

DRAFT VERSION

ENGINEERING EVALUATION REPORT

C P Auto Body Repair; Plant Number: 16488

Application Number: 10909

I. BACKGROUND

C P Auto Body Repair is applying for a permit to operate an automotive paint booth and associated refinishing operation for Group I vehicles. The facility is located at 915 Cayuga Ave., San Francisco. This facility is located within a radius of 1000 feet of the outer boundary of The Discovery Center School, Balboa High School and Independence High School. This application is therefore subject to the Public Notification requirements of Reg. 2-1-412. The Public Notice information was also provided to the parents or guardians of the enrolled students at James Denman Middle School since Reg. 2-1-412 requirements include notification to any school that is within ¼ mile of the source. In addition to the parents or guardians of the students enrolled at the above noted schools the Public Notice was also mailed to all addresses within 1000 feet of the source.

The Public Notice letter as well as this Evaluation Report (Draft version) was posted on the District's web site for public review. A District telephone line was set-up to receive comments generated by the distribution of the Public Notice letter.

A copy of the Public Notice letter and summary of the Public comments received during the public comment period is attached.

This application limits the operation to 500 gallons per year for all coatings and 200 gallons per year of clean-up solvent/thinner.

Group I Type Vehicles are reconstructed, refinished, and painted at this facility.

This is an application for a Paint Spray Booth/Area at a paint spraying operation using a HVLP spray gun(s).

II. EMISSION CALCULATIONS

Assuming 100% evaporation of the solvents in the coatings and using material limits allowing for future growth of the operation the following emissions are estimated:

A. Coating and Solvent Emissions

S-1 (Permitted Usage)

(500 gallon/yr Coatings) (4.5 lbs/gallon) = 2250 lbs/yr POC

(200 gallon/yr Solvent) (7.0 lbs/gallon) = 1400 lbs/yr POC

Total POC Emissions = 3650 lbs/yr POC

= 14.04 lbs/day POC (260 day yr)

= 10.0 lbs/day POC (365 day yr)

Cumulative Increase = 1.82 TPY

The only NPOC used appears to be acetone. Although NPOC emissions are not calculated, I recommend an allowance for NOPCs equivalent to the POC emission rate since EPA has delisted VOCs (i.e. turned POCs into NPOCs) and the additional permitted usage of NPOCs trigger no additional requirements for the applicant.

B. Toxics

For motor vehicle coating operations, the Toxics Evaluation Section has established that the two highest weight percentage organic compounds are used to determine whether a risk screen is triggered by the application.

Organic Compounds (trigger levels for each compound appear in brackets)

This source will comply with the District's Toxic Risk Management Policy by emitting toxic compounds in quantities less than the risk screen trigger levels for the organic compounds contained in all coatings.

A review of the generic coating information from the "Auto Bodyshop Industrywide Risk Assessment Guidelines" prepared by the Toxics Committee of the California Air Pollution Control Officers Association (CAPCOA) for the two most common Toxic Air Contaminants used at this facility and their emission rates are:

Coating lbs/gal = 10.5

Isopropyl Alcohol– 32 wt % = 3.36 lbs/gal (500 gal/yr coating) = 1680 lbs/yr
[*<4.4E+05 lb/yr]

Xylene – 7 wt % = 0.74 lbs/gal (500 gal/yr coating) = 367.5 lbs/yr
[*<5.8E+04 lbs/yr]

**TAC Trigger Level*

III. EXEMPT OPERATIONS

NONE

IV. STATEMENT OF COMPLIANCE

The operation of the spray booth (S-1) is subject to and is in compliance with Regulation 8 – Organic Compounds, Rule 45 – Motor Vehicle and Mobile Equipment Coating Operations. All proposed coatings for use in the spray booth are complying coatings (basis: 8-45-301) and meet the requirements of 8-45-303 (Transfer Efficiency) with the use of HVLP spray gun(s).

This operation has the potential to emit more than 10 pounds of POC per day, therefore assume BACT is triggered. BACT is compliance with Regulation 8-45. Abatement is presumed to not be cost effective since there are no abated auto body booths in the BAAQMD and the only abated auto body booths are in the South Coast Air District that are allowed to emit 22 pounds per day of POC.

Offsets are not triggered for this source (S-1) because estimated emissions are less than 10 pounds per day and 15 tons per year, respectively.

Regulation 11 – Hazardous Pollutants is not triggered. This project is considered to be ministerial under Regulation 2-1-311 because it is evaluated in accordance with Chapter 5.8 of the Permit Handbook (Motor Vehicle and Mobile Equipment Coating Operations) and, therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors and therefore is ministerial as defined by CEQA.

Generic coating information used to estimate toxic emissions were taken from the "Auto Bodyshop Industrywide Risk Assessment Guidelines" prepared by the CAPCOA. The generic coating formulations for DuPont Automotive Finishes indicate the existence of Isopropyl Alcohol and Xylene. However, because the Isopropyl Alcohol and Xylene are emitted below their respective trigger levels, an Air Toxics Screening is not required.

The project is within 1000 feet of a school and is therefore subject to the public notification requirements of Regulation 2-1-412, as note in the Background section of this evaluation report.

V. CONDITIONS:

Operation of S-1 Spray Booth is subject to the following permit conditions:

- 1. Net usage of coating at S-1 shall not exceed the following limits, in any consecutive twelve-month period:**
 - a. Pretreatment Wash Primer, Precoat, Primer, Topcoat Coatings 500 gallons**
 - b. Cleanup Solvent 200 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, provided that the owner/operator can demonstrate that both of the following are satisfied:**
 - a. Total emissions of POC from S-1, do not exceed 3650 pounds in any consecutive twelve month period; and**
 - b. Total emissions of NPOC and/or POC from S-1 do not exceed 3650 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.
(basis: Cumulative Increase; Toxic Risk Screen)**

- 3. In order to demonstrate compliance with the above conditions, the following records shall be maintained 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;**
 - 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;**
 - c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelve-month period.
(basis: Cumulative Increase; Toxic Risk Screen)**

VI. PERMIT TO OPERATE:

Recommend a Permit to Operate be issued to C P Body Repair, for the following:

S-1 Spray Booth(s) and filtration system(s), Use of HVLP Spray Gun(s)

By _____ Date _____

John Joseph
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