TECHNICAL REVIEW DOCUMENT OPERATING PERMIT 070PAD296

to be issued to:

Elkay Wood Products Company Adams County Source ID 0011602

Geoffrey D. Drissel Review Engineer August 2011

I. Purpose:

This document will establish the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the operating permit proposed for this site. This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the application submitted September 12, 2007, previous inspection reports and various e-mail correspondence, as well as telephone conversations with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at http://www.cdphe.state.co.us/ap/Titlev.html.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

II. Source Description:

This source is primarily classified as a Wood Kitchen Cabinet manufacturing facility under Standard Industrial Classification 2434. This facility manufactures wood cabinets employing a hanging line finishing system. The facility utilizes various wood working equipment to manufacture the cabinets and finishing operations take place with manual spray guns in nine coating booths, which incorporate a UV drying process. Woodworking emissions are vented through a baghouse.

The facility is located in Aurora in an area designated as non-attainment for ozone. It is within 100 kilometers of Rocky Mountain National Park a Federal Class I designated area but there are no affected states within a 50 mile radius of the facility. Facility emissions from regulated equipment are as follows:

Pollutant	Potential to Emit (tpy)	Actual (tpy)
VOC	249.0	86.7
HAPs	241.8	3.6
PM/PM ₁₀	1.3	0.15

Potential VOC and PM/PM₁₀ emissions are based on the maximum allowable emissions defined by Colorado Construction Permit 06AD0012. Potential HAP emissions are based on maximum emission rates provided in the Operating Permit application. Actual VOC and PM/PM₁₀ emissions are based on data provided during a facility inspection conducted in February of 2008. Actual HAP emissions are based on the levels reported for the 2006 data year on the Air Pollution Emission Notice submitted with the Operating Permit application.

This facility utilizes an emission control unit (baghouse) to achieve compliance with the PM/PM_{10} limits listed in the Operating Permit. However, multiple emission units contribute to the PM/PM10 emissions and it is the Division's opinion that no single emission unit contributes uncontrolled emissions equal to or greater than 100 tons per year. Consequently, CAM does not apply to any of the emission units at this facility.

This facility is not subject to the requirements of Section 112(r) of the Clean Air Act Amendments of 1990 based upon the information supplied in the Title V application. This facility is subject to the Maximum Achievable Control Technology (MACT) standard for Wood Furniture Manufacturing Operations (40 CFR 63, Subpart JJ and Colorado Regulation No. 8, Part A, Subpart JJ).

III. Emission Sources:

The following sources are specifically regulated under terms and conditions of the Operating Permit for this Site:

P001 – Hanging Line Finishing System:

Process Line: Nine Chemco Manufacturing Spray Booths w/ MaxGuard Panel Filters

P009 - Wood Working Operations:

Wood Sawing, Sanding and Dust Handling Operations. Emissions Controlled by Donaldson Torit RF Baghouse

Discussion:

1. Applicable Requirements- Final Approval Construction Permit 06AD0012 was issued on August 20, 2008, defining the applicable requirements for the coating operations at this facility. These requirements include annual

Volatile Organic Compound (VOC) and PM₁₀ emission limitations; an annual material throughput limitation: and the use of High Volume Low Pressure spray guns for coating application. In addition, the source is subject to the MACT standard for Wood Furniture Manufacturing Operations was promulgated. Provisions of this rule are defined in 40 CFR Part 63, Subpart JJ and Colorado Regulation No. 8, Part A, Subpart JJ. This regulation establishes limitations on Volatile HAP content of coatings as applied, recordkeeping requirements, and work practice standards designed to limit HAP emissions.

2. Emission Factors- MSD Sheets for each coating used at this facility list the VOC content and HAP breakdown per pollutant. This data is multiplied by the material usage to determine the emissions associated with each coating.

Particulate emissions are calculated by multiplying the Construction Permit emission factor by the material usage.

3. Monitoring Plan- Monitoring for the Finishing System at this facility focuses on the recordkeeping necessary to determine compliance with emission limitations and specific requirements of the Wood Manufacturing MACT. Material usage and associated emissions will be documented on a monthly basis and a rolling 12 month emission total will be maintained.

The facility must show compliance with the MACT standard emission limitations in one of three ways: 1) Use compliant coatings in all regulated processes, 2) Use a weighted average of Volatile HAP content for all materials used in finishing operations, or 3) Use a combination of control equipment and compliant coatings/weighted average to achieve the emission limits.

The MACT standard requires that a Work Practice Implementation Plan be developed focusing on 11 action elements which encompass employee training, site housekeeping, and equipment cleaning and disposal procedures.

4. Compliance Status- This facility is currently considered to be in compliance with all applicable requirements.

IV. Insignificant Activities

The facility has identified four Rupp air make-up units and individual fuel burning equipment, which uses gaseous fuel and has a design rate equal to or less than 10 million Btu per hour, and which is used solely for heating buildings, as insignificant activities at this site:

V. Alternative Operating Scenarios

No separate operating scenarios were requested.

VI. Permit Shield

The permit shield was not requested for any equipment or processes.