

STATEMENT OF BASIS
JIM BISHOP CABINETS, INC.

Facility No. 209-0038

Montgomery, Alabama

On June 3, 2011, Jim Bishop Cabinets, Inc. submitted a Title V major source renewal permit application for the manufacture of wooden kitchen cabinets (SIC 2434). This facility's Title V Permit expires on December 3, 2011. Jim Bishop Cabinets, Inc. is located in Montgomery, Alabama, and is currently subject to NESHAP 40 CFR Part 63, Subpart JJ – for Wood Furniture Manufacturing Operations (see existing Title V Permit).

Operation

The wooden cabinet components from off-site and the woodworking operations are conveyed to a Surface Coating Operation (Line #1) consisting of one (1) stain spray booth, one (1) sealer spray booth, one (1) drying tunnel, one (1) glaze spray booth, one (1) topcoat booth, and a drying oven. After being coated, the components are assembled into a final product (cabinets). The assembled cabinets are stored and eventually transported off-site.

The incoming wood products such as plywood, particle board, hardboard, fiberboard, and melamine are conveyed to Woodworking Operations (Line #2) that consist of cutting, drilling, and sanding. Emissions from the operations are conveyed to one of two (2) reverse-air baghouses. The second baghouse is an addition from their initial Title V Permit. Jim Bishop Cabinets, Inc. manufactures wooden kitchen cabinets using cherry, oak, maple, poplar and laminated wood particleboard. Facility operations consist of raw material receiving, woodworking operations, finishing operations, assembly, and storage and shipping of finished goods.

Emissions / Requirement

The woodworking operations are sources of particulate emissions. The facility is equipped with dust collection systems and two reverse air baghouses to control the particulate emissions. The baghouses are designed to have efficiencies of >99% for PM, >97% for PM₁₀, and >95% for PM_{2.5}. Potential controlled particulate emissions to the atmosphere are less than ten (10) tons per year. The wood waste is collected in a dumpster and disposed of off-site at a landfill. Jim Bishop is considered a Class 1 County Source and its allowable PM emissions are 10.2 tpy, using $E = 3.59P^{0.62}$. Particulate Matter emissions are regulated under ADEM Rules 335-3-4.04(1), 335-3-4-.01(1) and 335-3-4-.02.

Volatile organic compounds (VOCs) from the solvents in the paints, stains, glazes, paint thinners, adhesives, and cleanup solvents, etc., are regulated criteria air contaminants emitted to the atmosphere by the surface coating of the wood cabinet components. These operations are also a source of hazardous air pollutants (HAPs), as listed in Appendix G of the ADEM Air Regulations.

Potential emission of VOCs exceeds the major source threshold of 100 tons per year. Therefore, Jim Bishop Cabinets, Inc. is considered a major source for Title V. Jim Bishop Cabinets, Inc. has requested to retain their current facility wide VOC emissions limit of 235 tons per rolling 12-month period in order to avoid PSD requirements. No other criteria pollutants are emitted in sufficient quantities, actually or potentially, to exceed the major source threshold of 100 tons per year.

The potential HAP emissions from the cabinet coating line are also emitted in such quantities as to exceed the Title III and Title V major source thresholds. The HAP emissions thresholds for a major source are 10 tons for a single HAP and 25 tons for any combination of HAPs. The facility wide potential HAP emissions are 57 tons per year, and Toluene, Methanol, Xylene, and Ethylbenzene all exceed the 10 tons per year single HAP threshold.

The cabinet coating line and the adhesives used in assembly are subject to 40 CFR 63 Subpart JJ – National Emission Standards for Wood Furniture Manufacturing Operations. This regulation requires Jim Bishop Cabinets, Inc. to limit emissions of certain HAPs in their coatings and adhesives, and to implement certain work practices and training for operators.

The following is a list of all of the facility's sources (individual emissions units) which will be part of the facility's Title V Major Source Operating Permit:

Permit Unit No.	Description of Unit
001	Wood Cabinet Coating Line and Assembly
002	Woodworking Operations with Baghouses

Monitoring of Emissions

Jim Bishop Cabinets, Inc. is subject to 40 CFR 63 Subpart JJ MACT standards as an existing source. This facility shall not emit greater than 1.0 pound of VHAP per gallon of solids as delivered to the applicator for all coatings and adhesives, among other requirements. This facility is currently complying with the MACT Standard for the Wooden Furniture Industry. Jim Bishop Cabinets will maintain records of monthly coating and adhesive usage and analysis to show compliance with their Wood Furniture MACT requirements. These records will be submitted quarterly to the Department.

The woodworking operations at the facility are subject to opacity and particulate standards. The dust collection system will be monitored daily by observing opacity to indicate compliance with the particulate standards. If emissions that are greater than normal are noted, corrective action to minimize emissions will be taken within 24 hours, followed by an additional observation to confirm that emissions are reduced to normal. Records of daily observations and any corrective actions will be retained for at least five years.

The pre-control potential woodworking/baghouse PM emissions are calculated at 43.8 tons per year. There are no applicable CAM requirements for this facility's operations. Their current existing monitoring is sufficient to demonstrate compliance and no changes are necessary.

Jim Bishop Cabinets, Inc. has a 2.8 MMBtu/hr natural gas-fired drying oven at the end of its cabinet coating line and another small natural gas-fired oven used to clean paint from the hooks used on the conveyor line. No periodic monitoring for any emissions will be required on these ovens due to the inherently clean nature of the fuel and the small sizes of the ovens. The potential GHG emissions for the facility were calculated to be less than 100,000 tons per year CO₂e. Therefore, GHG emissions are not subject to PSD requirements.

Permitting Fees

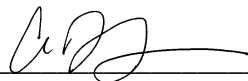
Title V major sources are subject to operating permit fees which charge the facility a yearly amount based on the actual emission rate of pollutants for the previous year.

Affected States Notification

Notification of the proposal of this major source operating permit will be sent to all affected states bordering Alabama.

Recommendations:

Based on the above analysis, I recommend Jim Bishop Cabinets' existing MSOP be renewed pending the public notice period and EPA review. Jim Bishop Cabinets', Major Source Operating Permit will consist of two (2) units. Jim Bishop Cabinets, Inc. will be required to keep and submit quarterly emissions reports to this Department and continue to comply with 40 CFR 63 Subpart JJ MACT standard requirements. I recommend that the attached permit be issued to Jim Bishop Cabinets, Inc.



Adam D. George
Chemical Branch

September 22, 2011

Date