

217/782-2113

CONSTRUCTION PERMIT -- REVISED
NESHAP SOURCE

PERMITTEE

MasterBrand Cabinets, Inc.
Attn: Andy Traub
217 South Oak Street
Arthur, Illinois 61911

Application No.: 97090044 I.D. No.: 139404AAH
Applicant's Designation: FINISHSHOP Date Received: January 25, 2010
Subject: Six Additional Spray Booths for Two Coating Lines
Date Issued: May 6, 2010
Location: 217 South Oak Street, Arthur

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of increasing permitted emissions from the six spray booths (two stain [1E and 1W] and one pre-seal booth for monorail #1 and two stain [2E and 2W] booths and one pre-seal booth for monorail #2) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. i. An "affected spray booth" for the purpose of this permit is one of the six new spray booths identified above.
- ii. An "affected coating line" for the purpose of this permit is a coating line that includes one or more of the spray booths identified above.
- b. The affected coating lines are subject to 40 CFR 63 Subpart JJ, "National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations".
- c. Each affected coating line is subject to 35 IAC 215.204(1), which provides that:
 - i. No owner or operator of an affected coating line applying coatings to wood furniture products or parts shall apply at any time any coating in which the VOM content exceeds the following emission limitations. These limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

<u>Wood Furniture Coating</u>	<u>kg/l</u>	<u>lb/gal</u>
Clear Topcoat	0.67	5.6
Opaque Stain	0.56	4.7
Pigmented Coat	0.60	5.0

<u>Wood Furniture Coating</u>	<u>kg/l</u>	<u>lb/gal</u>
Repair Coat	0.67	5.6
Sealer	0.67	5.6
Semi-Transparent Stain	0.79	6.6
Wash Coat	0.73	6.1

- ii. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.
- d. Each affected spray booth is subject to 35 IAC 212.321(a), which requires that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) [35 IAC 212.321(a)].
- 2. Work Practices
 - a. i. Pursuant to 40 CFR 63.803, the Permittee shall prepare and maintain a work practice implementation plan and comply with the applicable NESHAP work practice standards including:
 - A. Operator training course.
 - B. Inspection and maintenance plan.
 - C. Cleaning and washoff solvent accounting system.
 - D. Chemical composition of cleaning and washoff solvents.
 - E. Spray booth cleaning.
 - F. Storage requirements.
 - G. Application equipment requirements.
 - H. Line cleaning.
 - I. Gun cleaning.
 - J. Washoff operations.
 - ii. Pursuant to 40 CFR 63.803(l), the Permittee shall prepare and maintain a formulation assessment plan for finishing operations (i.e., applications of coatings).
 - b. The Permittee shall operate, maintain, and replace the filters in the affected spray booths in accordance with filter replacement operating procedures that reflect good air

pollution practice to minimize emissions of particulate matter.

- c. Sealer and stain shall be applied with high volume, low pressure, spray equipment, air assisted airless spray equipment or equipment with equivalent or more efficient transfer technology.
- d. Closed containers shall be used for the storage and disposal of cloth or paper used for VOM solvent cleanup.
- e. Fresh or spent VOM solvent shall be stored in closed containers.
- f. Equipment for collecting VOM solvent and VOM containing cleaning compounds and minimizing evaporation of VOM to the atmosphere shall be used for the cleanup of mixing, storage, and spray equipment.
- g. Containers of VOM coating and thinner shall not be left open to the atmosphere when not in use.

3. Emission Limitations

- a. i. Pursuant to 40 CFR 63.802(a)(1), using any of the compliance methods of 40 CFR 63.804(a), the Permittee shall comply with the following limitations for the furniture coating operations at the source, including the affected coating lines:
 - A. A weighted average emission limit of 1.0 lb VHAP/lb solids, as applied across all coatings for all finishing operations; or
 - B. Other applicable limits in 40 CFR 63, Subpart JJ, Table 3.
- ii. Pursuant to 40 CFR 63.802(a)(3), the VHAP content of strippable spray booth coatings shall not exceed 0.8 kg VOC/kg solids, as applied.
- b. Total combined emissions of VOM from the four affected stain booths (Booths 1E, 1W, 2E, and 2W) shall not exceed 4 tons/month and 39 tons/year. These limits shall address VOM emissions attributable to all stains, coatings and other VOM containing material applied or used in these booths. Compliance with the annual limit shall be determined from a running total of 12 months of data.
- c. This permit is issued based on negligible PM emissions from the four affected stain spray booths (Booths 1E, 1W, 2E and 2W). For this purpose, the PM emissions from each booth shall not exceed 0.1 pounds per hour and 0.44 tons per year.

4. Testing Requirements

Upon request by the Illinois EPA, the VOM content of specific coatings and cleaning solvents used on each affected coating line shall be determined according to USEPA Reference Method 24 of 40 CFR 60 Appendix A and the procedures of 35 IAC 215.105(a), 215.208 and 215.211(a).

- a. The VOM content of representative coatings "as applied" on the affected coating line shall be determined according to the procedures of 35 IAC 215.105(a).
- b. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee, and the Permittee's records to show compliance with 35 IAC 215.204(1) directly reflect the application of such material and separately account for any additions of solvent [35 IAC 215.105(a), 215.208, and 215.211(a)].

5. Inspection Requirements

The Permittee shall perform inspections consistent with the work practices implementation plan.

6. Recordkeeping Requirements

- a. Pursuant to 40 CFR 63.806, the Permittee shall comply with the following recordkeeping requirements:
 - i. Records demonstrating compliance with the NESHAP emission limits including:
 - A. Certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits of 40 CFR 63.802 [40 CFR 63.806(b)(1)].
 - B. VHAP content in kg VHAP/kg solids (lbs VHAP/lb solids), as applied, of each finishing material subject to 40 CFR 63.802 [40 CFR 63.806(b)(2)].
 - C. The VOC content, in kg VOC/kg solids (lbs VOC/lb solids), as applied, of each strippable booth coating subject to 40 CFR 63.802(a)(3) [40 CFR 63.806(b)(3)].
 - ii. Copies of calculation for each month following the NESHAP compliance date (i.e., December 7, 1998 or November 21, 1997), as well as the data on the quantity of coatings and thinners used that is necessary to support the demonstration of compliance with the NESHAP limit(s) [40 CFR 806.(c)].
 - iii. The work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to the following, which records shall be kept on-site [40 CFR 63.806(e)]:

- A. Records demonstrating that the operator training program required by 40 CFR 63.803(b) is in place.
 - B. Records collected in accordance with the inspection and maintenance plan required by 40 CFR 63.803(c).
 - C. Records associated with the cleaning solvent accounting system required by 40 CFR 63.803(d).
 - D. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by 40 CFR 63.803(h)(5).
 - E. Records associated with the formulation assessment plan required by 40 CFR 63.803(l).
 - F. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- iv. Records of compliance certifications for each semiannual period following the compliance date [40 CFR 63.806(h)].
 - v. Records of other information included with the compliance status report as required by 40 CFR 63.807(b) [40 CFR 63.806(i)].
- b. For the four affected stain booths, the Permittee shall maintain records of the following items, and such other items as may be appropriate to determine VOM emissions and demonstrate compliance with the limits in this permit.
 - i. Usage of each coating (gallons/month).
 - ii. Coating density (lbs/gallon).
 - iii. VOM content of each coating (weight %).
 - iv. VOM emissions (tons/month).
 - v. VOM emissions (tons/year).
 - vi. Usage and recovery of VOM solvent for cleanup and other operations (lbs/month).
- c. The Permittee shall maintain records of the following for all six affected spray booths:
 - i. Records of the testing of VOM and HAP content (in weight %) of each coating and cleaning solvent as tested pursuant to Condition 4, which include the following:

- A. Identification of material tested;
 - B. Results of analysis;
 - C. Documentation of analysis methodology; and
 - D. Person performing analysis.
- ii. Records of replacements of filters in the affected spray booths or the schedule for replacement of filters and records of purchase of paint booth filters.

7. Reporting Requirements

- a. The Permittee shall fulfill the reporting requirements of 40 CFR 63.807 in accordance to the applicability criteria of 40 CFR 63.800(d) and pertinent compliance approach of 40 CFR Subpart JJ.
- b. The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance or deviations of an affected coating line or booth with the permit requirements. Reports shall describe the deviations, the probable cause of such deviations, the corrective actions taken, and any preventive measures taken.
- c. For the affected stain booths the Permittee shall submit annual reports listing the following items:
 - i. Total monthly and annual emissions of VOM (tons).
 - ii. VOM content of all currently employed coatings, with classification of each (lbs/gallon).

8. Two copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

and one copy shall be sent to the Illinois EPA regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

9. For the affected pre-seal booths, the Permittee shall also comply with applicable requirements established for application of sealer on the monorail lines, including the emission limitations in

Construction Permit 91020002 and testing, monitoring, recordkeeping and reporting requirements in Clean Air Act Program Permit 95120059.

It should be noted that this permit has been revised at the request of the Permittee to increase the permitted VOM emissions of the affected stain booths, which would enable increased production of "high fashion" cabinetry that has multiple applications of stain. This permit is issued based upon the project addressed by this permit still not constituting a major modification pursuant to the federal rules for Prevention of Significant Deterioration (PSD) 40 CFR 52.21, because the VOM emissions of these booths are still not significant. (The pre-seal booths are not considered to contribute to any increase in VOM emissions, as they were installed to prepare parts for coatings, reducing the amount of material that has to be applied in the sealer booths.)

If you have any questions on this permit, please call Bob Smet at 217/782-2113.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:RPS:jws

cc: Region 3