

Lane Regional Air Pollution Authority  
Air Contaminant Discharge Permit

**REVIEW REPORT**

Davis Cabinets, Inc.

Permit No. 202136

1. General Background Information

Davis Cabinets operates a cabinet making operation in Junction City, Oregon. The operation consists of two (2) spray booths, and three (3) baghouses which control PM/PM<sub>10</sub> from various woodworking equipment. In 1999 the facility produced approximately 130 sets of residential cabinets, and 1540 sets of cabinet doors. The source operates approximately 4,160 hours per year (16 hours per day, 5 days per week, and 52 weeks per year).

2. Reasons for Permit Issuance

This source is listed in LRAPA Regulations Title 34, Table A, Part II and, therefore, is required to have an Air Contaminant Discharge Permit (ACDP). This is a new facility applying for its first ACDP.

3. Performance Testing

No performance testing has been completed by this source. At this time performance testing is not necessary.

4. Enforcement Actions

There source received a Notice of Non-Compliance (NON #1879) on 4/11/00 for handling dry wood fines and causing particulate matter to become airborne. Conveying equipment at the facility was also leaking and causing particulate matter to become airborne. The facility is required to submit and abide by a LRAPA approved dust control plan.

5. Plant Site Emission Limits (PSELS)

In accordance with LRAPA 34-060(5)(A), the PSELS in the permit will be based on projected operating conditions, as reflected in the permit application.

**Baseline Emissions**

The source did not exist during the baseline period (1978). Baseline emissions are set at zero (0) tons per year for PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and VOC.

**Synthetic Minor Limits**

The Synthetic Minor permit limits the source's potential to emit to 9.5 tons per rolling 12-month period of any single Hazardous Air Pollutant

(HAP) and 24.5 tons per rolling 12-month period of any combination of

HAPs. These limits are below the Title V thresholds of 10 tons per year for a single HAP or 25 tons per year for any combination of HAPs. At such time that the HAP emissions exceed these thresholds, the source will become subject to the provisions of 40 CFR Part 70, Title V Operating Permits. (See the attachment to this report for determination basis calculations and usage summations).

- a. The emission factor used for the HAPs assumes that 100% of the HAP component is volatile (as calculated by % by weight HAP which is the basis for the emission rate as measured in pounds of HAP per gallon of coating). By assuming 100% of HAPs are volatile and that 100% of HAPs used are emitted, the limits set effectively restricts the HAP potential to emit to less than major source thresholds.
- b. Substitutions of coatings may be employed provided that both consumption and composition records are maintained in accordance with the permit reporting requirements.
- c. To confirm the composition for each coating, diluent, and cleanup solvent, information shall be taken from the Material Safety Data Sheets (MSDS) for each material.
- d. Special conditions in the permit require the source to apply for a Title V permit, exclusive of excess emission incidents, prior to an emissions increase above the Title V permit trigger levels for criteria or hazardous air pollutants.

#### **Plant Site Emission Limits (PSELS)**

Projected VOC emissions were calculated based on mass balances using MSD sheets as reference. Projected PM/PM<sub>10</sub> emissions were calculated based on amounts of wood dust collected in dumpsters and manufacturer rated efficiencies for the baghouses. Should the source wish to increase production, the source will have to apply for a permit modification, including a new assessment of fees.

PSELS for the source restrict potential emissions from the facility to 4,900 pounds/month and 24.5 tons/year of VOCs (see the attachment to this report for emission calculations). The projected VOC emissions from the facility were less than the PSELS, but to allow for operational flexibility the VOC PSELS were increased to correspond with the HAP limits. The monthly PSEL for VOCs was set by dividing the annual limit by 12 and then multiplying by 1.2 to account for wide month-to-month fluctuations in material usage.

PM/PM<sub>10</sub> PSELS were based on actual 1999 throughput totals and multiplied by 1.2 to allow for growth over the permit term. The monthly PSEL for PM/PM<sub>10</sub> was set by dividing the annual limit by 12 and then multiplying by 1.2 to account for wide month to month fluctuations in material usage.

The PSELs have been set equal to the source's projected emissions, the following PSELs are proposed.

**Annual  
 (tons)**

<u>Source</u>	<u>PM</u>	<u>PM<sub>10</sub></u>	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>SO<sub>2</sub></u>	<u>VOC</u>
2 Spray Booths	--	--	--	--	--	24.5
3 Baghouses	13.1	13.1	--	--	--	--
<b>Totals</b>	<b>13.1</b>	<b>13.1</b>	--	--	--	<b>24.5</b>

**Monthly  
 (pounds)**

<u>Source</u>	<u>PM</u>	<u>PM<sub>10</sub></u>	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>SO<sub>2</sub></u>	<u>VOC</u>
2 Spray Booths	--	-	-	-	-	4,900
3 Baghouses	2,620	2,620	--	--	--	--
<b>Totals</b>	<b>2,620</b>	<b>2,620</b>	--	--	--	<b>4,900</b>

The facility is required to calculate 12-month rolling VOC and HAP emissions to ensure compliance with the permit PSELs and conditions. The facility is also required to keep track of the amount of wood waste that is collected by the baghouses.

6. PM Emission Limitation and Visible Emission

LRAPA's process weight rule limits emissions of PM for specific processes as a function of the amount of material processed. [LRAPA 32-045(A)] If the facility is in compliance with the grain loading limit it is expected that the facility will be in compliance with the process weight rule.

The permit contains limits on grain loading and visible emissions.

7. Pollution Controls and Typically Achievable Control Technology (TACT)

LRAPA Title 32-008 requires a new emission unit at a facility to meet TACT if: the emissions unit would have emissions from the emission unit of any criteria pollutants equal to or greater than one (1) ton per year, or of PM<sub>10</sub> equal or greater than 500 pounds per year in a PM<sub>10</sub> nonattainment area, and the emissions unit is not subject to New Source

Review requirements in Title 38, an applicable Standard of Performance for New Stationary Sources in Title 46, or any other standard applicable only to new or modified sources in Title 32, Title 33, or Title 39 at the time TACT is required. The facility did have emissions for the emission unit of greater than one (1) ton per year of VOC and is therefore required to meet TACT. To satisfy the TACT requirements, the facility is required to search for materials which contain less VOCs and HAPs than those currently used.

8. New Source Review (NSR)

Because the proposed PSEs for all regulated pollutants are below the Significant Emission Rates (SERs) in LRAPA Title 38, the source is not subject to LRAPA's New Source Review (NSR) requirements for PM<sub>10</sub> nor the Prevention of Significant Deterioration (PSD) requirements for SO<sub>x</sub>, NO<sub>x</sub>, CO, and VOC.

9. New Source Performance Standards (NSPS)

There are no sources at the facility that are subject to any NSPS.

Monitoring, Recordkeeping, and Reporting Requirements

10. The source is required to record all inspections and maintenance of air pollution control equipment. The permittee is also required to keep records of the amount and types of VOC and HAP containing materials used, the VOC and HAP compositions of each material, and calculations of VOC and HAP emissions. Semi-annual reports are required to document compliance with the HAP and VOC limits contained in the permit.

The source is required to submit an annual summary for the information required by General Condition 13.

Fugitive Dust Control Plan

11. The facility is required to follow a LRAPA-approved dust control plan which specifies methods and practices to reduce particulate matter from becoming airborne. LRAPA has approved the plan the facility submitted May 10, 2000. The plan may change depending on the effectiveness of the plan as determined throughout the life of the permit.

Public Notice

12. This permit establishes PSEs for the source, and 1978 baseline year emissions of zero (0) tons per year for PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and VOC. Because the proposed increases in VOC emissions above the baseline emission rates are less than the SERs for VOC, in LRAPA Rule 38, and because the source is expected to emit minimal amounts of PM and PM<sub>10</sub>, the source is not subject to the NSR and PSD requirements.

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13. The draft permit was on public notice from July 22, 2001, through August 22, 2001. No written comments were received during the 30-day comment period.

MH  
8/28/01