unit is an affected source under 40 CFR 63 Subpart JJ.

(e) One (1) automated spray booth, identified as STB-20, approved in 2016 for construction, with a maximum capacity of 378 units per hour, utilizing high volume low pressure (HVLP), air assisted airless, or equivalent spray application equipment, with particulate emissions controlled by a dry filter, and exhausting through stack STS-6.

This unit is an affected source under 40 CFR 63 Subpart JJ.
### Part 70 Quarterly Report

**Source Name:** MasterBrand Cabinets, Inc.  
**Source Address:** 614 W 3rd Street, Ferdinand, Indiana 47532  
**Part 70 Permit No.:** T037-33447-00051  
**Facility:** Finishing Lines (Lines A and B)  
**Parameter:** VOC Emissions  
**Limit:** The input of VOC to spray booths Line A (LAB-1 through LAB-8) and Line B (LBB-1 through LBB-8) shall be limited such that the VOC emissions shall be less than three hundred thirty-one (331) tons per twelve (12) consecutive month period with compliance determined at the end of each month. When using the RTO (RTO-2) to comply with this limitation, the following formula shall be used to determine compliance:

\[
i (\text{tons/month}) = \left(1 - (\text{DRE} \times \text{Ecap})\right) X + Y
\]

Where:
- \(i\) = VOC emissions for month in tons per month.  
- \(\text{Ecap}\) = Averaged Capture Efficiency for Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.  
- \(\text{DRE}\) = Averaged Destruction Removal Efficiency for Spray Booth LAB1 through LAB-4 and LBB-1 through LBB-4, which will be determined by Condition D.1.6.  
- \(X\) = Total monthly VOC Input to Spray Booths LAB-1 through LAB-4 and LBB-1 through LBB-4.  
- \(Y\) = Total monthly VOC Input to Spray Booths LAB-5 through LAB-8 and LBB-5 through LBB-8.

<table>
<thead>
<tr>
<th>QUARTER:</th>
<th>YEAR:</th>
</tr>
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<tbody>
<tr>
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<td></td>
<td>This Month (tons)</td>
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</table>

- [ ] No deviation occurred in this quarter.  
- [ ] Deviation/s occurred in this quarter.  
  Deviation has been reported on: _______________________

Submitted by: ____________________________________________________________

Title / Position: ___________________________________________________________

Signature: _______________________________________________________________

Date: ___________________________________________________________________

Phone: _________________________________________________________________
Additional Changes

While there are model updates to standard permit language that are applicable to this source, they are not being made as part of this modification. An application for a Part 70 Operating Permit Renewal was submitted on May 28, 2019. The model updates will be made in the Part 70 Operating Permit Renewal.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 14, 2019. Additional information was received on May 23, 2019.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 037-41205-00051. The operation of this proposed modification shall be subject to the conditions of the attached proposed Significant Permit Modification No. 037-41274-00051.

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and Significant Permit Modification be approved.

IDEM Contact

(a) If you have any questions regarding this permit, please contact Natalie Moore, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 233-8279 or (800) 451-6027, and ask for Natalie Moore or (317) 233-8279.

(b) A copy of the findings is available on the Internet at: [http://www.in.gov/ai/appfiles/idem-caats/](http://www.in.gov/ai/appfiles/idem-caats/)

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: [http://www.in.gov/idem/airquality/2356.htm](http://www.in.gov/idem/airquality/2356.htm); and the Citizens’ Guide to IDEM on the Internet at: [http://www.in.gov/idem/6900.htm](http://www.in.gov/idem/6900.htm).
### Appendix B: Emissions Calculations

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>GHG as CO2e</th>
<th>Total HAPs</th>
<th>Highest Single HAP</th>
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<td>52.8</td>
<td>52.8</td>
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<td>-</td>
<td>624.7</td>
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<td>179.9</td>
<td>137.7 Xylene</td>
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<td>0.03</td>
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<td>0.09 Hexane</td>
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<td>Formic Acid</td>
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**Total**: 1,491, 1,491, 1,491, 0.06, 14.66, Greater than 2,671.2, 11.77, 17,046, Greater than 618.5, Greater than 325.8 Xylene

*For permitting level applicability, controlled PTE were considered for the woodworking operation.*

### Limited Uncontrolled Emissions

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<tr>
<th>Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>GHG as CO2e</th>
<th>Total HAPs</th>
<th>Highest Single HAP</th>
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<td>52.8</td>
<td>52.8</td>
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<td>-</td>
<td>624.7</td>
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<td>137.7 Xylene</td>
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<td>neg</td>
<td>neg</td>
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<tr>
<td>Spray Booths (STB-19, STB-20, STB-21)</td>
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<td>303.70</td>
<td>-</td>
<td>-</td>
<td>47.93</td>
<td>-</td>
<td>-</td>
<td>2.07</td>
<td>2.07 Xylene</td>
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<tr>
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<td>0.48</td>
<td>0.48</td>
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<td>0.42</td>
<td>-</td>
<td>-</td>
<td>neg</td>
<td>neg</td>
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<td>0.26</td>
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<td>0.25</td>
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<td>neg</td>
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<tr>
<td>Natural Gas Fuel Combustion</td>
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<td>0.37</td>
<td>0.37</td>
<td>0.03</td>
<td>-</td>
<td>0.27</td>
<td>0.4</td>
<td>15.99</td>
<td>0.09</td>
<td>0.09 Hexane</td>
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<td>2.19</td>
<td>-</td>
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<td>0.09</td>
<td>16.95</td>
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<tr>
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<td>84</td>
<td>-</td>
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<td>87.58</td>
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<td>-</td>
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<td>16.6 Xylene</td>
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<tr>
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<td>1.78E-05</td>
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<td>0.72</td>
<td>0.02</td>
<td>0.06</td>
<td>24.98</td>
<td>0.01</td>
<td>Formic Acid</td>
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</tbody>
</table>

**Total**: 1,491, 1,491, 1,491, 0.06, 14.66, Greater than 2,671.2, 11.77, 17,046, Greater than 618.5, Greater than 325.8 Xylene

### Limited/Controlled Emissions

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<thead>
<tr>
<th>Emission Unit</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
<th>GHG as CO2e</th>
<th>Total HAPs</th>
<th>Highest Single HAP</th>
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</thead>
<tbody>
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<td>-</td>
<td>624.7</td>
<td>-</td>
<td>-</td>
<td>179.9</td>
<td>137.7 Xylene</td>
</tr>
<tr>
<td>Finishing Line A</td>
<td>2.43</td>
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<td>2.43</td>
<td>-</td>
<td>-</td>
<td>331.0</td>
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<td>-</td>
<td>Greater than 25.0</td>
<td>Greater than 10.0</td>
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<td></td>
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<tr>
<td>Spray Booths (STB-19, STB-20, STB-21)</td>
<td>303.70</td>
<td>303.70</td>
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<td>-</td>
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<td>neg</td>
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<tr>
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<td>0.26</td>
<td>0.26</td>
<td>0.02</td>
<td>0.25</td>
<td>neg</td>
<td>neg</td>
<td>neg</td>
<td>neg</td>
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</tr>
<tr>
<td>Natural Gas Fuel Combustion</td>
<td>0.09</td>
<td>0.37</td>
<td>0.37</td>
<td>0.03</td>
<td>-</td>
<td>0.27</td>
<td>0.4</td>
<td>15.99</td>
<td>0.09</td>
<td>0.09 Hexane</td>
</tr>
<tr>
<td>Woodboiling (OVW-1 through WW-8, WW-10, and PCD-4)</td>
<td>63.7</td>
<td>63.7</td>
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<td>-</td>
<td>-</td>
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<tr>
<td>Oil Line Parts Booth</td>
<td>84</td>
<td>84</td>
<td>84</td>
<td>-</td>
<td>-</td>
<td>87.58</td>
<td>-</td>
<td>-</td>
<td>16.95</td>
<td>16.6 Xylene</td>
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<td>-</td>
<td>0.55</td>
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<td>-</td>
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<tr>
<td>Emergency Generator (NG-GEN)</td>
<td>1.38E-05</td>
<td>1.78E-05</td>
<td>1.78E-05</td>
<td>1.7E-04</td>
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<td>0.06</td>
<td>24.98</td>
<td>0.01</td>
<td>Formic Acid</td>
</tr>
</tbody>
</table>

**Total**: 1,491, 1,491, 1,491, 0.06, 14.66, Greater than 2,671.2, 11.77, 17,046, Greater than 618.5, Greater than 325.8 Xylene
### Material Density (lb/Gal) Weight % Volatile (H2O & Organics) Weight % Water Weight % Organics Volume % Water Volume % Non-Volatiles (solids) Gal of Mat. (gal/unit) Maximum Throughout (unit/hour) Pounds VOC per gallon of coating Pounds VOC per gallon of coating less water Potential VOC pounds per hour Potential VOC pounds per day Potential VOC tons per year Potential PM/PM10/PM2.5 (ton/yr) lb VOC/gal solids Transfer Efficiency

**CLB-1**
- **Rouge Toner**: 7.0 95.94% 0.0% 95.9% 0.0% 4.06% 0.00700 225.0 6.70 6.70 10.55 253.13 46.20 0.29 164.94 85%

**CLB-2**
- **Rouge Wiping Toner**: 7.3 75.48% 0.0% 73.7% 0.0% 24.52% 0.01300 225.0 5.48 5.48 29.57 709.57 129.50 7.54 19.58 85%

**CLB-3**
- **Conventional Self-Sealer**: 7.6 72.04% 0.0% 72.0% 0.0% 27.96% 0.02400 225.0 5.48 5.48 29.57 709.57 129.50 7.54 19.58 85%

**CLB-4**
- **White Conventionnal Enamel**: 9.0 56.71% 0.0% 56.7% 0.0% 43.29% 0.02400 225.0 5.11 5.11 27.59 662.20 120.85 13.84 11.80 85%

**CLB-5 (Parts Booth)**
- **Rouge Toner**: 7.0 95.94% 0.0% 95.9% 0.0% 4.06% 0.00700 225.0 6.70 6.70 10.55 253.13 46.20 0.29 164.94 85%

**CLB-6 (Parts Booth)**
- **Rouge Wiping Toner**: 7.3 75.48% 0.0% 73.7% 0.0% 24.52% 0.01300 225.0 5.48 5.48 29.57 709.57 129.50 7.54 19.58 85%

- **Conventional Self-Sealer**: 7.6 72.04% 0.0% 72.0% 0.0% 27.96% 0.02400 225.0 5.48 5.48 29.57 709.57 129.50 7.54 19.58 85%

- **White Conventionnal Enamel**: 9.0 56.71% 0.0% 56.7% 0.0% 43.29% 0.02400 225.0 5.11 5.11 27.59 662.20 120.85 13.84 11.80 85%

**CLB-5 (Parts Booth)**
- **Worst Case PTE**: 6.70 6.70 29.57 709.57 129.50 13.84 164.94

**CLB-6 (Parts Booth)**
- **Worst Case PTE**: 6.70 6.70 29.57 709.57 129.50 13.84 164.94

---

**Uncontrolled PTE of the conventional surface coating line:** 142.6 3,423 624.7 52.80

**Controlled PM/PM10/PM2.5 Emissions**: 2.64
## Appendix B: Emissions Calculations

### Conventional Surface Coating Line PTE

**Company Name:** MasterBrand Cabinets, Inc  
**Address:** 614 W 3rd St., Ferdinand, Indiana 47532  
**SPM Number:** 037-98871-00051  
**Reviewer:** Mehul Sura

### Material Density

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (Lb/Gal)</th>
<th>Gal of Mat. (gal/unit)</th>
<th>Maximum Throughput (units/hour)</th>
<th>Weight % Xylene</th>
<th>Weight % Ethylbenzene</th>
<th>Weight % Toluene</th>
<th>Weight % Trimethylbenzene</th>
<th>Xylene Emissions (ton/yr)</th>
<th>Ethylbenzene Emissions (ton/yr)</th>
<th>Toluene Emissions (ton/yr)</th>
<th>Trimethylbenzene Emissions (ton/yr)</th>
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<tr>
<td>Rouge Toner</td>
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<td>225.0</td>
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<td>0.00%</td>
<td>1.10%</td>
<td>0.00%</td>
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<tr>
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<td>0.05%</td>
<td>9.07%</td>
<td>0.00%</td>
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<td>16.31</td>
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<td>0.00%</td>
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<tr>
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<td>225.0</td>
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<td>8.00%</td>
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<td>9.07%</td>
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<td>0.36</td>
<td>0.09</td>
<td>16.31</td>
<td>0.00</td>
</tr>
<tr>
<td>White Convnetional Enamel</td>
<td>9.0</td>
<td>0.02400</td>
<td>225.0</td>
<td>6.21%</td>
<td>1.11%</td>
<td>0.03%</td>
<td>0.00%</td>
<td>13.23</td>
<td>2.37</td>
<td>0.06</td>
<td>0.00</td>
</tr>
<tr>
<td>CLB-6 (Parts Booth)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rouge Toner</td>
<td>7.0</td>
<td>0.00700</td>
<td>225.0</td>
<td>9.00%</td>
<td>0.00%</td>
<td>1.10%</td>
<td>0.00%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.53</td>
<td>0.00</td>
</tr>
<tr>
<td>Rouge Wiping Toner</td>
<td>7.3</td>
<td>0.01300</td>
<td>225.0</td>
<td>32.00%</td>
<td>8.00%</td>
<td>0.31%</td>
<td>0.47%</td>
<td>30.06</td>
<td>7.51</td>
<td>0.29</td>
<td>0.44</td>
</tr>
<tr>
<td>Conventional Self-Sealer</td>
<td>7.6</td>
<td>0.02400</td>
<td>225.0</td>
<td>9.20%</td>
<td>0.05%</td>
<td>9.07%</td>
<td>0.00%</td>
<td>0.36</td>
<td>0.09</td>
<td>16.31</td>
<td>0.00</td>
</tr>
<tr>
<td>White Convnetional Enamel</td>
<td>9.0</td>
<td>0.02400</td>
<td>225.0</td>
<td>6.21%</td>
<td>1.11%</td>
<td>0.03%</td>
<td>0.00%</td>
<td>13.23</td>
<td>2.37</td>
<td>0.06</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Uncontrolled PTE of the conventional surface coating line:**

![Uncontrolled PTE](image)

**Total Uncontrolled PTE for HAPs:**

![Total Uncontrolled PTE](image)

**Methodology**

*Booth CBL-1 and CBL-2 only use Toner  
**Booth CBL-3 uses only Sealers  
***Booth CBL-4 uses only Enamels

HAP Emissions (tons/year) = Density (lbs/gal) * Gal. of Mat. (gal/unit) * Maximum Throughput (units/hr) * Weight % HAP * 8760 (hrs/yr) / 2000 (lbs/ton)
### Line A (Surface Coating)

<table>
<thead>
<tr>
<th>Type of Booths</th>
<th>Line A - Booth ID</th>
<th>Number of Booths</th>
<th>Control Device</th>
<th>Max. Coating Usage (gal/hr/booth)</th>
<th>Coating Solid Content (lbs/gal)</th>
<th>Transfer Efficiency* (%)</th>
<th>Uncontrolled PM/PM10/PM2.5 Emissions (tons/yr)</th>
<th>Control Efficiency* (%)</th>
<th>Controlled PM/PM10/PM2.5 Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toner Booths</td>
<td>LAB-1,2</td>
<td>2</td>
<td>Dry Filters &amp; RTO</td>
<td>5.87</td>
<td>0.074</td>
<td>60.0%</td>
<td>1.52</td>
<td>98.0%</td>
<td>0.03</td>
</tr>
<tr>
<td>Stain Booths</td>
<td>LAB-3,4</td>
<td>2</td>
<td>Dry Filters &amp; RTO</td>
<td>4.94</td>
<td>0.038</td>
<td>60.0%</td>
<td>0.66</td>
<td>98.0%</td>
<td>0.01</td>
</tr>
<tr>
<td>Topcoat-Back Booth</td>
<td>LAB-7</td>
<td>1</td>
<td>Dry Filters</td>
<td>0.84</td>
<td>9.17</td>
<td>95.0%</td>
<td>1.69</td>
<td>60.0%</td>
<td>0.07</td>
</tr>
</tbody>
</table>

**TOTAL** 3.87 0.11

### Line B (Surface Coating)

<table>
<thead>
<tr>
<th>Type of Booths</th>
<th>Line B - Booth ID</th>
<th>Number of Booths</th>
<th>Control Device</th>
<th>Max. Coating Usage (gal/hr/booth)</th>
<th>Coating Solid Content (lbs/gal)</th>
<th>Transfer Efficiency* (%)</th>
<th>Uncontrolled PM/PM10/PM2.5 Emissions (tons/yr)</th>
<th>Control Efficiency* (%)</th>
<th>Controlled PM/PM10/PM2.5 Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toner Booth and Color Match Booth</td>
<td>LBB-1,2</td>
<td>2</td>
<td><strong>Dry Filters &amp; RTO</strong></td>
<td>5.87</td>
<td>0.074</td>
<td>60.0%</td>
<td>1.52</td>
<td>98.0%</td>
<td>0.03</td>
</tr>
<tr>
<td>Stain Booths</td>
<td>LBB-3,4</td>
<td>2</td>
<td><strong>Dry Filters &amp; RTO</strong></td>
<td>4.94</td>
<td>0.038</td>
<td>60.0%</td>
<td>0.66</td>
<td>98.0%</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**TOTAL** 2.18 0.04

**TOTAL INCLUDING LAB-8**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Uncontrolled PM/PM10/PM2.5 Emissions (tons/yr)</th>
<th>Control Efficiency* (%)</th>
<th>Controlled PM/PM10/PM2.5 Emissions (tons/yr)</th>
</tr>
</thead>
</table>

**TOTAL** 52.94 2.50

Limit reflected in D.1.1(a)(2) 2.43

---

* This information was provided by the source based on the manufacturer’s specifications. Booths LAB-1 through LAB-4 and LBB-1 through LBB-4 are spray booths. Booths LAB-7 and LAB-8 are UV coaters which use high solid content coatings and have high transfer and control efficiencies.

** Another filter is installed to the inlet exhaust pipe of the RTO, which makes the control efficiency of the dry filters in series with another filter to be at 98%.

**METHODOLOGY**

Uncontrolled PM/PM10/PM2.5 Emissions (tons/yr) = Number of Booths x Max. Coating Usage (gal/hr/booth) x Coating Solid Content (lbs/gal) x (1-Transfer Efficiency) x 8760 hrs/yr x 1 ton/2000 lbs

Controlled PM/PM10/PM2.5 Emissions (tons/yr) = PTE of PM/PM10 before Control (tons/yr) x (1-Control Efficiency)
### VOC and Particulate

#### From Surface Coating Operations

**Company Name:** MasterBrand Cabinets, Inc  
**Source Address:** 614 W 3rd St., Ferdinand, Indiana 47532  
**SSM Number:** 037-41205-00051  
**SPM Number:** 037-41274-00051  
**Reviewer:** Natalie Moore

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lbs/gal)</th>
<th>Weight % Volatile (water, VOC, and exempt compounds)</th>
<th>Weight % water and exempt compounds</th>
<th>Volume % Solids</th>
<th>Maximum Material Usage (gal/hour)</th>
<th>Maximum Material Usage (gall/day)</th>
<th>Pounds VOC per gallon of coating less water and exempt compounds</th>
<th>Pounds VOC per gallon of coating</th>
<th>PTE of VOC (lbs/hour)</th>
<th>PTE of VOC (lbs/day)</th>
<th>PTE of VOC (lbs/year)</th>
<th>Uncontrolled PTE of PM10/PM2.5 (lbs/year)</th>
<th>Pounds VOC per gallon of coating solids</th>
<th>PTE of HAP (tons/year)</th>
<th>Transfer Efficiency</th>
<th>Weight % HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>975-506V-229 Clear Topcoat</td>
<td>8.80</td>
<td>1.08%</td>
<td>0.00%</td>
<td>1.08%</td>
<td>31.70%</td>
<td>98.40%</td>
<td>0.10%</td>
<td>0.10%</td>
<td>0.10%</td>
<td>9.35</td>
<td>1.71</td>
<td>46.90</td>
<td>0.30</td>
<td>70%</td>
<td>0.54%</td>
<td>0.85</td>
</tr>
</tbody>
</table>

**Control Efficiency =** 95.0%

**Total Controlled Potential to Emit (PTE) (tons/year) =** 2.34

---

**Methodology**

*Exempt compounds include all compounds specifically exempted from the definition of volatile organic compounds (VOC) under 40 CFR 51.103.(s).

Weight % VOC = \( \left( \text{Weight % Volatile (water, VOC, and exempt Compounds)} \right) - \left( \text{Weight % water and exempt Compounds} \right) \)

Maximum Material Usage (gall/day) = \( \left( \text{Maximum Material Usage (gal/hour)} \right) \times \left( 24 \text{ hours/day} \right) \)

Pounds of VOC per gallon coating less water and exempt Compounds = \( \left( \text{Density (lbs/gal)} \right) \times \left( \text{Weight % VOC} \right) \times \left( 1 - \left( \text{Volume % water and exempt Compounds} \right) \right) \)

Pounds of VOC per gallon coating = \( \left( \text{Density (lbs/gal)} \right) \times \left( \text{Weight % VOC} \right) \times \left( 1 - \left( \text{Transfer Efficiency} \right) \right) \)

PTE of VOC (lbs/hour) = \( \left( \text{Maximum Material Usage (gal/hour)} \right) \times \left( \text{Pounds of VOC per gallon coating} \right) \)

PTE of VOC (lbs/day) = \( \left( \text{PTE of VOC (lbs/hour)} \right) \times \left( 24 \text{ hours/day} \right) \)

PTE of VOC (lbs/year) = \( \left( \text{PTE of VOC (lbs/day)} \right) \times \left( 8760 \text{ hours/year} \right) \)

Uncontrolled PTE of PM10/PM2.5 (tons/year) = \( \left( \text{Density (lbs/gal)} \right) \times \left( \text{Maximum Material Usage (gal/hour)} \right) \times \left( 1 - \left( \text{Weight % Volatile} \right) \right) \times \left( 1 - \left( \text{Transfer Efficiency} \right) \right) \times \left( 8760 \text{ hours/year} \right) \times \left( 1 \text{ ton/2000 lbs} \right) \)

Pounds VOC per gallon of coating solids = \( \left( \text{Density (lbs/gal)} \right) \times \left( \text{Weight % VOCs} \right) \times \left( \text{Volume % Solids} \right) \)

Controlled PTE of PM10/PM2.5 (tons/year) = \( \left( \text{Uncontrolled PTE of PM10/PM2.5 (tons/year)} \right) \times \left( \text{Control Efficiency} \right) \)

Hazardous air pollutant (HAP) is defined by Section 112(b) of the Clean Air Act. The product data sheets provided by the source did not specify the type of HAP contained in each coating. Therefore, all HAP is assumed to be the single highest HAP at the source as a worse-case scenario.

Booth LAB-8 is a UV coater which uses high solid content coatings, has high transfer and control efficiencies, and is associated with the finishing lines (Lines A and B).
### Appendix A: Emissions Calculations From Surface Coating Operations

<table>
<thead>
<tr>
<th>Material</th>
<th>Density [lbs/ft³]</th>
<th>Weight % Volatile (water, VOC, and exempt compounds*)</th>
<th>Weight % water and exempt compounds</th>
<th>Volume % solvents</th>
<th>Maximum Material Usage [gal/day]</th>
<th>Maximum Capacity [tons/year]</th>
<th>Pounds VOC per gallon of coating base water and exempt compounds</th>
<th>Pounds VOC per gallon of coating</th>
<th>PTE of VOC [Btu/hour]</th>
<th>PTE of VOC [Misc]</th>
<th>PTE of VOC [Misc]</th>
<th>Pounds VOC per gallon of coating</th>
<th>Transfer Efficiency</th>
<th>Weight % HAP</th>
<th>PTE of HAP [tons/year]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saddle</td>
<td>0.35</td>
<td>56.5%</td>
<td>43.5%</td>
<td>27.3%</td>
<td>1848</td>
<td>357</td>
<td>19.344</td>
<td>2.00</td>
<td>0.87</td>
<td>2.00</td>
<td>0.87</td>
<td>13.16</td>
<td>0.00</td>
<td>2.00</td>
<td>0.00</td>
</tr>
<tr>
<td>White W/B Topcoat 40 Sheen</td>
<td>0.45</td>
<td>60.9%</td>
<td>39.1%</td>
<td>22.7%</td>
<td>1848</td>
<td>357</td>
<td>19.344</td>
<td>2.01</td>
<td>0.89</td>
<td>2.01</td>
<td>0.89</td>
<td>13.16</td>
<td>0.00</td>
<td>2.01</td>
<td>0.00</td>
</tr>
<tr>
<td>White Waterbased Primer</td>
<td>0.87</td>
<td>63.2%</td>
<td>36.8%</td>
<td>19.3%</td>
<td>1848</td>
<td>357</td>
<td>19.344</td>
<td>2.05</td>
<td>0.91</td>
<td>2.05</td>
<td>0.91</td>
<td>13.16</td>
<td>0.00</td>
<td>2.05</td>
<td>0.00</td>
</tr>
<tr>
<td>White Acrylic Primer for Wood</td>
<td>0.72</td>
<td>65.8%</td>
<td>34.2%</td>
<td>17.8%</td>
<td>1848</td>
<td>357</td>
<td>19.344</td>
<td>2.05</td>
<td>0.91</td>
<td>2.05</td>
<td>0.91</td>
<td>13.16</td>
<td>0.00</td>
<td>2.05</td>
<td>0.00</td>
</tr>
</tbody>
</table>

#### Highlights

- **Hazardous air pollutant (HAP) is defined by Section 112(b) of the Clean Air Act. The product data sheets provided by the source did not specify the type of HAP contained in each coating. Therefore, all HAP is assumed to be the single highest HAP at the source as a worse-case scenario.**

- **Appendix A: Emissions Calculations From Surface Coating Operations**

- **Material**: List of materials used in the coatings.
- **Density [lbs/ft³]**: Density of the material.
- **Weight % Volatile (water, VOC, and exempt compounds*)**: Weight percentage of volatile materials in the coating.
- **Weight % water and exempt compounds**: Weight percentage of water in the coating.
- **Volume % solvents**: Volume percentage of solvents.
- **Maximum Material Usage [gal/day]**: Maximum usage of the material in gallons per day.
- **Maximum Capacity [tons/year]**: Maximum capacity of the material in tons per year.
- **Pounds VOC per gallon of coating base water and exempt compounds**: Pounds of VOC per gallon of coating base water and exempt compounds.
- **Pounds VOC per gallon of coating**: Pounds of VOC per gallon of coating.
- **PTE of VOC [Btu/hour]**: Pounds of thermal energy of VOC per hour.
- **Transfer Efficiency**: Transfer efficiency of VOC.
- **Weight % HAP**: Weight percentage of hazardous air pollutants.
- **PTE of HAP [tons/year]**: Pounds of thermal energy of HAP per year.

---

**Methodology**

- *Exempt compounds include all compounds specifically exempted from the definition of volatile organic compounds (VOC) under 40 CFR 51.10(b).
- Weight % VOC = Weight % Volatile (water, VOC, and exempt compounds*) / (Weight % water and exempt compounds + Weight % water and exempt compounds).
- Pounds of VOC per gallon coating = Density [Btu/lb] * [Weight % VOC] / [Pounds VOC per gallon coating].
- PTE of VOC [Btu/hour] = [Maximum Material Usage [gallons]] / [Minimum Capacity (units/hour)] * [Water Capacity (units/hour)] * [Pounds VOC per gallon coating] / [Btu/lb].
- Uncontrolled PTE of PM10/PM2.5 [tons/year] = [Uncontrolled PTE of PM10/PM2.5 (ton/year)] * [1 ton/1000 lbs].
- Controlled PTE of PM10/PM2.5 [tons/year] = [Uncontrolled PTE of PM10/PM2.5 (ton/year)] / [Transfer Efficiency].
- Transfer Efficiency = [1 - Weight % Volatile] / [Btu/lb].

---

**Notes**

- *Hazardous air pollutant (HAP) is defined by Section 112(b) of the Clean Air Act. The product data sheets provided by the source did not specify the type of HAP contained in each coating. Therefore, all HAP is assumed to be the single highest HAP at the source as a worse-case scenario.
### Appendix B: Emissions Calculations

**Surface Coating Emissions - End Coat Booth (UVPB-1)**

**Company Name:** MasterBrand Cabinets, Inc  
**Source Address:** 614 W 3rd St., Ferdinand, Indiana 47532  
**SSM Number:** 037-41205-00051  
**SPM Number:** 037-41274-00051  
**Reviewer:** Natalie Moore

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Volume % Water</th>
<th>Weight % Organics</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Gal of Mat. (gal/unit)</th>
<th>Maximum (units/hour)</th>
<th>Pounds VOC per gallon of coating less water</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>Potential PM/PM10/PM2.5 (ton/yr)</th>
<th>lb VOC/gal solids</th>
<th>Transfer Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antique White Edge Coat</td>
<td>10.31</td>
<td>14.58%</td>
<td>0%</td>
<td>14.58%</td>
<td>0%</td>
<td>0.00004</td>
<td>440</td>
<td>1.50</td>
<td>1.50</td>
<td>0.03</td>
<td>0.12</td>
<td>0.12</td>
<td>0.17</td>
<td>3.48</td>
<td>75%</td>
</tr>
<tr>
<td>Neutral Edge Coat</td>
<td>10.38</td>
<td>17.93%</td>
<td>0%</td>
<td>17.93%</td>
<td>0%</td>
<td>0.00012</td>
<td>440</td>
<td>1.86</td>
<td>1.86</td>
<td>0.09</td>
<td>0.42</td>
<td>0.42</td>
<td>0.48</td>
<td>3.52</td>
<td>75%</td>
</tr>
<tr>
<td>Dark Edge Coat</td>
<td>9.87</td>
<td>16.36%</td>
<td>0%</td>
<td>16.36%</td>
<td>0%</td>
<td>0.00006</td>
<td>440</td>
<td>1.61</td>
<td>1.61</td>
<td>0.04</td>
<td>0.17</td>
<td>0.22</td>
<td>3.30</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)
Potential PM/PM10/PM2.5 (ton/yr) = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Sum of all solvents used

This coating contains 0 to neg. amounts of HAPs
### Appendix B: Emissions Calculations

**Surface Coating Emissions - UV-cured mist coater (UVMC-1)**

**Company Name:** MasterBrand Cabinets, Inc  
**Source Address:** 614 W 3rd St., Ferdinand, Indiana 47532  
**SSM Number:** 037-41205-00051  
**SPM Number:** 037-41274-00051  
**Reviewer:** Natalie Moore

#### Material Density

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (Lb/Gal)</th>
<th>Weight % Volatile (H2O &amp; Organics)</th>
<th>Weight % Water</th>
<th>Volume % Organics</th>
<th>Volume % Non-Volatiles (solids)</th>
<th>Gal of Mat. (gal/unit)</th>
<th>Maximum (unit/hour)</th>
<th>Pounds VOC per gallon of coating less water</th>
<th>Pounds VOC per gallon of coating</th>
<th>Potential VOC pounds per hour</th>
<th>Potential VOC pounds per day</th>
<th>Potential VOC tons per year</th>
<th>Potential PM/PM10/PM2.5 (ton/yr)</th>
<th>lb VOC/gal solids</th>
<th>Transfer Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray UV Molding SS T/C</td>
<td>9.17</td>
<td>0.014%</td>
<td>0%</td>
<td>0.014%</td>
<td>99.98%</td>
<td>0.00085</td>
<td>378</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td>0.01</td>
<td>0.002</td>
<td>0.26</td>
<td>0.001</td>
<td>98%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.00085</td>
<td>0.001</td>
<td>0.001</td>
<td>0.01</td>
<td>0.002</td>
<td>0.26</td>
<td>0.001</td>
<td>98%</td>
</tr>
</tbody>
</table>

#### METHODOLOGY

- **Pounds of VOC per Gallon Coating less Water** = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
- **Pounds of VOC per Gallon Coating** = (Density (lb/gal) * Weight % Organics)
- **Potential VOC Pounds per Hour** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
- **Potential VOC Pounds per Day** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
- **Potential VOC Tons per Year** = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)
- **Potential PM/PM10/PM2.5 (ton/yr)** = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
- **Pounds VOC per Gallon of Solids** = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
- **Total** = Sum of all solvents used

This coating contains 0 to neg. amounts of HAPs
### Woodworking PM Emissions

**Company Name:** MasterBrand Cabinets, Inc  
**Source Address:** 614 W 3rd St., Ferdinand, Indiana 47532  
**SSM Number:** 037-41205-00051  
**SPM Number:** 037-41274-00051  
**Reviewer:** Natalie Moore

#### METHODOLOGY

- **PM10** was not a regulated pollutant until July 31, 1987. (52 FR 24672-24715 published on July 1, 1987, and effective on July 31, 1987)

- **PM2.5** was not a regulated pollutant until July 15, 2008. (73 FR at 28321-28350 published on May 16, 2008, and effective on July 15, 2008)

**Controlled PM/PM10/PM2.5 Emissions (lbs/hr) = Air Flow (acfm) * Outlet Grain Loading (gr/ascf) * 60 (min/hr) / 7000 (gr/lb)**

**Uncontrolled PM/PM10/PM2.5 Emissions (lbs/hr) = Controlled PM/PM10/PM2.5 Emissions (lbs/hr) / (1 - Control Efficiency (%))**

**Controlled PM/PM10/PM2.5 Emissions (tons/yr) = Controlled PM/PM10/PM2.5 Emissions (lbs/hr) * 8760 (hrs/yr) / 2000 (lbs/ton)**

**Uncontrolled PM/PM10/PM2.5 Emissions (tons/yr) = Uncontrolled PM/PM10/PM2.5 Emissions (lbs/hr) * 8760 (hrs/yr) / 2000 (lbs/ton)**

**Limited PM/PM10/PM2.5 Emissions (tons/yr) = Limited PM/PM10/PM2.5 Emissions (lbs/hr) * 8760 (hrs/yr) / 2000 (lbs/ton)**

In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge (“ALJ”) Garnoton receiving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In this finding, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, potential emissions for particulate matter were calculated after consideration of the baghouse controls. However, for purposes of determining the applicability of Prevention of Significant Deterioration (PSD), potential particulate matter emissions from the woodworking operations were calculated before consideration of the baghouse controls.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Construction Date</th>
<th>PM/PM10/PM2.5</th>
<th>PM/PM10/PM2.5</th>
<th>PM/PM10/PM2.5</th>
<th>PM/PM10/PM2.5</th>
<th>PM/PM10/PM2.5</th>
<th>PM/PM10/PM2.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW-1</td>
<td>1968</td>
<td>---</td>
<td>PM/PM10/PM2.5</td>
<td>156.9</td>
<td>156.9</td>
<td>156.9</td>
<td>687.0</td>
</tr>
<tr>
<td>WW-2</td>
<td>1998</td>
<td>PM/PM10</td>
<td>PM/2.5</td>
<td>5.68</td>
<td>3.40</td>
<td>156.9</td>
<td>24.9</td>
</tr>
<tr>
<td>WW-3</td>
<td>1969</td>
<td>PM/PM10/PM2.5</td>
<td>300.0</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
</tr>
<tr>
<td>WW-4</td>
<td>1997</td>
<td>PM/PM10</td>
<td>PM/2.5</td>
<td>5.68</td>
<td>3.40</td>
<td>156.9</td>
<td>14.9</td>
</tr>
<tr>
<td>WW-5</td>
<td>1986</td>
<td>PM/PM10/PM2.5</td>
<td>300.0</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
</tr>
<tr>
<td>WW-6</td>
<td>2002</td>
<td>PM/PM10</td>
<td>PM/2.5</td>
<td>2.54</td>
<td>1.46</td>
<td>11.2</td>
<td>7.94</td>
</tr>
<tr>
<td>WW-7</td>
<td>2011</td>
<td>PM/PM10/PM2.5</td>
<td>5.01</td>
<td>2.95</td>
<td>1.98</td>
<td>21.9</td>
<td>12.26</td>
</tr>
<tr>
<td>WW-8</td>
<td>2013</td>
<td>PM/PM10/PM2.5</td>
<td>5.70</td>
<td>3.22</td>
<td>2.28</td>
<td>25.0</td>
<td>14.18</td>
</tr>
</tbody>
</table>

**Limited Emissions (limits to render 326 IAC 2-2 (PSD) not applicable)**

<table>
<thead>
<tr>
<th>Operation</th>
<th>Construction Date</th>
<th>Limited PM Emissions (lbs/hr)</th>
<th>Limited PM10 Emissions (lbs/hr)</th>
<th>Limited PM2.5 Emissions (lbs/hr)</th>
<th>Limited PM Emissions (tons/yr)</th>
<th>Limited PM10 Emissions (tons/yr)</th>
<th>Limited PM2.5 Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW-1</td>
<td>1968</td>
<td>156.9</td>
<td>156.9</td>
<td>156.9</td>
<td>687.0</td>
<td>687.0</td>
<td>687.0</td>
</tr>
<tr>
<td>WW-2</td>
<td>1998</td>
<td>5.68</td>
<td>3.40</td>
<td>156.9</td>
<td>24.9</td>
<td>14.9</td>
<td>687.0</td>
</tr>
<tr>
<td>WW-3</td>
<td>1969</td>
<td>300.0</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
</tr>
<tr>
<td>WW-4</td>
<td>1997</td>
<td>5.68</td>
<td>3.40</td>
<td>156.9</td>
<td>14.9</td>
<td>14.9</td>
<td>687.0</td>
</tr>
<tr>
<td>WW-5</td>
<td>1986</td>
<td>300.0</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
<td>183.1</td>
</tr>
<tr>
<td>WW-6</td>
<td>2002</td>
<td>2.54</td>
<td>1.46</td>
<td>11.2</td>
<td>7.94</td>
<td>4.48</td>
<td>24.88</td>
</tr>
<tr>
<td>WW-7</td>
<td>2011</td>
<td>5.01</td>
<td>2.95</td>
<td>1.98</td>
<td>21.9</td>
<td>12.26</td>
<td>7.37</td>
</tr>
<tr>
<td>WW-8</td>
<td>2013</td>
<td>5.70</td>
<td>3.22</td>
<td>2.28</td>
<td>25.0</td>
<td>14.18</td>
<td>9.59</td>
</tr>
</tbody>
</table>

**Total PTE for Woodworking Stations:**

- **PTE for Woodworking Stations:** 1,455 14.35 6,371 63.71

---

**Note:** PM10 was not a regulated pollutant until July 31, 1987 (52 FR 24672-24715 published on July 1, 1987, and effective on July 31, 1987)
## Appendix B: Emissions Calculations

### Natural Gas Combustion Only

**MM BTU/hr <100**

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>MasterBrand Cabinets, Inc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Address:</td>
<td>614 W 3rd St., Ferdinand, Indiana 47532</td>
</tr>
<tr>
<td>SSM Number:</td>
<td>037-41205-00051</td>
</tr>
<tr>
<td>SPM Number:</td>
<td>037-41274-00051</td>
</tr>
<tr>
<td>Reviewer:</td>
<td>Natalie Moore</td>
</tr>
</tbody>
</table>

### Heat Input Capacity

<table>
<thead>
<tr>
<th>MMBtu/hr</th>
<th>Potential Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.576</td>
<td>73.7 MCF/yr</td>
</tr>
<tr>
<td>1.0</td>
<td>10.3 Curing Oven (OV-1)</td>
</tr>
<tr>
<td>1.0</td>
<td>8.6 Curing Oven (OV-2)</td>
</tr>
<tr>
<td>0.7</td>
<td>0.0 Air Make Up Unit</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>98.6 Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential Emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM*</td>
<td>1.9</td>
<td>0.0098</td>
</tr>
<tr>
<td>PM10*</td>
<td>7.6</td>
<td>0.37</td>
</tr>
<tr>
<td>direct PM2.5*</td>
<td>7.6</td>
<td>0.37</td>
</tr>
<tr>
<td>SO2</td>
<td>0.6</td>
<td>0.03</td>
</tr>
<tr>
<td>NOx</td>
<td>100</td>
<td>4.93</td>
</tr>
<tr>
<td>VOC</td>
<td>5.5</td>
<td>0.27</td>
</tr>
<tr>
<td>CO</td>
<td>84</td>
<td>4.14</td>
</tr>
</tbody>
</table>

**PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.**

**PM2.5 emission factor is filterable and condensable PM2.5 combined.**

**Emission Factors for NOx: Uncontrolled = 150, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32**

### Methodology

All emission factors are based on normal firing.

- MMBtu = 1,000,000 Btu
- MCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMBtu/1,020 MMBtu

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

### HAPs Calculations

#### HAPs - Organics

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>Benzene</th>
<th>Dichlorobenzene</th>
<th>Formamide/Aldehyde</th>
<th>Hexane</th>
<th>Toluene</th>
<th>Total - Organics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>1.0E-04</td>
<td>5.9E-05</td>
<td>3.7E-03</td>
<td>8.9E-02</td>
<td>1.7E-04</td>
<td><strong>9.3E-02</strong></td>
</tr>
</tbody>
</table>

#### HAPs - Metals

<table>
<thead>
<tr>
<th>Emission Factor in lb/MMCF</th>
<th>Lead</th>
<th>Cadmium</th>
<th>Chromium</th>
<th>Manganese</th>
<th>Nickel</th>
<th>Total - Metals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emission in tons/yr</td>
<td>5.0E-04</td>
<td>1.1E-03</td>
<td>1.4E-03</td>
<td>3.8E-04</td>
<td>2.1E-03</td>
<td><strong>2.7E-03</strong></td>
</tr>
</tbody>
</table>

Methodology is the same as above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

### Greenhouse Gas Calculations

<table>
<thead>
<tr>
<th>Greenhouse Gas</th>
<th>Emission Factor in lb/MMCF</th>
<th>Potential emission in tons/yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>5.914</td>
<td>5.914</td>
</tr>
<tr>
<td>CH4</td>
<td>8.1</td>
<td>0.1</td>
</tr>
<tr>
<td>N2O</td>
<td>0.1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

CO2e Total in tons/yr = 5.949

**Methodology**

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

**Off-Line Part Booth (OLB-1) Surface Coating**

**Company Name:** MasterBrand Cabinets, Inc  
**Source Address:** 614 W 3rd St., Ferdinand, Indiana 47532  
**SSM Number:** 037-41205-00051  
**SPM Number:** 037-41274-00051  
**Reviewer:** Natalie Moore

<table>
<thead>
<tr>
<th>Material</th>
<th>Density (lb/gal)</th>
<th>Gal of Mat (gal/unit)</th>
<th>Maximum Throughput (unit/hr)</th>
<th>Transfer Efficiency</th>
<th>Particulate Control Efficiency</th>
<th>wt% VOC</th>
<th>wt% Solids</th>
<th>wt% Xylene</th>
<th>wt% Ethylbenzene</th>
<th>wt% Toluene</th>
<th>wt% Trimethylbenzene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rouge Toner</td>
<td>7</td>
<td>0.007</td>
<td>100</td>
<td>79%</td>
<td>95%</td>
<td>95.80%</td>
<td>4.06%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>1.10%</td>
</tr>
<tr>
<td>Rouge Wiping Toner</td>
<td>7.3</td>
<td>0.013</td>
<td>100</td>
<td>79%</td>
<td>95%</td>
<td>73.70%</td>
<td>24.52%</td>
<td>32.00%</td>
<td>8.00%</td>
<td>0.31%</td>
<td>0.47%</td>
</tr>
<tr>
<td>Conventional Self-Sealer</td>
<td>7.6</td>
<td>0.004</td>
<td>100</td>
<td>79%</td>
<td>95%</td>
<td>72%</td>
<td>27.96%</td>
<td>0.20%</td>
<td>0.05%</td>
<td>0.97%</td>
<td>0.05%</td>
</tr>
<tr>
<td>White Conventional Enamel</td>
<td>9</td>
<td>0.024</td>
<td>100</td>
<td>79%</td>
<td>95%</td>
<td>56.70%</td>
<td>43.29%</td>
<td>6.21%</td>
<td>1.11%</td>
<td>0.03%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material</th>
<th>Potential Emissions (tons/yr)</th>
<th>Controlled PM/PM10/PM2.5 Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VOC</td>
<td>PM/PM10/PM2.5</td>
</tr>
<tr>
<td>Rouge Toner</td>
<td>20.58</td>
<td>6.18</td>
</tr>
<tr>
<td>Rouge Wiping Toner</td>
<td>30.63</td>
<td>2.14</td>
</tr>
<tr>
<td>Conventional Self-Sealer</td>
<td>57.52</td>
<td>4.69</td>
</tr>
<tr>
<td>White Conventional Enamel</td>
<td>53.64</td>
<td>8.60</td>
</tr>
<tr>
<td>Worst-Case PTE</td>
<td>57.52</td>
<td>8.60</td>
</tr>
</tbody>
</table>

VOC/HAP Emissions (tons/yr) = Maximum Throughput (unit/hr) x Gal of Mat (gal/unit) x Density (lb/gal) x wt% VOC/HAP x 1 ton/2,000 lbs x 8,760 hrs/yr

Uncontrolled PM/PM10/PM2.5 Emissions (tons/yr) = Maximum Throughput (unit/hr) x Gal of Mat (gal/unit) x Density (lb/gal) x wt% solids x (1 - Control Eff.) x 1 ton/2,000 lbs x 8,760 hrs/yr

Controlled PM/PM10/PM2.5 Emissions (tons/yr) = Uncontrolled PM/PM10/PM2.5 Emissions (tons/yr) x (1 - Control Eff.)

Note: Only one coating can be applied at a time; therefore, worst-case PTE is based on the assumption that only the worst-case coating is being applied.
### Operation Material Density (Lb/Gal) Weight % V.OC/ Org. Density (Lb/Gal) Weight % V.OC/ Org. Volume % Non-Volatiles Maximum Usage (lbs/hour) Pounds VOC per gallon of coating less water Pounds VOC per gallon of coating Potential VOC pounds per hour Potential VOC pounds per day Potential VOC pounds per year Potential VOC Tons per year Particulate Potential (ton/yr) lb VOC/gal solids Transfer Efficiency

#### Edge Banding Operations

<table>
<thead>
<tr>
<th>Operation</th>
<th>Material</th>
<th>Jowatherm 288.60</th>
<th>10.60</th>
<th>0.80%</th>
<th>0.00%</th>
<th>0.80%</th>
<th>0.00%</th>
<th>99.20%</th>
<th>28.600</th>
<th>0.08</th>
<th>0.08</th>
<th>0.23</th>
<th>5.49</th>
<th>1.00</th>
<th>0.00</th>
<th>0.09</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edge Banding Cleaning</td>
<td>Technomelt PUR Cleaner 3030</td>
<td>6.70</td>
<td>100.00%</td>
<td>5.00%</td>
<td>95.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.010</td>
<td>6.37</td>
<td>6.37</td>
<td>0.01</td>
<td>0.24</td>
<td>0.04</td>
<td>0.00</td>
<td>0.00</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

### Total Potential to Emit

Add worst case coating to all solvents

### METHODOLOGY

- Pounds of VOC per Gallon Coating less Water = (Density (Lb/gal) * Weight % Organics) / (1 - Volume % water)
- Pounds of VOC per Gallon Coating = (Density (Lb/gal) * Weight % Organics)
- Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (Lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
- Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (Lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hrs/day)
- Potential VOC Tons per Year = Pounds of VOC per Gallon coating (Lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)
- Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1-Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
- Total = Worst Coating + Sum of all solvents used
Appendix A: Emissions Calculations

4-Stroke Lean-Burn (4SLB) Engines

Emergency Generator (NG-GEN)

Company Name: MasterBrand Cabinets, Inc
Source Address: 614 W 3rd St., Ferdinand, Indiana 47532
SSM Number: 037-41205-00051
SPM Number: 037-41274-00051
Reviewer: Natalie Moore

Maximum Output Horsepower Rating (hp)  93.9
Brake Specific Fuel Consumption (BSFC) (Btu/hp-hr)  7500
Maximum Hours Operated per Year (hr/yr)  500
Potential Fuel Usage (MMBtu/yr)  352
High Heat Value (MMBtu/MMscf)  1020
Potential Fuel Usage (MMcf/yr)  0.35

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>PM2.5*</th>
<th>PM10*</th>
<th>PM*</th>
<th>SO2</th>
<th>NOx</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Emissions (tons/yr)</td>
<td>0.00014</td>
<td>0.0018</td>
<td>1.76E-03</td>
<td>1.04E-04</td>
<td>2.32E-04</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

*PM emission factor is for filterable PM-10.  PM10 emission factor is filterable PM10 + condensable PM.  PM2.5 emission factor is filterable PM2.5 + condensable PM.

Hazardous Air Pollutants (HAPs)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Potential Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaldehyde</td>
<td>8.3E-03</td>
<td>9.99E-04</td>
</tr>
<tr>
<td>Acrolein</td>
<td>5.1E-03</td>
<td>6.0E-04</td>
</tr>
<tr>
<td>Benzene</td>
<td>4.4E-04</td>
<td>3.0E-04</td>
</tr>
<tr>
<td>Butadiene</td>
<td>2.1E-04</td>
<td>4.1E-05</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>2.5E-03</td>
<td>1.1E-04</td>
</tr>
<tr>
<td>Methanol</td>
<td>4.2E-03</td>
<td>1.4E-04</td>
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<tr>
<td>Toluene</td>
<td>4.0E-03</td>
<td>7.1E-05</td>
</tr>
<tr>
<td>2,2,4-Trimethylpentane</td>
<td>2.5E-04</td>
<td>3.4E-05</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>0.00</td>
</tr>
</tbody>
</table>

HAP pollutants consist of the eleven highest HAPs included in AP-42 Table 3.2-2.

Methodology

Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2
Potential Fuel Usage (MMBtu) = [Maximum Output Horsepower Rating (hp)] * [Brake Specific Fuel Consumption (Btu/hp-hr)] * [Maximum Hours Operated per Year (hr/yr)] / [1000000 Btu/MMBtu]
Potential Emissions (tons/yr) = [Potential Fuel Usage (MMBtu)] * [Emission Factor (lb/MMBtu)] / [2000 lb/ton]

Greenhouse Gases (GHGs)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Potential Emissions (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>110</td>
<td>1.25</td>
</tr>
<tr>
<td>CH4</td>
<td>2.2</td>
<td>0.22</td>
</tr>
<tr>
<td>N2O</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>19.59</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Factor (lb/MMBtu)</th>
<th>Potential Emissions (tons/yr)</th>
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</thead>
<tbody>
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<td>CO2</td>
<td>19.37</td>
<td>0.22</td>
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<tr>
<td>CH4</td>
<td>19.59</td>
<td>0.00</td>
</tr>
</tbody>
</table>

CO2e Total in tons/yr 24.98

Methodology

*The CO2 and CH4 emission factors are from Emission Factors are from AP-42 (Supplement F, July 2000), Table 3.2-2
**The N2O emission factor is from AP-42, Table 1.4-2.  The N2O Emission Factor for low Nox burner is 0.64.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
For CO2 and CH4, Emission (tons/yr) = [Potential Fuel Usage (MMBtu/yr)] * [Emission Factor (lb/MMBtu)] / (2,000 lbs/ton)
For N2O, Emission (tons/yr) = [Potential Fuel Usage (MMBtu)] * [Emission Factor (lb/MMBtu)] / (2,000 lbs/ton)
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (2) + N2O Potential Emission ton/yr x N2O GWP (20)

Abbreviations

PM = Particulate Matter  NOx = Nitrous Oxides  CO2 = Carbon Dioxide
PM10 = Particulate Matter (10 um)  VOC = Volatile Organic Compounds  CH4 = Methane
SO2 = Sulfur Dioxide  CO = Carbon Monoxide  NOx = Nitrous Oxides
CO2e = CO2 equivalent emissions
Historically, Permittee maintained records of usage at STB-19 and STB-20 together. These estimates are based on 5.26% usage at STB-19 and 94.74% at STB-20.

For STB-19 and STB-20:

### Baseline Emissions - Methodology

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<thead>
<tr>
<th>Month</th>
<th>Hours Operated</th>
<th>Solids Used (lbs/month)</th>
<th>Transfer Efficiency</th>
<th>Control Efficiency</th>
<th>Particulate Emissions (lbs/month)</th>
<th>VOC Emissions (lbs/month)</th>
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<tr>
<td>1</td>
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<td>1,494</td>
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<td>246.28</td>
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<td>62.11</td>
<td>1.09</td>
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<td>5.19</td>
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<td>1.96E-03</td>
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</tbody>
</table>

### Notes:
1. Based on Permittee's records and calculations of actual PM and VOC emissions.
2. For STB-19 and STB-20, the Permittee has calculated usage based on annual production data. The source has used a ratio based on 2018 production to designate separate baseline and could have accommodated the net decrease in PM and VOC emissions.
<table>
<thead>
<tr>
<th>Particulate Emissions</th>
<th>VOC Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAB-8 (new) STB-19 STB-20 STB-21 SUM</td>
<td>LAB-8 STB-19 STB-20 STB-21 SUM</td>
</tr>
<tr>
<td>Projected Actual</td>
<td>9,430,199</td>
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<tr>
<td>Baseline</td>
<td>3,025,220</td>
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<tr>
<td>Could Have Accommodated</td>
<td>6,404,980</td>
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<tr>
<td>Particulate Emissions</td>
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<tr>
<td>Baseline</td>
<td>0.0004</td>
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<tr>
<td>Could Have Accommodated</td>
<td>0.0004</td>
</tr>
<tr>
<td>Voc Hybrid ATP/ATPA (tons/year)</td>
<td>2.34</td>
</tr>
<tr>
<td>Baseline</td>
<td>0.0004</td>
</tr>
<tr>
<td>Could Have Accommodated</td>
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</tr>
</tbody>
</table>

Methodology:

**Production Rate (parts/year)**

Projected Actual Emission Rate (lbs/part) = Baseline/Could Have Accommodated Emissions (lbs/part) * Proposed Actual Production Rate (parts/year)

Note: Projected Actual production rates for STB-19 (37%) and STB-20 (63%) are based on the maximum capacities of STB-19 (220 units per hour) and STB-20 (900 units per hour) divided by the sum of the units' maximum capacities (220 + 900 units per hour). The source has requested that they be able to shift production between STB-19 and STB-20 with a total production between the two units of 5,000,000 parts per year without completing another ATPA. Since STB-19 and STB-20 use the same coatings and use the same amount of coating per unit for the stains, there is no difference in emissions between the two units. However, STB-20 uses more of the opaque coatings (White Water-Based Primer and White W/B Topcoat 40 Sheen) per unit than STB-19 does. Therefore, if production is shifted from STB-19 to STB-20, the emissions would increase.

Baseline/Could Have Accommodated Emission Rate (lbs/part) = Baseline Emissions (tons/year) * (1 ton / 2,000 pounds) / Could Have Accommodated Emissions (tons/year)

Notes:

- ATPA = Projected Actual - Baseline - Could Have Accommodated
- ATP/ATPA = Particulate hybrid ATP/ATPA (tons/year) + VOC hybrid ATP/ATPA (tons/year)
- ATP/ATPA (tons/year) = LAB-8 + STB-19 + STB-20 + STB-21

VOC Hybrid ATP/ATPA (tons/year) = Projected Actual - Baseline - Could Have Accommodated

- ATP/ATPA = Particulate Hybrid ATP/ATPA (tons/year) + VOC Hybrid ATP/ATPA (tons/year)

- ATP/ATPA (tons/year) = LAB-8 + STB-19 + STB-20 + STB-21

- ATP/ATPA (tons/year) = Projected Actual - Baseline - Could Have Accommodated
October 4, 2019

Ms. Sally Gaines
MasterBrand Cabinets, Inc. #4/22
614 West Third Street
Ferdinand, IN 47532

Re: Public Notice
MasterBrand Cabinets, Inc. #4/22
Permit Level: Significant Source Modification
Permit Number: 037-41205-00051
Permit Level: Significant Permit Modification
Permit Number: 037-41274-00051

Dear Ms. Sally Gaines:

Enclosed is a copy of your draft Significant Source and Significant Permit Modifications, Technical Support Document, emission calculations, and the Public Notice.

The Public Notice period will begin the date the Notice is published on the IDEM Official Public Notice website. Publication has been requested and is expected within 2-3 business days. You may check the exact Public Notice begins and ends date here: https://www.in.gov/idem/5474.htm

Please note that as of April 17, 2019, IDEM is no longer required to publish the notice in a newspaper.

OAQ has submitted the draft permit package to the Ferdinand Branch Library, 112 E. 16th Street in Ferdinand, IN 47532. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Natalie Moore, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 3-8279 or dial (317) 233-8279.

Sincerely,

Vicki Biddle

Vicki Biddle
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover Letter 4/12/19
October 4, 2019

To: Ferdinand Branch Library
From: Jenny Acker, Branch Chief
Permits Branch
Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air Permit

Applicant Name: MasterBrand Cabinets, Inc.
Permit Number: 037-41205-00051 and 037-41274-00051

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. Please make this information readily available until you receive a copy of the final package.

If you have any questions concerning this public review process, please contact Joanne Smiddle-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library updated 4/2019
Notice of Public Comment

MasterBrand Cabinets, Inc.
037-41205-00051 and 037-41274-00051

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has posted on IDEM’s Public Notice website at https://www.in.gov/idem/5474.htm.

The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana’s Air Permitting Program.

Please Note: If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.
AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

October 4, 2019

A 30-day public comment period has been initiated for:

**Permit Number:** 037-41205-00051 and 037-41274-00051
**Applicant Name:** MasterBrand Cabinets, Inc.
**Location:** Ferdinand, Dubois County, Indiana

The public notice, draft permit and technical support documents can be accessed via the IDEM Air Permits Online site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management
Office of Air Quality, Permits Branch
100 North Senate Avenue
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Affected States Notification 1/9/2017
Mail Code 61-53

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<td></td>
<td>Scott Denhart Director MasterBrand Cabinets, Inc-# 4/22 614 W 3rd St Ferdinand IN 47532 (RO CAATS)</td>
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<td>Dubois County Commissioners One Courthouse Square Jasper IN 47546 (Local Official)</td>
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<tr>
<td>4</td>
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<td>Mr. Alec Kalla 8733 W. Summit Circle Drive French Lick IN 47432 (Affected Party)</td>
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<td>Dubois County Health Department 1187 S St. Charles Street Jasper IN 47546 (Health Department)</td>
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