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Permit Evaluation Report

Application Number: 25648
Plant number: 22063
Bayfront Custom Cabinets and Closets
15011 Wicks Blvd,
San Leandro, CA 94577

Background

Bayfront Custom Cabinets and Closets has applied for an Authority to construct/ Permit to operate a Wood Coating Operation for refinishing custom made wood cabinets and closets. Accounting for growth, the operation is evaluated using 500 gallons of coating, 100 gallons of lacquer thinner and 100 gallons of acetone per year. The products are air-dried.

This site is within 1000 feet of one K-12 school (Madison Elementary School) which will necessitate a public Notice.

The source description is:

S-1 Wood Coating Operation

Emission Calculations

Basis:

According to the District's Permit Handbook, Chapter 5.1, in the usage of Spray Booths and Spray Guns, 100% of Volatile Organic Compound (VOC) content is assumed to be evaporated into the atmosphere for coating and cleanup solvents. The proposed operating schedule will be 4 hours per week, 5 days per week and 52 weeks per year. The emission calculations are displayed in the table below.

Material	VOC Content (lb/gal)	Proposed Throughput (gallons/year)	Emission (lbs/year)	Emissions (tons/year)
Coatings (varnish & sealer)	2.3	500	1150	.575
Lacquer thinner	6.58	100	658	.329
Acetone (NPOC)	6.59	100	659	.330

Total POC (lbs/yr) 1,808
Total POC (tons/yr) 0.904
Total POC (tons/yr) 0.330
Maximum daily POC (lbs/day) 6.9
Maximum Daily NPOC (lbs/day) 2.5

POC = Precursor organic compound

NPOC = Non-precursor organic compound

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Cumulative Emissions (tons/yr)

Pollutant	Existing	New(from this operation) Tons/yr	Total(New + Existing) Tons/yr
POC	0.00	.904	.904
NPOC	0.00	.330	.330

Toxics Risk Screening Analysis

The Toxic Air Contaminant (TAC) emissions are determined based on the requested maximum throughput levels and the highest weight percent of the TAC components in the provided Material Safety Data Sheets (MSDS) and Manufacturers Specifications.

TAC	Annual Emission(lb/yr)	Chronic Trigger Level (lb/yr)	Trigger level exceeded?	Hourly Emission (lb/hr)	Acute Trigger 1 hr max (lb/hr)	Trigger level exceeded?
Glycol Ethers	107.8	N/A	N/A	0.104	31.0	No
Ethyl Benzene	10.3	43	No	0.010	N/A	N/A
Formaldehyde	4.3	18	No	0.004	.12	No
Silica (crystalline, respirable)	43.3	120	No	0.042	N/A	N/A
Toluene	98.8	12,000	No	0.095	82.0	No
Xylene	32.9	27,000	No	0.032	49.0	No
Methanol	26.4	150,000	No	0.025	62.0	No
Isopropyl Alcohol	39.5	270,000	No	0.038	7.1	No

*Hourly rates are based on 4 hours per day operation.

The estimated emissions shown in the table above associated with the operation of S-1, are below the Risk screening trigger levels specified in Regulation 2-5-1. Hence a Health Risk Screening Analysis is not required for this operation.

Public Notification

Madison Elementary School is located within 1000 feet from this facility and therefore subject to public notification requirements of Regulation 2-1-412 due to the increase in the emissions from this project. A public notice will be sent to all parents of students of the above-mentioned schools and all residents within 1000 feet of the facility. There will be a 30-day public comment period.

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Statement of Compliance

The owner and operator is expected to meet the requirements of Regulation 8-32-301 and 8-32-303 for Furniture, Custom Cabinetry and Custom Architectural Millwork Limits. The owner/operator proposes to use High volume Low Pressure (HVLP) spray gun. Proposed materials do not exceed VOC content limits. The owner/operator is expected to comply with requirements for solvent evaporative loss minimization (8-32-320), records (8-32-501), and Permit Condition #25666.

The application is considered to be ministerial under the District's CEQA Regulation 2-1-311 and therefore, is not subject to CEQA review. The engineering review for this project requires, only the fixed standards and objective measurements stated in Permit Handbook Chapter 5.1 and therefore is not discretionary as defined by CEQA.

Best Available Control Technology

In accordance with the District Regulation 2-2-301, BACT is triggered for any new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NOx, CO, SO2 or PM10. The emission calculations above shows the proposed permitted levels are below the BACT triggers.

Permit Conditions

S-1 will be subject to the following permit condition
Permit Condition Number 25666

In addition to requirements of Regulation 8, Rule 32, the owner/operator shall follow the proceeding Permit Conditions for Source 1 (Wood Coating Operations).

1. The owner/operator of S-1 shall not exceed the following usage limits during any consecutive twelve-month period:

Coating and sealer	500 Gallons
Lacquer thinner	100 Gallons
Acetone (NPOC)	100 Gallons

(Basis: Cumulative Increase)

2. The owner/operator may use an alternate coating(s) or cleanup solvent(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
 - a. Total POC emissions from S-1 do not exceed 1800 pounds in any consecutive twelve month period;
 - b. Total NPOC emissions from S-1 do not exceed 660 pounds in any consecutive twelve month period; and
 - c. The use of these materials does not increase toxic emissions above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

(Basis: Cumulative Increase; Toxics)

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3. To demonstrate compliance with Part 1 above, the owner/operator shall maintain records in accordance with Regulation 8, Rule 32, Section 501 and total daily material usage on a monthly basis in the categories specified in Part 1 above. Monthly records shall be totaled for every rolling 12-month period in the categories specified in Part 1 above. [Basis: Recordkeeping]

RECOMMENDATION

The District has reviewed the material contained in the permit application for the proposed project and has made a preliminary determination that the project is expected to comply with all applicable requirements of District, state, and federal air quality-related regulations. The preliminary recommendation is to issue an Authority to Construct for the equipment listed below. However, the proposed source will be located within 1000 feet of a school, which triggers the public notification requirements of District Regulation 2-1-412.6. After the comments are received and reviewed, the District will make a final determination on the permit.

I recommend that the District initiate a public notice and consider any comments received prior to taking any final action on issuance of an Authority to Construct for the following source:

S-1: Custom Cabinets Finishing (1 spray booth)

By: _____

Date: