Permit Evaluation Report DRAFT

Aguilera's Cabinets, Inc.dba Golden Cabinetry
1891- Woolner Avenue
Fairfield, CA 94533

Application NO. 12298
Plant NO. 16939

Background:
Aguilera's Cabinets, Inc. has submitted this application for a Permit to operate the following equipment/operations:

S-1 Spray Booth, Eagle Model ECF-24 equipped with filter.

S-2 Spray Booth, Golden West Model 24 SB equipped with filter.

Aguilera's Cabinets, Inc. manufactures custom wood cabinets for kitchen, bathroom etc. One of the spray booths (S-1) has been in operation since 12/21/2000, and the other one (S-2), will be put in operation after receiving a Permit to Operate from the District.

Emissions:
The emission summaries for the above sources are:

Table 1, Usage and Emissions (combined usage for S-1 and S-2)

Coating Description	Usage (gal/y)	POC Content (lb/gal)	POC Emission lb/yr	NPOC Content Percent	NPOC Emission lb/yr
Clear Sealer	1,242	1.86	2,310	51	4548
Transparent Lacquer	1,155	2.7	3,118.5	36	3177
Other coatings (Dye Stain, Wipe Stain, Glaze, Porcelain	210	(4.4) Average	924	--	--
Cleanup Solvent (Lacquer thinner)	120	5.36	643.2	20	172
Total (rounded up)	--	--	7,000	--	8,000

- Plant Cumulative Increase:

  POC = 0.00 tpy (existing) + 3.5 tpy (new) = 3.5 tpy

  NPOC = 0.00 tpy (existing) + 4 tpy (new) = 4 tpy

- Toxics: According to coating MSDS, the amount of toxic air contaminants from coatings operations at this facility does not exceed the BAAQMD triggering limits of the toxic health risk screening values listed below:

Compound	Trigger level lb/year	Actual emissions lb/year
2-Ethoxy ethanol (cellosolve; ethylene glycol monoethyl ether)	3.90E+04	231
Toluene	3.90E+04	300
Naphthalene	2.70E+02	49
Xylenes	5.80E+04	249

Statement of compliance:

The spray booths, S-1 and S-2 are subject to and in compliance with following District Regulation 8, Rule 32, and Sections 301, 302 and 303:

8-32-301 Spray Application Equipment Limitations: *Any person who utilizes spray application equipment to apply coatings to wood products, furniture and cabinets shall use one or more of the following application methods:*
Airless spray, Air assisted airless spray, High Volume Low Pressure (HVLP) spray or Electrostatic air spray.
Detailing or Touch-up Guns (Amended April 17, 1991)

8-32-303 Furniture, Custom Cabinetry and Custom Architectural Millwork Limits:
A person shall not apply to any furniture, custom cabinet or custom architectural millwork, any coating with a VOC content in excess of the following limits; expressed as grams VOC per liter (pounds VOC per gallon) of coating as applied, unless emissions to the atmosphere are controlled to an equivalent level by air pollution abatement equipment with an abatement device efficiency of at least 85 percent that meets the requirements of Regulation 2, Rule 1.

303.1 High Solids Coatings:
Effective Sept 1, 1996:
Clear Topcoat 550 (4.6), Sanding Sealer 550 (4.6), Pigmented Coating 550 (4.6), High Solids Stain 700 (5.8), Filler 500 (4.2)

303.2 Low Solids Coatings:
Effective Sept 1, 1996:
Low Solids Stain 480 (4.0), Wash-coat 480 (4.0).
(Adopted April 17,1991; Amended October 6, 1993, July 6, 1994, June 19, 1996)

Compliance table:

Coatings	Reg. 8-32 limits (lb/gal)	Actual VOC in coatings according to MSDS (lb/gal)
Clear sealer	4.6	1.86
Transparent lacquer	4.6	2.7
Varnish, pigmented conversion	5.0	4.2
Dye stain	5.0	0.28-0.7
Wiping stain	5.0	4.4-5.0
Glaze coat	4.6	4.6

This project is considered to be ministerial under the District's CEQA regulation 2-1-311 and therefore is not subject to CEQA review (PHBK Chapter 5.11). The engineering review for this project requires only the application of standard permit conditions and standard emissions factors and therefore is not discretionary as defined by CEQA.

BACT:

This operation has the potential emit more than 10 pounds of POC and NPOC per day, therefore triggering BACT requirements.

Cost analyses: BACT for the control of the VOC from the spraying operations can be installation of a thermal incinerator or a Carbon Adsorption system. Using the EPA cost analysis spreadsheet at 90% VOC control. The cost effectiveness for the incinerator is $147,000/ton POC and $130,000/ton NPOC . The cost effectiveness for carbon adsorption system is $86,000 per ton/ ton POC and $76,000 per ton/ ton NPOC. The above costs for control devices are more than the District cost effectiveness guideline of $17,500 per ton of POC and NPOC removed. Therefore, the installation of the thermal incinerator or the carbon adsorption unit for this application is not cost effective.

Offsets:

POC Offsets are not applicable since the facility wide emissions are less than 10 tons per year.

Public Notification:

The Shelton elementary school[1] is within 1000 feet of this company; therefore public notification contained in Regulation 2-1-412 is required.

The District will distribute a public notice, as requested by Reg.2-1-412.

[1] See enclosed school program print out results.

Conditions for S-1 and S-2 (Paint Spray Booths):

1. Except as allowed in Condition No. 2, the owner/operator of S-1 and S-2 shall not exceed the following coating usage (two booths combined) limits, in any consecutive twelve-month period:

a. Clear Sealer	1,242	gallons
b. Transparent Lacquer	1,155	gallons
c. Other coatings (Dye stain, Wiping stain, Glaze coat)	210	gallons
d. Cleanup Solvent (Lacquer thinner)	120	gallons

   (basis: Cumulative Increase)

2. Coatings and cleanup solvents other than the materials specified in Condition 1, and/or usages in excess of those specified in Condition 1, may be used at S-1 and S-2, provided that the owner/operator can demonstrate that all of the following are satisfied:
   a. Total emissions of POC from S-1 and S-2 do not exceed 7,000 pounds in any consecutive twelve-month period.
   b. Total emissions of NPOC from S-1 and S-2 do not exceed 8,000 pounds in any consecutive twelve-month period.
   c. The use of these materials does not increase toxic emissions above any risk screening trigger level.
   (basis: Cumulative Increase; Toxic Risk Screen)

3. In order to demonstrate compliance with the above conditions, the following records shall be maintained by the owner/operator in a District approved log. These records shall be kept on site and made available for District inspection for a period of 24 months from the date on which a record is made:
   a. Type and monthly usage of all POC and/or NPOC containing materials used.
   (basis: Cumulative Increase; Toxic Risk Screen)
   b. If a material other than those specified in Condition 1 is used, POC, NPOC and toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Condition 2, on a monthly basis;
   (basis: Cumulative Increase; Toxic Risk Screen)
   c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelve-month period.
   (basis: Cumulative Increase; Toxic Risk Screen)
   d. The owner/operator of sources 1 and 2 shall use one or more of the following coating application methods:
   Airless spray, Air assisted airless spray, High Volume Low Pressure (HVLP) spray or Electrostatic air spray.
   (basis: Reg. 8-32-301)

* End of permit conditions *

Exemption:

None

Recommendation:
Issue a Permit to Operate for the following source:

S-1 Spray Booth, Eagle Model ECF-24 equipped with filter.
S-2 Spray Booth, Golden West Model 24 SB equipped with filter.

By:
Mohamad Moazed
July 13, 2005