

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <i>ENGINEERING and COMPLIANCE</i>  <b>APPLICATION PROCESSING AND CALCULATIONS</b>	PAGES 5	PAGE 1
	APPL. NO. Below	DATE 08 . 21 . 07
	PROCESSED BY SMKE	CHECKED BY

Zieman Manufacturing  
12425 E. Whittier Blvd.  
Whittier, CA 90608  
ID: 020504

**EQUIPMENT DESCRIPTION**

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions	Conditions
<b>Process 1: SURFACE COATING</b>					
<b>System 1:</b>					
SPRAY COATING OPERATION, SPRAY KING, MODEL DI-60710, 13 FT.-6 IN. W. X 60 FT. L. X 7 FT. H., ONE HUNDRED EIGHT 20 IN. X 20 IN. EXHAUST FILTERS, WITH SPRAY BOOTH  A/N: <del>408561</del> → 472445	D1			PM: (9) RULE 404; ROG: (9) RULE 1107, 1171	See facility permit
SPRAY COATING OPERATION, BLEEKER, MODEL ATRD-54, 16 FT.-4 IN. W. X 54 FT.-8 IN. L. X 13 FT.-2 IN. H., THIRTY 20 IN. X 20 IN. EXHAUST FILTERS, WITH SPRAY BOOTH  A/N: <del>408562</del> → 472447	D4			PM: (9) RULE 404; ROG: (9) RULE 1107, 1171	See facility permit

A/N 472446

Title V Revision - Minor

**BACKGROUND**

Zieman Manufacturing submitted A/N 472445 and 472447 to change the conditions of spray booth D1 and D4, to replace the condition limiting the two spray booths to 45 gal/day combined coating and solvent usage (C1.1), with a condition limiting the spray booths to 39 lb/day combined VOC emissions (A63.2). Spray booth D4 also has an individual equipment limit (condition A63.1) of 850 lb VOC per month which will remain. A/N 472446 was also submitted for Title V revision.

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#### Application Summary

Current A/N	Equipment	Device No.	Previous A/N	Previous P/O
472445	Spray Booth, Spray King	D1	408561	F57681
472446	Title V Revision – Minor	-	-	-
472447	Spray Booth, Bleeker	D4	408562	F57682

Spray Booth D1 was originally permitted in 1990 as a replacement for two old spray booths. One of the replaced spray booths had a 20 gal/day coating and solvent usage limit and the other spray booth was pre-1976 and had no limit. In the original evaluation for D1, the engineer calculated VOC emissions using historical usage data of coating and solvent for the pre-76 booth (approximately 25 gal/day) plus 20 gal/day for the other replaced booth and reported VOC emissions of 56 lb/day. The applicant has requested a 39 lb/day combined emission cap for these two spray booths, therefore, this project will result in a potential emission reduction.

These two spray booths are the only permitted VOC-emitting equipment operated at the facility. There are no complaints, notices to comply or notices of violation on file for this facility within the last 2 years. Zieman Manufacturing is a Title V Group A facility. A Title V renewal permit was issued to this facility on October 6, 2004. Zieman Manufacturing has proposed to revise their Title V renewal permit by changing condition C1.1 of device no. D1 (A/N 472445) and device no. D4 (application no. 472447). The recordkeeping condition K67.1 will also be updated to reflect the emission limit changes in C1.1. In addition, a Rule 1401 toxic condition (B59.1) will be added to D4 that was omitted in the previously issued facility permit. This permit revision is considered as a “minor permit revision” to the Title V renewal permit, as described in the Regulation XXX evaluation.

#### **PROCESS DESCRIPTION**

Zieman Manufacturing manufactures boat trailers. The spray booths are used to paint trailers with Rule 1107-compliant primers and topcoats. The painted parts are air-dried. Zieman Manufacturing typically operates 16 hrs/day, 5 days/wk and 52 wks/yr.

#### **EMISSIONS ESTIMATES**

The two spray booths were originally limited to 45 gal/day combined under condition C1.1. The two spray booths will now be limited to 39 lbs/day combined under condition A63.2, and C1.1 will be removed. Spray booth D4 also had an 850 lb/month equipment VOC limit (A63.1) which will remain.

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For AEIS emission entries, the 39 lb/day VOC emissions are assumed to be divided under this limit. For NSR entries, the maximum potential to emit is 39 lb/day for each spray booth. The original evaluation for D1 shows calculated VOC emissions of 56 lb/day based on the 45 gallon per day usage limit. The NSR entry (30 day average) for D1 under A/N 408561 has been updated to reflect 56 lb/day VOC. Since the new limit is 39 lb/day VOC, it is assumed that there is not an increase in PM10 and toxic emissions since there is a potential decrease in coating and solvent usage.

**AEIS:**

Average hourly VOC emissions per S/B =  $39 \text{ lb/day} \div 2 \div 16 \text{ hrs/day} = 1.2 \text{ lbs/hr}$

**NSR:**

Maximum daily VOC emissions per S/B = 39 lb/day

Maximum hourly VOC emissions per S/B =  $39 \div 16 \text{ hr/day} = 2.44 \text{ lb/hr}$

A/N	Dev #	Proposed Permit Limit	AEIS Ave lb/hr	NSR - max		
				Lb/hr	Lb/day	30-day ave lb/day
472445	D1	39 lb/day combined D1 and D4	1.2	2.44	39	39
472447	D4	850 lb/mo. D4 only + 39 lb/day combined D1 and D4	1.2	2.44	39	0

**RULE ANALYSIS**

**RULE 212:** This is not a significant project, there is no school within 1,000, there are no emission increases as a result of this change of condition, and no increase in risk. Public notification is not necessary.

**RULE 401:** Visible emissions are not expected with proper operation of this equipment. There are no complaints or notices on file for the last two years.

**RULE 402:** Operation of this equipment is not expected to create a nuisance. There are no complaints or notices on file for the last two years.

**RULE 1107 & 1171:** Based on the recent District inspection on March 2, 2007, compliant primers and topcoats are used in the spray booths with electrostatic spray guns. Acetone is used to clean the spray guns. A steam cleaner is used to remove surface grime on the metal parts before coating. Compliance is expected.

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**REG. XIII**

1303(a): There are no emission increases from each spray booth as a result of this change of condition. Spray booth D4 will continue to operate under the 850 lbs/month VOC limit, and spray booth D1 will operate under the 39 lb/day combined VOC limit instead of 45 gal/day combined limit (previously calculated to be 56 lb/day VOC). Compliance with BACT is expected.

1303(b)(1): Modeling is not required since there is no increase in PM10 emission due to this proposed change. Spray booth D1 was previously allowed up to 45 gal/day coating and solvent which was equivalent to 56 lb/day VOC. The maximum VOC emissions from this spray booth will now be 39 lb/day, there is a likely a decrease in coating usage, therefore a decrease in PM10. Spray booth D4 maximum potential to emit was 850 lb/month under the previous application and will maintain the same limit, therefore there will be no increase in PM10 emissions either.

1303(b)(2): Emissions offsets are not required since there is not an emission increase from this facility due to these permit condition changes.

1303(b)(4): The facility is expected to be in full compliance with all applicable rules and regulations of the District. Based on the recent District inspection on 3-2-07, the facility was found to be in compliance with all applicable rules at the time.

RULE 1401: There will be no increase in VOC or PM10 emissions due to this change of condition, therefore no expected increase in any toxic emissions. This project is exempt from Rule 1401 under (g)(1)(B) – Modification with no increase in risk. In the previous evaluation for spray booth D4, a toxic evaluation was made based on the applicable version of Rule 1401, as amended February 7, 2003. MEK (CAS# 78-93-3) was present in the topcoat reducer and phosphoric acid (CAS# 7664-38-2) was present in the wash primer. Emissions were calculated and hazard indices were below one based on the screening risk assessment. However, a Rule 1401 condition was not imposed on the facility permit. As a result, Condition B59.1 will be added to spray booth D4 to ensure continued compliance with Rule 1401. Spray booth D1 was originally permitted before Rule 1401 was adopted, and in the subsequent change of condition, did not have an emission increase (spray booth D4 was just bubbled into the equipment cap) therefore was exempt from Rule 1401. Therefore D1 should not have any Rule 1401 condition.

**REGULATION XXX:**

This facility is not in the RECLAIM program. The proposed project is considered as a “minor permit revision” to the Title V permit for this facility.

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Rule 3000(b)(12)(vi) defines a “minor permit revision” as any Title V permit revision that does not result in an increase in emissions of a pollutant subject to Regulation XIII – New Source Review (non-RECLAIM pollutants) or a hazardous air pollutant (HAP).

The proposed project is not expected to result in an increase in emissions of a pollutant subject to Regulation XIII – New Source Review (non-RECLAIM pollutants) or a hazardous air pollutant (HAP), and therefore is considered as a “minor permit revision” pursuant to Rule 3000(b)(12)(A)(vi).

This proposed project is the 1st permit revision to the Title V renewal permit issued to this facility on October 6, 2004. The following table summarizes the permit revisions since the Title V renewal permit:

<b>Revision</b>	<b>HAP</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>SO<sub>x</sub></b>	<b>CO</b>
1 <sup>st</sup> Permit Revision; change of conditions for spray booths D1 and D4 from 45 gal/day combined to 39 lb/day VOC combined (replace condition C1.1 with A63.2 - A/Ns 472445 & 472447). Update recordkeeping condition K67.1, and add facility-wide recordkeeping condition F16.1. Add Rule 1401 condition B59.1 to D4 that was previously omitted from the FP.	0	0	0	0	0	0
Cumulative Total	0	0	0	0	0	0
Maximum Daily	30	30	40	30	60	220

## **RECOMMENDATION**

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “minor permit revision”, it is exempt from the public participation requirements under Rule 3006(b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V permit will be issued to this facility.