



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT



## HEALTHY AIR LIVING™

MAR 15 2010

Gerardo C. Rios, Chief  
Permits Office  
Air Division  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

Re: **Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)  
District Facility # N-1002  
Project # N-1093677**

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authorities to Construct for Excel Storage Products, located at 214 Kelly Street in Lodi, CA, which has been issued a Title V permit. Excel Storage Products is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The applicant is proposing to receive Authorities to Construct to increase the powder coating material throughput of permit unit N-1002-4 and is proposing to decrease the potential to emit of the liquid coating equipment operating under permit N-1002-2.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authorities to Construct # N-1002-2-9 and N-1002-4-4 with Certificate of Conformity. After demonstrating compliance with the Authorities to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,

David Warner  
Director of Permit Services

DW: MK/cm

Enclosures

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

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1990 E. Gettysburg Avenue  
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**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585



**San Joaquin Valley**  
AIR POLLUTION CONTROL DISTRICT



**HEALTHY AIR LIVING™**

MAR 15 2010

Scott Moffet  
Excel Storage Products  
213 Kelly Street  
Lodi, CA 95240

**Re: Proposed Authorities to Construct / Certificate of Conformity (Minor Mod)  
District Facility # N-1002  
Project # N-1093677**

Dear Mr. Moffet:

Enclosed for your review is the District's analysis of your application for Authorities to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The applicant is proposing to receive Authorities to Construct to increase the powder coating material throughput of permit unit N-1002-4 and is proposing to decrease the potential to emit of the liquid coating equipment operating under permit N-1002-2.

After addressing any EPA comments made during the 45-day comment period, the Authorities to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,

David Warner  
Director of Permit Services

DW: MK/cm

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**San Joaquin Valley Air Pollution Control District  
Authority to Construct  
Application Review**

**Metal Parts and Products Coating and Powder Coating Operations**

Facility Name:	Excel Storage Products LP	Date:	March 1, 2010
Mailing Address:	213 Kelly Street Lodi, CA 95240	Engineer:	John Fowler
Contact Person:	Scott Moffet	Lead Engineer:	Nick Peirce
Telephone:	(209) 334-2500		
Fax:	(209) 334-1259		
Application #(s):	N-1002-2-9 and 4-4		
Project #:	N-1093677		
Deemed Complete:	September 30, 2009		

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**I. Proposal:**

Excel Storage Products, LP is applying for Authority to Construct (ATC) permits to modify a liquid coating metal parts and products coating operation, and a powder coating metal parts and products coating operation.

The following are the proposed modifications:

For Permit Unit N-1002-2, Metal Parts and Products Liquid Coating Operation:

The applicant is proposing to limit the VOC emissions to 50,200 lb year, which will have the affect of limiting coating usage to a reduced rate. The reduced usage will, in turn, reduce the potential PM10 emissions such that offsets are not required.

For Permit Unit N-1002-4, Metal Parts and Products Powder Coating Operation:

The applicant is proposing to increase their powder coating usage from 1,000 lb/day to 3,000 lb/day, remove an ITW Gema powder coating booth from the equipment description, and derate their 5.4 MMBtu/hr curing oven to 4.9 MMBtu or less.

The applicant previously applied to increase the powder coating usage limit from 1,000 lb/day to 3,000 lb/day and was issued ATC N-1002-4-2 under Project N-1080633. However, during the start-up inspection for this ATC, it was determined that the equipment description did not match the equipment that is located on site. Therefore, the facility is applying for an ATC to remove the manual powder coating booth from the equipment description as well as increase the current coating usage limit from 1,000 lb/day to 3,000 lb/day.

The modification to derate the curing oven is being proposed so that the curing oven's heat input will be below the heat input threshold of District Rule 4309 (Dryers, Dehydrators, and Ovens). The curing oven uses a series manifolds and burners to provide constant heat throughout the oven. The operator can selectively eliminate burners from the oven in order to control the temperature within the oven. In order to keep from burning their coatings, the facility does not use all of the burners and can physically remove burners from the oven without affecting the curing process.

The facility is currently operating under a Title V permit and the proposed modifications are minor modifications to that permit. The applicant has proposed to proceed with Certificates of Conformity.

## **II. Applicable Rules:**

Rule 2201 New and Modified Stationary Source Review Rule (9/21/06)  
Rule 2520 Federally Mandated Operating Permits (6/21/01)  
Rule 4001 New Source Performance Standards (4/14/99)  
Rule 4101 Visible Emissions (2/17/05)  
Rule 4102 Nuisance (12/17/92)  
Rule 4201 Particulate Matter Concentration (12/17/92)  
Rule 4301 Fuel Burning Equipment (12/17/92)  
Rule 4309 Dryers, Dehydrators, and Ovens (12/15/05)  
Rule 4603 Surface Coating of Metal Parts and Products, Plastic Parts and Products, and  
Pleasure Crafts (9/17/09)  
Rule 4801 Sulfur Compounds (12/17/92)  
17 CCR, Subchapter 6, § 92000 thru § 92540  
CH&SC 41700 Health Risk Assessment  
CH&SC 42301.6 School Notice  
40CFR63  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA  
Guidelines

## **III. Project Location:**

The facility is located at 214 Kelly Street in Lodi, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirements of California Health and Safety Code §42301.6 is not applicable to this project.

#### **IV. Process Description:**

Excel Storage Products manufactures metal storage racks and related components for industrial warehouses. The metal products are coated for corrosion prevention and appearance.

N-1002-2-9:

Metal parts and products conveyed through a hot water wash tank, a cold water rinse tank, and then into the liquid coating booth where they are coated. Following coating, the items are conveyed through a curing oven.

N-1002-4-4:

Metal parts and products conveyed through a hot water wash tank, a cold water rinse tank, and then into the powder coating booth where powder coating is applied. Following powder coat application, the items are conveyed through a curing oven.

#### **V. Equipment Listing:**

##### Pre-Project Equipment Description:

**N-1002-2-5:** METAL PARTS & PRODUCTS COATING OPERATION WITH HVLP SPRAY GUN(S), SPRAY PAINT BOOTH WITH EXHAUST AND SPRAY GUN CLEANER AND 1.2 MMBTU/HR NATURAL GAS-FIRED CURING OVEN

**N-1002-4-1:** METAL PARTS AND PRODUCTS CONVEYORIZED-LINE POWDER COATING OPERATION CONSISTING OF A GBD INDUSTRIES WASH/RINSE BOOTH WITH A PERMIT EXEMPT 1.9 MMBTU/HR NATURAL GAS INDIRECT-FIRED WATER HEATER, A 1.9 MMBTU/HR POLLUTION CONTROL PRODUCTS MODEL PRC-150 NATURAL GAS DIRECT-FIRED INFRA-RED DRYING OVEN, ONE ITW GEMA POWDER COATING BOOTH WITH MANUAL ELECTROSTATIC GUNS, AND ONE GEMA MODEL DIAMOND, POWDER COATING BOOTH WITH AUTOMATED GUNS, AND A 5.4 MMBTU/HR GED NATURAL GAS DIRECT-FIRED INFRA-RED CURING OVEN. BOTH POWDER COATING BOOTHS ARE SERVED BY DRY CARTRIDGE FILTERS

##### Post Project Equipment Description:

**N-1002-2-9:** METAL PARTS & PRODUCTS COATING OPERATION WITH HVLP SPRAY GUN(S), SPRAY PAINT BOOTH WITH EXHAUST FILTERS AND A 1.2 MMBTU/HR NATURAL GAS-FIRED CURING OVEN.

**N-1002-4-4:** CONVEYORIZED METAL PARTS AND PRODUCTS POWDER COATING OPERATION CONSISTING OF A GBD INDUSTRIES WASH/RINSE BOOTH WITH A PERMIT EXEMPT 1.9 MMBTU/HR NATURAL GAS INDIRECT-FIRED WATER HEATER, A 1.9 MMBTU/HR NATURAL GAS DIRECT-FIRED INFRA-RED DRYING OVEN, ONE GEMA MODEL DIAMOND POWDER COATING

BOOTH WITH AUTOMATED ELECTROSTATIC APPLICATION EQUIPMENT AND DRY CARTRIDGE FILTERS, AND A 5.4 MMBTU/HR (DERATED TO 4.9 MMBTU/HR) GBD NATURAL GAS DIRECT-FIRED INFRA-RED CURING OVEN.

## **VI. Emission Control Technology Evaluation:**

### For Permit Unit N-1002-2, Liquid Coating Operation:

PM<sub>10</sub> and VOC are emitted from the application of liquid coatings and painting operations, and NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC are emitted from the combustion of natural gas in the curing oven. The applicant performs all application of coatings in a paint spray booth with a dry exhaust filter system for PM<sub>10</sub> control, and High Volume Low Pressure (HVLP) spray equipment for PM<sub>10</sub> and VOC control. The paint spray booth with a dry exhaust filter system will control PM<sub>10</sub> emissions by filtering air from inside the paint booth before it is exhausted to the atmosphere. The HVLP spray equipment will control PM<sub>10</sub> and VOC emissions by having more paint transfer to the desired surfaces than traditional painting equipment. NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC emissions from the curing oven will be reduced by the use of natural gas as their combustion fuel.

### For Permit Unit N-1002-4, Powder Coating Operation:

The powder coating operation will generate PM<sub>10</sub> emissions from the application of powder coatings, and NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC emissions from the combustion of natural gas in the drying and curing ovens.

The powder coating enclosure is exhausted through a set of 30 cartridge filters housed in a mobile metal box that exhausts into the inside of the building. The facility uses several mobile filter cartridge boxes, one for each powder coating color. Using different filter cartridge boxes allow the facility to recover the captured powder coating and recycle it back into the coating application equipment. Prior to coating application, the filter cartridge box for the color being applied will be connected to the exhaust for the coating booth. Electrostatic spray guns are used apply powder coatings to the metal parts. Electrostatic spray guns cause the powder coatings to be attracted to the metal parts thereby reducing overspray and PM<sub>10</sub> emissions.

NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC emissions from the curing oven will be reduced by the use of natural gas as their combustion fuel.

## **VII. General Calculations:**

### **A. Assumptions:**

#### 1. For Permit Unit N-1002-2, Liquid Coating Operation:

- HVLP gun transfer efficiency (TE) is 75% (per STAPPA/ALAPCO Vol. 2, 5/30/91).
- HVLP application equipment will be used to control both VOC and PM<sub>10</sub> emissions.
- Dry exhaust filter removal efficiency (RE) is 66% (STAAPPA/ALAPCO Vol. 2, 5/30/91).
- The VOC emissions are, and will continue to be limited on a mass basis. A number of coatings with varying VOC contents are used. Since PM<sub>10</sub> emissions are proportional to the amount of solid material sprayed, the worst case PM<sub>10</sub> emissions would occur if the

coating usage were maximized. To maximize the coating usage, while complying with a VOC limit, the lowest VOC material would be used. Information submitted as part of project N-1080633 shows that the lowest VOC material used has a VOC content of 1.04 lb/gal. That VOC content will be assumed during coating usage calculations.

- Pre-project and post-project daily VOC emissions are limited to 276.0 lb/day.
- Pre-project annual VOC emissions are limited to 64,533 lb/yr (current permit).  
(15,912 lb 1<sup>st</sup> Qtr + 16,089 lb 2<sup>nd</sup> Qtr + 16,266 lb 3<sup>rd</sup> Qtr + 16,266 lb 4<sup>th</sup> Qtr)
- Post-project annual VOC emissions will be limited to 50,200 lb/year (per applicant).

2. For Permit Unit N-1002-4, Powder Coating Operation:

- Pre-project manual powder throughput = 60 lb/day (current permit)
- Pre-project automated powder throughput limit = 1,000 lb-powder/day (current permit)
- Post-project automated powder throughput limit = 3,000 lb-powder/day (per applicant)
- The material used in the powder coating operation will not contain any VOC (current permit)

**B. Emission Factors:**

1. For Permit Unit N-1002-2, Liquid Coating Operation:

The applicant is not proposing any change to the coatings that they will use. Therefore, the pre-project and post-project emission factors will be the same.

- The solid content is 4.3 lb-PM/gal (from project N-1080633).
- The pre and post-project EFs for the curing oven are listed in the following table. The AP-42 values were converted from the terms of lb/MMScf to lb/MMBtu assuming a natural gas heating value of 1,000 Btu/scf.

<b>Curing Oven Emission Factors</b>		
Pollutant	lb/MMBtu	Source
NO <sub>x</sub>	0.1	AP-42 (7/98), Table 1.4-1
SO <sub>x</sub>	0.00285	APR 1720
PM <sub>10</sub>	0.0076	AP-42 (7/98), Table 1.4-2
CO	0.084	AP-42 (7/98), Table 1.4-1
VOC	0.0055	AP-42 (7/98), Table 1.4-2

2. For Permit Unit N-1002-4, Powder Coating Operation:

a. Powder Coating:

- PM<sub>10</sub> Emissions Factor = 0.0025 lb-PM<sub>10</sub>/lb-powder (current ATC)

b. 1.9 MMBtu/hr Drying Oven and 5.4 MMBtu/hr Curing Oven:

<b>Drying and Curing Oven Emission Factors</b>		
Pollutant	lb/MMBtu	Source
NO <sub>x</sub>	0.1	AP-42 (7/98), Table 1.4-1
SO <sub>x</sub>	0.00285	APR 1720
PM <sub>10</sub>	0.0076	AP-42 (7/98), Table 1.4-2
CO	0.084	AP-42 (7/98), Table 1.4-1
VOC	0.0055	AP-42 (7/98), Table 1.4-2

**C. Calculations:**

1. Pre-Project Potential to Emit (PE1):

The pre-project emissions were previously determined in Project N-1080633. Therefore, for brevity, the pre-project emissions will be stated as determined in Project N-1080633 and the calculations will not be repeated here.

a. For Permit Unit N-1002-2, Liquid Coating Operation:

**For the Curing Oven:**

<b>PE1 for the 1.2 MMBtu/hr Curing Oven</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)*
NO <sub>x</sub>	2.9	1,059
SO <sub>x</sub>	0.1	37
PM <sub>10</sub>	0.2	73
CO	2.4	876
VOC	0.2	73

\* Annual emissions = daily emissions x 365 day/yr

**For the Coating Operation:**

<b>PE1 for the Coating Operation</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)
PM <sub>10</sub>	96.9	22,654
VOC	275.8	64,460

**Total Combined Emissions:**

<b>Daily Combined Pre-Project Potential to Emit (PE1)</b>			
Pollutant	Curing Oven (lb/day)	Coating Operation (lb/day)	Combined Emissions (lb/day)
NO <sub>x</sub>	2.9	0	2.9
SO <sub>x</sub>	0.1	0	0.1
PM <sub>10</sub>	0.2	96.9	97.1
CO	2.4	0	2.4
VOC	0.2	275.8	276.0

<b>Annual Combined Pre-Project Potential to Emit (PE1)</b>			
Pollutant	Curing Oven (lb/year)	Coating Operation (lb/year)	Combined Emissions (lb/year)
NO <sub>x</sub>	1,059	0	1,059
SO <sub>x</sub>	37	0	37
PM <sub>10</sub>	73	22,654	22,727
CO	876	0	876
VOC	73	64,460	64,533

b. For Permit Unit N-1002-4, Powder Coating Operation:

**For the 1.9 MMBtu/hr Drying Oven:**

<b>PE1 for the 1.9 MMBtu/hr Drying Oven</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)*
NO <sub>x</sub>	4.6	1,679
SO <sub>x</sub>	0.1	37
PM <sub>10</sub>	0.3	110
CO	3.8	1,387
VOC	0.3	110

\* Annual emissions = daily emissions x 365 day/yr

**For the 5.4 MMBtu/hr Curing Oven:**

<b>PE1 for the 5.4 MMBtu/hr Curing Oven</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)*
NO <sub>x</sub>	13.0	4,745
SO <sub>x</sub>	0.4	146
PM <sub>10</sub>	1.0	365
CO	10.9	3,979
VOC	0.7	256

\* Annual emissions = daily emissions x 365 day/yr

**For the Powder Coating Operation:**

<b>PE1 for the Powder Coating Operation</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)*
PM <sub>10</sub>	2.7	986

\* Annual emissions = daily emissions x 365 day/yr

**Total Combined Emissions:**

<b>Daily Combined PE1</b>				
Pollutant	Drying Oven (lb/day)	Curing Oven (lb/day)	Coating Operation (lb/day)	Combined Emissions (lb/day)
NO <sub>x</sub>	4.6	13.0	0	17.6
SO <sub>x</sub>	0.1	0.4	0	0.5
PM <sub>10</sub>	0.3	1.0	2.7	4.0
CO	3.8	10.9	0	14.7
VOC	0.3	0.7	0	1.0

<b>Annual Combined PE1 (Unit -4-1)</b>				
Pollutant	Drying Oven (lb/year)	Curing Oven (lb/year)	Coating Operation (lb/year)	Combined Emissions (lb/year)
NO <sub>x</sub>	1,679	4,745	0	6,424
SO <sub>x</sub>	37	146	0	183
PM <sub>10</sub>	110	365	986	1,461
CO	1,387	3,979	0	5,366
VOC	110	256	0	366

2. Post-Project Potential to Emit (PE2):

a. For Permit Unit N-1002-2, Liquid Coating Operation:

**For the Curing Oven:**

The applicant is not proposing any change to this permit unit that will affect the emissions rates or hours of operation for the curing oven. Therefore, PE2 will equal PE1 for all pollutants, and PE2 emissions will not need to be recalculated and PE1 will be restated as PE2 here.

<b>PE2 for the 1.2 MMBtu/hr Curing Oven</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)*
NO <sub>x</sub>	2.9	1,059
SO <sub>x</sub>	0.1	37
PM <sub>10</sub>	0.2	73
CO	2.4	876
VOC	0.2	73

\* Annual emissions = daily emissions x 365 day/yr

**For the Coating Operation:**

PM<sub>10</sub> and VOC are the only pollutants emitted by the spray application of liquid coatings. The daily and annual post project potential to emit for VOC emissions will be limited by permit conditions. Since the permitted VOC emission limits include the emissions from the natural gas curing oven, the curing oven's VOC emissions contributions will be subtracted from the VOC limit listed in the permit when determining the VOC emissions from the coating operation.

$$\begin{aligned} \text{Daily PE2}_{\text{VOC}} &= 276.0 \text{ lb-VOC/day} - 0.2 \text{ lb-VOC/day} \\ &= \mathbf{275.8 \text{ lb-VOC/day}} \end{aligned}$$

$$\begin{aligned} \text{Annual PE2}_{\text{VOC}} &= (50,200 \text{ lb-VOC/year}) - (73 \text{ lb-VOC/year}) \\ &= \mathbf{50,127 \text{ lb-VOC/year}} \end{aligned}$$

The maximum PM<sub>10</sub> emissions will occur when the facility operates with the lowest VOC coating. The lowest material VOC coating limit on the product date sheet is 1.04 lb-VOC/gal. Potential PM<sub>10</sub> emissions will be calculated as follows:

$$\begin{aligned} \text{Daily Coating Usage} &= (275.8 \text{ lb-VOC/day}) \div (1.04 \text{ lb-VOC/gal}) \\ &= \mathbf{265.2 \text{ gal/day}} \end{aligned}$$

$$\begin{aligned} \text{Daily PE2}_{\text{PM10}} &= (265.2 \text{ gal/day}) \times (4.3 \text{ lb-PM}_{10}\text{/gal}) \times (1 - 0.66) \times (1 - 0.75) \\ &= \mathbf{96.9 \text{ lb-PM}_{10}\text{/day}} \end{aligned}$$

$$\begin{aligned} \text{Annual Coating Usage} &= (50,127 \text{ lb-VOC/yr}) \div (1.04 \text{ lb-VOC/gal}) \\ &= \mathbf{48,199 \text{ gal/yr}} \end{aligned}$$

$$\text{Annual PE2}_{\text{PM}_{10}} = (48,199 \text{ gal/year}) \times (4.3 \text{ lb-PM}_{10}/\text{gal}) \times (1 - 0.66) \times (1 - 0.75)$$

$$= 17,617 \text{ lb-PM}_{10}/\text{year}$$

<b>PE2 for the Liquid Coating Operation</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)
PM <sub>10</sub>	96.9	17,617
VOC	275.8	50,127

**Total Combined Emissions:**

<b>Daily Combined PE2</b>			
Pollutant	Curing Oven (lb/day)	Coating Operation (lb/day)	Combined Emissions (lb/day)
NO <sub>x</sub>	2.9	0	2.9
SO <sub>x</sub>	0.1	0	0.1
PM <sub>10</sub>	0.2	96.9	97.1
CO	2.4	0	2.4
VOC	0.2	275.8	276.0

<b>Annual Combined PE2</b>			
Pollutant	Curing Oven (lb/year)	Coating Operation (lb/year)	Combined Emissions (lb/year)
NO <sub>x</sub>	1,059	0	1,059
SO <sub>x</sub>	37	0	37
PM <sub>10</sub>	73	17,617	17,690
CO	876	0	876
VOC	73	50,127	50,200

b. For Permit Unit N-1002-4, Powder Coating Operation:

**For the 1.9 MMBtu/hr Drying Oven:**

The applicant is not proposing any change to this permit unit that will affect the emissions rates or hours of operation for the drying oven. Therefore, PE2 will equal PE1 for all pollutants, and PE2 emissions will not need to be recalculated and PE1 will be restated as PE2 here.

<b>PE2 for the 1.9 MMBtu/hr Drying Oven</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)*
NO <sub>x</sub>	4.6	1,679
SO <sub>x</sub>	0.1	37
PM <sub>10</sub>	0.3	110
CO	3.8	1,387
VOC	0.3	110

\* Annual emissions = daily emissions x 365 day/yr

**For the Curing Oven:**

The applicant has proposed to de-rate the unit (as opposed to re-rating it) as defined in District Guidance Document FYI 112. As previously stated, the unit will be de-rated from 5.4 MMBtu/hr to 4.9 MMBtu/hr to avoid the necessity of complying with District Rule 4307. Since the unit is not being re-rated (permanent change in rating accompanied by a new nameplate), the emissions will continue to be assumed to be proportional to the rating on the existing nameplate (5.4 MMBtu/hr). Therefore, PE2 will equal PE1 for all pollutants, and PE2 emissions will not need to be recalculated and PE1 will be restated as PE2 here.

<b>PE2 for the 5.4 MMBtu/hr Curing Oven</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)*
NO <sub>x</sub>	13.0	4,745
SO <sub>x</sub>	0.4	146
PM <sub>10</sub>	1.0	365
CO	10.9	3,979
VOC	0.7	256

\* Annual emissions = daily emissions x 365 day/yr

**For the Powder Coating Operation:**

Daily PE2<sub>PM10</sub> = (0.0025 lb-PM<sub>10</sub>/lb-powder) x (3,000 lb-automated powder/day)

**Daily PE2<sub>PM10</sub> = 7.5 lb-PM<sub>10</sub>/day**

<b>PE2 for the Powder Coating Operation</b>		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)*
PM <sub>10</sub>	7.5	2,738

\* Annual emissions = daily emissions x 365 day/yr

**Total Combined Emissions:**

<b>Daily Combined PE2</b>				
Pollutant	Drying Oven (lb/day)	Curing Oven (lb/day)	Coating Operation (lb/day)	Combined Emissions (lb/day)
NO <sub>x</sub>	4.6	13.0	0	17.6
SO <sub>x</sub>	0.1	0.4	0	0.5
PM <sub>10</sub>	0.3	1.0	7.5	8.8
CO	3.8	10.9	0	14.7
VOC	0.3	0.7	0	1.0

<b>Annual Combined PE2</b>				
Pollutant	Drying Oven (lb/year)	Curing Oven (lb/year)	Coating Operation (lb/year)	Combined Emissions (lb/year)
NO <sub>x</sub>	1,679	4,745	0	6,424
SO <sub>x</sub>	37	146	0	183
PM <sub>10</sub>	110	365	2,738	3,213
CO	1,387	3,979	0	5,366
VOC	110	256	0	366

3. Pre-Project Stationary Source Potential to Emit (SSPE1):

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. The SSPE contribution of unit N-1002-1-2 is from the application review document for project N-1080633 and the PM10 contribution for unit N-1002-3-6 is from the application review document for project N-1064100. The VOC contribution for permit unit N-1002-3-6 is from the current Permit to Operate.

<b>Pre-Project Stationary Source Potential to Emit [SSPE1] (lb/year)</b>					
Permit Unit/ERC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
N-1002-1-2	0	0	8,153	0	54,750
N-1002-2-5	1,059	37	22,727	876	64,533
N-1002-3-6	0	0	5,256	0	12,500
ATC N-1002-4-1	6,424	183	1,461	5,366	366
ERC's	0	0	0	0	0
<b>Pre-Project SSPE (SSPE1)</b>	<b>7,483</b>	<b>220</b>	<b>37,597</b>	<b>6,242</b>	<b>132,149</b>

4. Post Project Stationary Source Potential to Emit (SSPE2):

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

<b>Post Project Stationary Source Potential to Emit [SSPE2] (lb/year)</b>					
Permit Unit	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
N-1002-1-2	0	0	8,153	0	54,750
N-1002-2-9 (project)	1,059	37	17,690	876	50,200
N-1002-3-6	0	0	5,256	0	12,500
N-1002-4-4 (project)	6,424	183	3,213	5,366	366
ERC	0	0	0	0	0
<b>Post Project SSPE (SSPE2)</b>	<b>7,483</b>	<b>220</b>	<b>34,312</b>	<b>6,242</b>	<b>117,816</b>

5. Major Source Determination:

Pursuant to Section 3.24 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.24.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of

emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.”

<b>Major Source Determination (lb/year)</b>					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
Pre-Project SSPE (SSPE1)	7,483	220	37,597	6,242	132,149
Post Project SSPE (SSPE2)	7,483	220	34,312	6,242	117,816
Major Source Threshold	50,000	140,000	140,000	200,000	50,000
Major Source?	No	No	No	No	Yes

This source is an existing Major Source for VOC emissions and will remain a Major Source for VOC.

6. Baseline Emissions (BE):

BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.22 of District Rule 2201.

**BE For NO<sub>x</sub>, SO<sub>x</sub>, PM10 and CO:**

As shown in Section VII.C.5 above, the facility is not a major source for NO<sub>x</sub>, SO<sub>x</sub>, PM10 and CO, therefore, Baseline Emissions (BE) are equal to the Pre-project Potential to Emit (PE1).

	NO <sub>x</sub> (lb/yr)	SO <sub>x</sub> (lb/yr)	PM10 (lb/yr)	CO (lb/yr)
N-1002-2	1,059	37	22,727	876
N-1002-4	6,424	183	1461	5,366
Total	7,483	220	24,188	6,242

**BE for VOC:**

As shown in Section VII.C.5 above, the facility is a major source for VOC emissions.

Clean Emissions Unit, Located at a Major Source

Pursuant to Rule 2201, Section 3.12, a Clean Emissions Unit is defined as an emissions unit that is “equipped with an emissions control technology with a minimum control

efficiency of at least 95% or is equipped with emission control technology that meets the requirements for achieved-in-practice BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application. This application was deemed complete on September 30, 2009.

For Permit Unit N-1002-2, Metal Parts and Products Liquid Coating Operation:

This emissions unit is equipped with HVLP spray equipment, an enclosed gun cleaner, and only uses coating compliant with District Rule 4603. This meets the requirements for achieved-in-practice BACT for the five years previous to submission of the complete application (guideline 4.3.2, which in appendix D of this document). Therefore, Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1).

$BE_{VOC} = PE1_{VOC} = 64,533 \text{ lb-VOC/year}$

For Permit Unit N-1002-4, Metal Parts and Products Powder Coating Operation:

This emissions unit does not use any coating that contains VOCs and the curing and drying ovens are fired solely on natural gas. This meets the requirements for achieved-in-practice BACT for the five years previous to submission of the complete application. Therefore, Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1).

$BE_{VOC} = PE1_{VOC} = 366 \text{ lb-VOC/year}$

Baseline Emissions Summary (lb/year)					
Permit Unit	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
N-1002-2	1,059	37	22,727	876	64,533
N-1002-4	6,424	183	1,461	5,366	366
Total	7,483	220	24,188	6,242	64,899

7. District Major Modification:

The purpose of Major Modification calculations is to determine the following:

- A. If Best Available Control Technology (BACT) is triggered for a new or modified emission unit that results in a Major Modification (District Rule 2201, §4.1.3); and
- B. If a public notification is triggered (District Rule 2201, §5.4.1).

Per section VII.C.5 of this document, this facility is a Major Source for only VOC emissions. To determine if a project triggers a Major Modification, Net Emissions Increase (NEI) is calculated for each Major Source pollutant, and is compared with the Major Modification threshold limit for each pollutant.

NEI can be calculated as the sum of the difference of post-project potential emissions (PE2) and historical actual emissions (HAE) for the emissions unit for this project.

The facility is only a major stationary source for VOC. Therefore, NEI will be calculated for only VOC.

$$NEI = PE2 - HAE,$$

Where:

HAE = Historical Actual Emissions

<b>Post-project Potential to Emit (PE2)</b>	
Permit Unit	PE2 (lb/year)
N-1002-2	50,200
N-1002-4	366
<b>Total VOC Emissions</b>	<b>50,566</b>

Since the powder coating and curing emissions are not fully offset, HAE equals the historical actual emissions of the powder coating and curing operations.

Pursuant to Section 3.22 of District Rule 2201, the HAE are Actual Emissions occurring during the Baseline Period. Pursuant to Section 3.8, the baseline period is equal to either:

- 3.8.1 the two consecutive years of operation immediately prior to the submission date of the Complete Application; or
- 3.8.2 at least two consecutive years within the five years immediately prior to the submission date of the Complete Application if determined by the APCO as more representative of normal source operation; or
- 3.8.3 a shorter period of at least one year if the emissions unit has not been in operation for two years and this represents the full operational history of the emissions unit, including any replacement units; or
- 3.8.4 zero years if an emissions unit has been in operation for less than one year (only for use when calculating AER).

Permit unit N-1002-4 has been in operation since January 2008 and the application was determined to be complete September 30, 2009. Since this period of operation is less than two years and greater than one year, a representative period must be chosen to determine the HAE for this permit unit. In addition, the time period for permit unit N-1002-2 must correspond with this time period. Therefore, the time period used will be 24 calendar months prior to the date that the applications were deemed complete.

a. For Permit Unit N-1002-2, Liquid Coating Operation:

The following table is used to determine the representative fuel combustion for this permit unit. The records are in Appendix B of this document.

Month/Year	Fuel Usage (MMBtu)	Month/Year	Fuel Usage (MMBtu)	Average Fuel Usage (MMBtu)
September 2007	357.5	September 2008	28.3	192.9
October 2007	350.9	October 2008	43.9	197.4
November 2007	227.4	November 2008	73.0	150.2
December 2007	486.2	December 2008	158.0	322.1
January 2008	680.1	January 2009	163.3	421.7
February 2008	481.4	February 2009	75.3	278.4
March 2008	483.0	March 2009	0	241.5
April 2008	246.9	April 2009	0	123.5
May 2008	189.9	May 2009	0	95.0
June 2008	65.6	June 2009	0	32.8
July 2008	133.7	July 2009	0	66.9
August 2008	132.8	August 2009	0	66.4
<b>Total</b>				<b>2188.8</b>

The emissions factor for this emission unit is 0.0055 lb-VOC/MMBtu.

$$\begin{aligned}
 \text{HAE}_{\text{natural gas combustion}} &= (\text{fuel usage}) \times (\text{EF}) \\
 &= (2,188.8 \text{ MMBtu/yr}) \times (0.0055 \text{ lb-VOC/MMBtu}) \\
 \text{HAE}_{\text{natural gas combustion}} &= \mathbf{12 \text{ lb-VOC/yr}}
 \end{aligned}$$

The following table summarizes the VOC emissions shown by the facility's records. Copies of the records are included in Appendix B of this document.

Month/Year	VOC Emissions (lb)	Month/Year	VOC Emissions (lb)	Average VOC Emissions (lb)
September 2007	803	September 2008	160	482
October 2007	542	October 2008	26	284
November 2007	552	November 2008	26	289
December 2007	534	December 2008	0	267
January 2008	642	January 2009	153	398
February 2008	606	February 2009	0	303
March 2008	897	March 2009	38	468
April 2008	401	April 2009	0	201
May 2008	189	May 2009	0	95
June 2008	72	June 2009	0	36
July 2008	69	July 2009	0	35
August 2008	188	August 2009	0	94
<b>Total</b>				<b>2,952</b>

The emissions factor for this emission unit is 2.93 lb/gal.

$$HAE_{\text{coating}} = 2,952 \text{ lb-VOC/yr}$$

$$HAE_{\text{total}} = (HAE_{\text{natural gas combustion}}) + (HAE_{\text{coating}})$$

$$= (12 \text{ lb-VOC/yr}) + (2,952 \text{ lb-VOC/yr})$$

$$HAE_{\text{total}} = 2,964 \text{ lb-VOC/yr}$$

b. For Permit Unit N-1002-4, Powder Coating Operation:

The following table is used to determine the representative fuel combustion for this permit unit. Since the emissions unit was not yet in operation for the time period of September 2007 through December 2007, the representative fuel usage for the months of September through December will be solely based on the fuel usage during the year 2008 for those months.

Month/Year	Fuel Usage (MMBtu)	Month/Year	Fuel Usage (MMBtu)	Average Fuel Usage (MMBtu)
September 2007	N/A	September 2008	1,611	1,611
October 2007	N/A	October 2008	1,587	1,587
November 2007	N/A	November 2008	956	956
December 2007	N/A	December 2008	1,167	1,167
January 2008	2,384	January 2009	1,262	1,823
February 2008	2,192	February 2009	1,306	1,749
March 2008	2,662	March 2009	983	1,823
April 2008	2,546	April 2009	1,168	1,857
May 2008	2,087	May 2009	1,419	1,753
June 2008	1,646	June 2009	731	1,189
July 2008	1,187	July 2009	925	1,056
August 2008	847	August 2009	240	544
<b>Total</b>				<b>17,115</b>

The emissions factor for this emission unit is 0.0055 lb-VOC/MMBtu.

$$\begin{aligned}
 \text{HAE}_{\text{natural gas combustion}} &= (\text{fuel usage}) \times (\text{EF}) \\
 &= (17,115 \text{ MMBtu/yr}) \times (0.0055 \text{ lb-VOC/MMBtu}) \\
 \text{HAE}_{\text{natural gas combustion}} &= \mathbf{94 \text{ lb-VOC/yr}}
 \end{aligned}$$

Total Project HAE:

<b>Historical Actual Emissions (HAE) in lb/year</b>	
Permit Unit	VOC
N-1002-2	2,964
N-1002-4	94
<b>Total Emissions</b>	<b>3,058</b>

NEI = PE2 - HAE

<b>Net Emissions Change (NEI) (lb/year)</b>	
	VOC
PE2	50,566
HAE	3,058
<b>NEI</b>	<b>47,508</b>

The following table compares the NEI with the Major Modification Thresholds to determine if this project is a Major Modification.

<b>Major Modification Determination (lb/year)</b>	
	VOC
NEI (lb/year)	47,508
Major Modification Threshold	50,000
Major Modification?	No

8. Federal Major Modification:

As shown above, this project does not constitute a District Major Modification. Therefore, in accordance with District Rule 2201, Section 3.17, this project does not constitute a Federal Major Modification and no further discussion is required.

9. Quarterly Net Emissions Change (QNEC):

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix C.

**VIII. Compliance:**

**Rule 2201 New and Modified Stationary Source Review Rule**

**A. Best Available Control Technology (BACT)**

**1. BACT Applicability:**

Per Section 4.1.1 of District Rule 2201, for modifications to an existing emissions unit, BACT shall be required on a pollutant-by-pollutant and on an emissions unit-by-unit basis if the modified emissions unit results in an AIPE for a pollutant that exceeds 2.0 pounds in any one day. Section 4.2.1 of this rule exempts CO from this requirement unless the SSPE2 for the source meets or exceeds 200,000 lb/yr for CO.

$$AIPE = PE2 - HAPE$$

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)

PE2 = Post-Project Potential to Emit, (lb/day)

HAPE = Historically Adjusted Potential to Emit, (lb/day)

$$HAPE = PE1 \times (EF2/EF1)$$

Where,

PE1 = The emissions unit's Potential to Emit prior to modification or relocation, (lb/day)

EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1

EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

$$AIPE = PE2 - (PE1 \times (EF2 / EF1))$$

**For Permit Unit N-1002-2, Liquid Coating Operation:**

<b>Adjusted Increase in Permitted Emissions (AIPE)</b>					
<b>Pollutant</b>	<b>PE2 (lb/day)</b>	<b>PE1 (lb/day)</b>	<b>EF2/EF1</b>	<b>AIPE</b>	<b>BACT Triggered?</b>
NO <sub>x</sub>	2.9	2.9	1	0	No
SO <sub>x</sub>	0.1	0.1	1	0	No
PM <sub>10</sub>	97.1	97.1	1	0	No
CO	2.4	2.4	1	0	No
VOC	276.0	276.0	1	0	No

As shown above, BACT is not triggered for any pollutant for the liquid coating operations.

**For Permit Unit N-1002-4, Powder Coating Operation:**

<b>Adjusted Increase in Permitted Emissions (AIPE)</b>					
<b>Pollutant</b>	<b>PE2 (lb/day)</b>	<b>PE1 (lb/day)</b>	<b>EF2/EF1</b>	<b>AIPE</b>	<b>BACT Triggered?</b>
NO <sub>x</sub>	17.6	17.6	1	0	No
SO <sub>x</sub>	0.5	0.5	1	0	No
PM <sub>10</sub>	8.8	4.0	1	<b>4.4</b>	<b>Yes</b>
CO	14.7	14.7	1	0	No
VOC	1.0	1.0	1	0	No

As shown above, the AIPE is greater than 2.0 lb/day for PM<sub>10</sub> emissions from the powder coating operation. Therefore BACT is triggered for this emissions unit.

**2. BACT Guideline:**

**For Permit Unit N-1002-4, Powder Coating Operation:**

BACT Guideline 4.3.7, attached in Appendix D, applies to the powder coating operations and curing ovens > 1.5 MMBtu/hr. Therefore, pursuant to the District's BACT policy, this Guideline will be used to complete a Top-Down BACT analysis for PM<sub>10</sub> emissions.

**3. Top-Down BACT Analysis:**

**For Permit Unit N-1002-4, Powder Coating Operation:**

Pursuant to the District's BACT policy, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

As shown in the Top-Down BACT Analysis in Appendix E of this document, BACT has been satisfied with the following:

PM<sub>10</sub>: Enclosed booth vented to 99% effective control device (cyclone vented to a filter; duel filter system) or equal, and natural gas fired fusing oven.

**B. Offsets:**

**1. Offset Applicability:**

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post Project Stationary Source Potential to Emit (SSPE2) equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

<b>Offset Determination (lb/year)</b>					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
Post Project SSPE (SSPE2)	7,483	220	34,312	6,242	117,816
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	Yes	No	Yes

**2. Quantity of Offsets Required:**

As seen above, the SSPE2 is greater than the offset thresholds for both VOC and PM<sub>10</sub>. Therefore, offset calculations will be required for both VOC and PM<sub>10</sub> for this project. Per Section 4.7.1, the quantity of offsets in pounds per year is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

$$\text{Offsets Required (lb/year)} = (\Sigma[\text{PE2} - \text{BE}] + \text{ICCE})$$

Where,

PE2 = Post Project Potential to Emit, (lb/year)

BE = Baseline Emissions, (lb/year)

ICCE = Increase in Cargo Carrier Emissions, (lb/year)

As shown in Section VII.C.6, the Baseline Emissions (BE) from the new and modified units are:

$$\text{BE}_{\text{VOC}} = 64,899 \text{ lb/yr}$$

$$\text{BE}_{\text{PM}_{10}} = 24,188 \text{ lb/yr}$$

As shown in section VII.C.2, the Potentials to Emit of the new and modified equipment are:

$$\text{PE}_{\text{VOC}} = 50,200 \text{ lb/yr} + 366 \text{ lb/yr} = 50,566 \text{ lb/yr}$$

$$\text{PE}_{\text{PM}_{10}} = 17,690 \text{ lb/yr} + 3,213 \text{ lb/yr} = 20,903 \text{ lb/yr}$$

The offset quantities are:

$$\text{Offset (VOC)} = 50,566 \text{ lb/yr} - 64,899 \text{ lb/yr} = 0 \text{ lb/yr}$$

$$\text{Offset (PM}_{10}) = 20,903 \text{ lb/yr} - 24,188 \text{ lb/yr} = 0 \text{ lb/yr}$$

**C. Public Notification:**

**1. Applicability:**

Public noticing is required for:

- a. Any new Major Source, which is a new facility that is also a Major Source,
- b. Major Modifications,
- c. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,

- d. Any project which results in the offset thresholds being surpassed, and/or
- e. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

**a. New Major Source:**

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

**b. Major Modification:**

As demonstrated in VII.C.7, this project does not constitute a Major Modification. Therefore, public noticing for Major Modification purposes is not required.

**c. PE > 100 lb/day:**

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units for this project. Therefore public noticing is not required for this project for Potential to Emit Purposes.

**d. Offset Threshold:**

The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

<b>Offset Threshold</b>				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO <sub>x</sub>	7,483	7,483	20,000 lb/year	No
SO <sub>x</sub>	220	220	54,750 lb/year	No
PM <sub>10</sub>	37,597	34,312	29,200 lb/year	No
CO	6,242	6,242	200,000 lb/year	No
VOC	132,149	117,816	20,000 lb/year	No

As detailed above, there will not be any offsets thresholds surpassed with this project. Therefore, public noticing is not required for offset purposes.

**e. SSIPE > 20,000 lb/year:**

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e.  $SSIPE = SSPE2 - SSPE1$ . The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively. The SSIPE is compared to the SSIPE Public Notice thresholds in

the following table. SSIPE values determined to be less than zero will be set to zero.

<b>Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice</b>					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO <sub>x</sub>	7,483	7,483	0	20,000 lb/year	No
SO <sub>x</sub>	220	220	0	20,000 lb/year	No
PM <sub>10</sub>	34,312	37,597	0	20,000 lb/year	No
CO	6,242	6,242	0	20,000 lb/year	No
VOC	117,816	132,149	0	20,000 lb/year	No

**2. Public Notice Action:**

As discussed above, this project will not result in emissions, for any criteria pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, a public notice will not be required for this project.

**D. Daily Emission Limits (DELs):**

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit’s maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT. The following are the DELs for each permit unit.

For Permit Unit N-1002-2-9, Liquid Coating Operation):

- Emissions from the natural gas-fired curing oven shall not exceed the following emission limits: 0.1 lb-NO<sub>x</sub>/MMBtu, 0.00285 lb-SO<sub>x</sub>/MMBtu, 0.0076 lb-PM<sub>10</sub>/MMBtu, 0.084 lb-CO/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
- The total VOC emissions rate shall not exceed 276.0 lb/day and 50,200 lb/year. [District NSR Rule]
- The total PM<sub>10</sub> emissions rate shall not exceed 97.1 lb/day and 17,690 lb/year. [District NSR Rule]

For Permit Unit N-1002-4-4, Powder Coating Operation:

- Emissions from the natural gas-fired drying and curing ovens shall not exceed the following emission limits: 0.1 lb-NO<sub>x</sub>/MMBtu, 0.00285 lb-SO<sub>x</sub>/MMBtu, 0.0076 lb-PM<sub>10</sub>/MMBtu, 0.084 lb-CO/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201]
- Powder coating usage shall not exceed 3,000 lb/day. [District Rule 2201]

- Powder coatings used shall not contain any VOCs. [District Rules 2201 and 4603]
- PM<sub>10</sub> emissions from this powder coating operation shall not exceed 0.0025 lb-PM<sub>10</sub>/lb of powder used. [District Rule 2201]

**E. Compliance Assurance:**

**1. Source Testing:**

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

**2. Monitoring:**

As they apply to the equipment currently under consideration, no rule or policy requires monitoring.

**3. Recordkeeping:**

Recordkeeping is required by Rule 4603, and to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. Rule 4603 Record keeping requirements will be discussed in the Rule 4603 rule compliance section below. The following conditions will be included in the permit to operate to assure compliance with Rule 2201 requirements:

a. For Permit Unit N-1002-2-9, Liquid Coating Operation:

- Permittee shall maintain a daily record that includes the date, daily VOC emissions and PM<sub>10</sub> emissions, and the cumulative annual VOC and PM<sub>10</sub> emissions. [District NSR Rule]

b. For Permit Unit N-1002-4-4, Powder Coating Operation:

- Permittee shall maintain a daily record that includes the date and the daily quantity of powder coating applied. [District NSR Rule]

**4. Reporting:**

As they apply to the equipment currently under consideration, no rule or policy requires reporting.

## **Rule 2520 Federally Mandated Operating Permits**

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit pursuant to Section 3.20 of this rule. As discussed above, the facility has proposed to proceed with Certificates of Conformity (COC). Therefore, the following conditions will be placed on each Authority to Construct:

{1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Y

{1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Y

## **Rule 4001 New Source Performance Standards (NSPS)**

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. The metal parts and products coating operation (unit -2) is subject to 40 CFR Subpart EE. However, the requirements of District Rule 4603 are more stringent than 40 CFR Part 60, Subpart EE and compliance with the requirements of this subpart is expected. The following condition will be included to the permit to demonstrate compliance with this rule.

- Compliance with permit conditions in the Operating Permit shall be deemed compliance with the following applicable District requirements: Rule 4102 (12/17/92); Rule 4201(12/17/92); Rule 4603 (12/20/01); and 40 CFR 60, Subpart EE. The requirements for District Rule 4603 are more stringent than 40 CFR Part 60, Subpart EE and satisfy all its requirements. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

## **Rule 4101 Visible Emissions**

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). Based on past inspections of the facility and other similar operations, visible emissions are not expected to exceed Ringelmann 1 or 20% opacity and continued compliance is expected. The following condition will be added to the permits to assure compliance with this rule.

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

The powder coating operation will be served by cartridge type filtering system that is expected to provide 99% or greater PM10 control. District Policy SSP 1005 requires that the visible emissions from such units be limited to less than 5% opacity for a period or periods aggregating more than three minutes in any one hour. Provided that the equipment is properly maintained and operated, compliance with this policy is expected.

### **Rule 4102 Nuisance**

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations provided the equipment is well maintained. Therefore, compliance with this rule is expected. The following condition will be added to the permits to further assure compliance with this rule.

- {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

### **California Health & Safety Code 41700 (Health Risk Assessment)**

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project attached in Appendix F, the total facility prioritization score including this project was less than or equal to one. Therefore, no further analysis is required and compliance with the District's Risk Management Policy is expected.

### **Rule 4201 Particulate Matter Concentration**

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

For Permit Unit N-1002-2-9, Liquid Coating Operation:

$$\text{PM Conc. (gr/scf)} = \frac{(\text{PM emission rate}) \times (7,000 \text{ gr/lb})}{(\text{Air flow rate}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})}$$

PM<sub>10</sub> emission rate = 97.1 lb/day. Assuming 100% of PM is PM<sub>10</sub>  
Exhaust Gas Flow = 37,500 scfm (from project N-1010862)

$$\begin{aligned} \text{PM Conc. (gr/scf)} &= [(97.1 \text{ lb/day}) \times (7,000 \text{ gr/lb})] \div [(37,500 \text{ ft}^3/\text{min}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})] \\ \text{PM Conc.} &= 0.013 \text{ gr/scf} \end{aligned}$$

Since 0.013 gr/scf is less than 0.1 gr/dscf, compliance with this rule is expected.

For Permit Unit N-1002-4-4, Powder Coating Operation:

$$\text{PM Conc. (gr/scf)} = \frac{(\text{PM emission rate}) \times (7,000 \text{ gr/lb})}{(\text{Air flow rate}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})}$$

PM<sub>10</sub> emission rate = 8.8 lb/day. Assuming 100% of PM is PM<sub>10</sub>  
Exhaust Gas Flow = 14,000 scfm (from project N-1054100)

$$\text{PM Conc. (gr/scf)} = [(8.8 \text{ lb/day}) \times (7,000 \text{ gr/lb})] \div [(14,000 \text{ ft}^3/\text{min}) \times (60 \text{ min/hr}) \times (24 \text{ hr/day})]$$

PM Conc. = 0.003 gr/scf

Since 0.003 gr/scf is less than 0.1 gr/dscf, compliance with this rule is expected.

**Rule 4309 Dryers, Dehydrators, and Ovens**

The purpose of this rule is to limit emissions of oxides of nitrogen (NO<sub>x</sub>) and carbon monoxide (CO) from dryers, dehydrators, and ovens. This rule applies to any dryer, dehydrator, or oven that is fired on gaseous fuel, liquid fuel, or is fired on gaseous and liquid fuel sequentially, and the total rated heat input for the unit is 5.0 million British thermal units per hour (5.0 MMBtu/hr) or greater.

For Permit Unit N-1002-2-9, Liquid Coating Operation:

The curing oven in the liquid coating operation has a heat input rating less than 5.0 MMBtu/hr. Therefore this oven is not subject to the requirements of this rule.

For Permit Unit N-1002-4-4, Powder Coating Operation:

The drying oven in the powder coating operation has a heat input rating less than 5.0 MMBtu/hr. Therefore, this oven is not subject to the requirements of this rule.

The powder coating operation also uses a 5.4 MMBtu/hr curing oven. As previously mentioned in the project proposal, the applicant will de-rate this oven to avoid being subject to this rule. The de-rating will be accomplished by limiting the number of burners that can be used within the oven and the heat input will not exceed 4.9 MMBtu/hr. Because of the Rule 4320 definition of Rated Capacity, units subject to that rule cannot avoid its requirements by de-rating. But Rule 4309, which this unit is subject to, allows de-rated units to fall outside of its applicability. The following permit condition will be included on the permit to enforce the derated heat input to the curing oven:

- *The maximum de-rated heat input for the GBD natural gas fired infra-red curing oven shall not exceed 4.9 MMBtu/hr. The curing oven heat input de-rating shall be accomplished by limiting the number of burners installed in the curing oven so that the total heat input of the curing oven can not exceed 4.9 MMBtu/hr.*

Therefore, the above condition on the permit will cause the curing oven's heat input to be below the applicability threshold of Rule 4309 and the curing oven will not be subject to Rule 4309.

**Rule 4603 – Surface Coating of Metal Parts and Products, Plastic Parts and Products, and Pleasure Crafts**

The purpose of this rule is to limit the emissions of volatile organic compounds (VOCs) from the coating of metal parts and products, large appliances parts or products, metal furniture, plastic parts and products, automotive/transportation and business machine plastic parts and products, and pleasure crafts, and from the organic solvent cleaning and storage and disposal of solvents and waste solvent materials associated with such coating. This rule also specifies the administrative and recordkeeping requirements and the test methods for determining the VOC content, the VOC emissions, the VOC capture efficiency, the acid content, the metallic or iridescent quality of coatings, and the VOC emissions from spray gun cleaning systems.

For Permit Unit N-1002-2-9, Liquid Coating Operation):

Sections 5.1 and 5.2 require that no person shall apply to any metal part or product any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (or pounds per gallon) of coating applied, (less water and exempt compounds). These limits and the coatings proposed by the applicant are presented in the following table:

<b>Rule 4603 Coating VOC Limits</b>			
<b>Coating Category</b>	<b>Allowable VOC content less water and exempt compounds g/l (lb/gal)</b>		
	<b>Baked Coatings</b>	<b>Air-dried Coatings</b>	<b>Proposed</b>
General Baked Coating	275 (2.3)	N/A	275 (2.3)
General Air-Dried Coating	N/A	340 (2.8)	N/A
<b>Dip Coating of Steel Joists, air dried:</b>			
a. coatings with a viscosity, as applied, of more than 45.6 centistokes at 78°F or an average dry-film thickness of greater than 2.0 mil	N/A	340 (2.8)	N/A
b. coatings with a viscosity, as applied, of less than or equal to 45.6 centistokes at 78°F and an average dry-film thickness of less than or equal to 2.0 mils	N/A	400 (3.32)	N/A

<b>Specialty Coatings for Metal Parts and Products Except for Large Appliance Parts or Products, and Metal Furniture Subject to Section 5.4.1</b>			
	<b>Baked</b>	<b>Air Dried</b>	<b>Proposed</b>
Camouflage	360 (3.0)	420 (3.5)	N/A
Extreme Performance	420 (3.5)	420 (3.5)	N/A
Heat Resistant	360 (3.0)	420 (3.5)	N/A
Extreme High Gloss	360 (3.0)	420 (3.5)	360 (3.0) (baked coating)
High Performance Architectural	420 (3.5)	420 (3.5)	N/A
High Temperature	420 (3.5)	420 (3.5)	N/A
Metallic Topcoat	360 (3.0)	420 (3.5)	N/A
Pretreatment Wash Primer	420 (3.5)	420 (3.5)	N/A
Silicone Release	420 (3.5)	420 (3.5)	N/A
Solar Absorbant	360 (3.0)	420 (3.5)	N/A
Solid Film Lubricant	880 (7.3)	880 (7.3)	N/A

The applicant has proposed coatings that meet the requirements of this Rule as shown in the table above. Therefore, the following conditions will be listed on the permit to ensure compliance:

- VOC content of any coatings as applied, excluding water and exempt compounds, used for any metal parts or product shall not exceed any of the following limits, except as allowed elsewhere in this permit: baked coating 275 g/l (2.3 lb/gal), air-dried coating: 340 g/l (2.8 lb/gal), air-dried dip coating of steel joists with coating viscosity, as applied, of more than 45.6 centistokes at 78 °F or an average dry-film thickness of greater than 2.0 millimeters: 340 g/l (2.8 lb/gal), air-dried dip coating of steel joists with coating viscosity, as applied, of less than or equal to 45.6 centistokes at 78 °F or an average dry-film thickness of less than or equal to 2.0 millimeters: 400 g/l (3.32 lb/gal). [District Rule 4603]
- VOC content of baked specialty coatings as applied, excluding water and exempt compounds, used for metal parts or product shall not exceed any of the following limits: camouflage 360 g/l (3.0 lb/gal), extreme performance: until 12/31/2010 - 420 g/l (3.5 lb/gal), on and after 1/1/2011 – 360 g/l (3.0 lb/gal), heat resistant: 360 g/l (3.0 lb/gal), extreme high gloss: 360 g/l (3.0 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic topcoat: 360 g/l (3.0 lb/gal), pretreatment wash primer: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), solar absorbent: 360 g/l (3.0 lb/gal), and solid film lubricant: 880 g/l (7.3 lb/gal). [District Rule 4603]

- VOC content of air-dried specialty coatings as applied, excluding water and exempt compounds, used for metal parts or product shall not exceed any of the following limits: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), extreme high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic topcoat: 420 g/l (3.5 lb/gal), pretreatment wash primer: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), solar absorbent: 420 g/l (3.5 lb/gal), and solid film lubricant: 880 g/l (7.3 lb/gal). [District Rule 4603]

Section 5.10.1 states that an operator shall not use organic solvents for cleaning operations that exceed the VOC content limits specified in the following table.

<b>Rule 4603 Solvent VOC Limits</b>	
Cleaning Solvent Use	Allowable VOC content less water and exempt compounds g/l (lb/gal)
Product Cleaning During Manufacturing Process or Surface Preparation for Coating Application	25 (0.21)
Repair and Maintenance Cleaning	25 (0.21)
Cleaning of Coating Application Equipment	25 (0.21)

Section 5.10.2 requires an operator to perform all solvent cleaning operations with cleaning material having VOC content of 25 g/L or less, unless such operations are performed within the control of an APCO-approved VOC emission control system that meets the requirements of Section 5.8.

Therefore, the following condition will be listed on the permit to ensure compliance:

- VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal). [District Rule 4603]

Section 5.11 requires that an owner or operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. Therefore, the following condition will be listed on permit to ensure compliance:

- All fresh or spent coatings, adhesives, catalysts, thinners and solvents shall be stored in closed containers. Solvent laden cloth or paper shall be stored and disposed in closed non-absorbent containers. [District Rule 4603]

Section 5.12 requires that a person shall not use or operate any coating application equipment on any metal parts and products subject to the provisions of this rule unless one of the following methods is used:

- Electrostatic application;
- Electrodeposition;
- High-Volume, Low-Pressure (HVLP) spray;
- Flow coating;
- Roll coating;
- Dip coating;
- Brush coating; or
- Continuous coating.

In addition Section 5.12.3.1 requires that High-Volume, Low-Pressure (HVLP) spray equipment shall be operated in accordance with the manufacturer's recommendations. Section 5.6.3.2 requires that for HVLP spray guns manufactured prior to January 1, 1996, the end user shall demonstrate that the gun meets HVLP spray equipment standards. Satisfactory proof will be either in the form of manufacturer's published technical material or by a demonstration using a certified air pressure tip gauge, measuring the air atomizing pressure dynamically at the center of the air cap and at the air horns. Therefore, the following conditions will be listed on the permit to ensure compliance:

- Only HVLP, electrostatic, electrodeposition, flow, roll, dip, brush or continuous coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4603]
- Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4603]

Section 6.1.1 requires that each container or accompanying data sheet of any coating shall display the maximum VOC content of the coating, as applied, and after any thinning recommended by the manufacturer. The VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). Section 6.1.2 requires that each container or accompanying data sheet display a statement of the manufacturer's recommendation regarding thinning of the coating. Therefore, the following condition will be listed on the permit to ensure compliance:

- Each container or accompanying data sheet of any coating shall display the maximum VOC content of the coating, as applied, and after any thinning recommended by the manufacturer. The VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). Each container or accompanying data sheet shall display a statement of the manufacturer's recommendation regarding thinning of the coating. [District Rule 4603, 6.1]

Section 6.2.1 requires that any person subject to Section 5.0 shall comply with the following requirements: Maintain a current list of coatings and solvents in use which contains all of the

coating data necessary to evaluate compliance, including the following information, as applicable:

- mix ratio of components used,
- VOC content and specific chemical constituents of coatings as applied, and
- VOC content and specific chemical constituents of solvents used for surface preparation and cleanup.

Section 6.2.2 requires that the permittee maintain records which include the following information:

- volume coating/solvent mix ratio,
- VOC content(lb/gal) and, for dip coating operations, viscosity (cSt) of coating,
- volume of each coating used (gallons), and
- quantity of cleanup solvent used (gallons).

Section 6.2.4 requires that consistent records may be kept in grams/liter and liters instead of pounds/gallon and gallons. An owner or operator of a stationary source subject to this rule shall maintain such records on a daily basis. An owner or operator that is subject to the exemption of Section 4.2 may maintain usage records of non-compliant coatings on the days that such non-compliant coatings are used.

Section 6.2.5 requires that the operator retain the records specified in Sections 6.2.1 through 6.2.4, as applicable, on site for a period of five years, make the records available on site during normal business hours to the APCO, ARB, or EPA and submit records to the APCO, ARB, or EPA upon request. The following conditions will be listed on the permit to ensure compliance:

- Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios by volume of components added to each coating applied, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent. [District Rule 4603]
- Permittee shall keep the following records for solvent cleaning activities: manufacturer's product data sheet or MSDS of solvents used, and the quantity of cleanup solvents used. [District Rule 4603]
- {1807} Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4603]

For Permit Unit N-1002-4-4, Powder Coating Operation:

Since there are no VOC emissions associated with the powder coating operation, this rule does not apply to this permit unit.

**California Health & Safety Code 42301.6 (School Notice)**

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code §42301.6, a school notice is not required.

**California Environmental Quality Act (CEQA)**

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

**IX. Recommendation**

Compliance with all applicable rules and regulations is expected. Issue Authorities to Construct N-1002-2-9 and N-1002-4-4 subject to the permit conditions on the attached draft Authorities to Construct in Appendix A.

N-1002-2-9:

The modifications to this permit consist solely of changes that will result in the emission reductions necessary to allow Authority to Construct N-1002-4-4 to be issued without offsets being required and without a Major Modification being triggered. Since this ATC will result only in reductions, it is not necessary to require that it be implemented previously to or concurrently with ATC N-1002-4-4.

N-1002-4-4:

The implementation of this ATC will depend on reductions required by ATC N-1002-2-9 being made. Per the applicant, the equipment currently operating under N-1002-2-9 may be sold and removed from the site prior to the required COC notice being completed. If the equipment were removed, ATC N-1002-2-9 could not be implemented. Normally, if emission increases allowed by one ATC depend on emission decreases required by another ATC, simultaneous implementation of the two ATC's is required. In recognition of the possibility that permit unit N-1002-2 will be sold and removed from the site before ATC N-1002-2-9 can be implemented, the following condition will be placed on ATC N-1002-4-4:

Authority to Construct N-1002-2-9 shall be implemented prior to, or simultaneously with this Authority to Construct. As an alternative to the implementation of ATC N-1002-2, Permit to Operate N-1002-2 may be cancelled.

**X. Billing Information**

<b>Annual Permit Fees</b>				
Permit Number	New Fee Schedule	Old Fee Schedule	Fee Description	Annual Fee
N-1002-2-9	3020-02-D	3020-02-D	1.2 MMBtu/hr burner	\$314.00
N-1002-4-4	3020-02-G	3020-02-G	7.3 MMBtu/hr burners	\$815.00

## **Appendixes**

- A: Draft ATCs
- B: Coating and Natural Gas Usage Records
- C: Quarterly Net Emissions Change
- D: BACT Guideline
- E: BACT Analysis
- F: HRA Summary
- G: Current PTOs

# **APPENDIX A**

## **Draft ATCs**

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1002-2-9

**LEGAL OWNER OR OPERATOR:** EXCEL STORAGE PRODUCTS LP

**MAILING ADDRESS:** 213 KELLY ST  
LODI, CA 95240

**LOCATION:** 214 KELLY ST  
LODI, CA 95240

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF A METAL PARTS AND PRODUCTS COATING OPERATION TO LIMIT THE ANNUAL VOC EMISSIONS TO 50,200 LB SUCH THAT THE EQUIPMENT DESCRIPTION BECOMES: METAL PARTS & PRODUCTS COATING OPERATION WITH HVLP SPRAY GUN(S), SPRAY PAINT BOOTH WITH EXHAUST FILTERS AND A 1.2 MMBTU/HR NATURAL GAS-FIRED CURING OVEN.

**CONDITIONS**

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2520] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule] Federally Enforceable Through Title V Permit
3. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
4. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
5. The particulate matter emissions from the stack of the paint spray booth shall not exceed 0.1 gr/scf. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Exhaust fans shall be switched on prior to the start of paint spraying operations. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

**DRAFT**

DAVID WARNER, Director of Permit Services

N-1002-2-9 : Mar 1 2010 3:48PM - SCHONHOM : Joint Inspection NOT Required

7. The exhaust filters shall be properly maintained and shall be in place during the painting operation. [District Rule 4102] Federally Enforceable Through Title V Permit
8. The total VOC emissions rate shall not exceed 276.0 lb/day and 50,200 lb/year. A year for the purposes of this condition is any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The total PM10 emissions rate shall not exceed 97.1 lb/day and 17,690 lb/year. A year for the purposes of this condition is any rolling 12-month period. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The VOC emission rate shall not exceed 15,912 lb during the first quarter, 16,089 lb during the second quarter, 16,266 lb during the third quarter, nor 16,266 lb during the fourth quarter. [District NSR Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
11. Emissions from the natural gas-fired curing oven shall not exceed any of the following: 0.1 lb-NO<sub>x</sub>/MMBtu, 0.00285 lb-SO<sub>x</sub>/MMBtu, 0.0076 lb-PM10/MMBtu, 0.084 lb-CO/MMBtu, and 0.0055 lb-VOC/MMBtu [District Rule 2201] Federally Enforceable Through Title V Permit
12. VOC content the coatings as applied, excluding water and exempt compounds, shall not exceed any of the following, except as allowed elsewhere in this permit: baked coating 275 g/l (2.3 lb/gal), air-dried coating: 340 g/l (2.8 lb/gal), air-dried dip coating of steel joists with coating viscosity, as applied, of more than 45.6 centistokes at 78 °F or an average dry-film thickness of greater than 2.0 millimeters: 340 g/l (2.8 lb/gal), air-dried dip coating of steel joists with coating viscosity, as applied, of less than or equal to 45.6 centistokes at 78 °F or an average dry-film thickness of less than or equal to 2.0 millimeters: 400 g/l (3.32 lb/gal). [District Rule 4603, 5.1; 40 CFR 60 Subpart EE and 40 CFR Part 64] Federally Enforceable Through Title V Permit
13. VOC content of baked specialty coatings as applied, excluding water and exempt compounds, shall not exceed any of the following: camouflage 360 g/l (3.0 lb/gal), extreme performance: 420 g/l (3.5 lb/gal) through 12/31/2010 and 360 g/l (3.0 lb/gal) on and after 1/1/2011, heat resistant: 360 g/l (3.0 lb/gal), extreme high gloss: 360 g/l (3.0 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic topcoat: 360 g/l (3.0 lb/gal), pretreatment coating: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), solar absorbent: 360 g/l (3.0 lb/gal), and solid film lubricant: 880 g/l (7.3 lb/gal). [District Rule 4603, 5.2; 40 CFR 60 Subpart EE and 40 CFR Part 64] Federally Enforceable Through Title V Permit
14. VOC content of air-dried specialty coatings as applied, excluding water and exempt compounds, shall not exceed any of the following: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), extreme high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic topcoat: 420 g/l (3.5 lb/gal), pretreatment coating: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), solar absorbent: 420 g/l (3.5 lb/gal), and solid film lubricant: 880 g/l (7.3 lb/gal). [District Rule 4603, 5.2; 40 CFR 60 Subpart EE and 40 CFR Part 64] Federally Enforceable Through Title V Permit
15. Only HVLP, electrostatic, electrodeposition, flow, roll, dip, brush or continuous coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4603, 5.12 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
16. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4603, 5.12.3] Federally Enforceable Through Title V Permit
17. VOC content of solvents used for product cleaning during manufacturing process or surface preparation for coating application, repair and maintenance cleaning, and cleaning of coating application equipment shall not exceed 25 g/l (0.21 lb/gal). [District Rule 4603] Federally Enforceable Through Title V Permit
18. All fresh or spent coatings, adhesives, catalysts, thinners and solvents shall be stored in closed containers. Solvent laden cloth or paper shall be stored and disposed in closed non-absorbent containers. [District Rule 4603] Federally Enforceable Through Title V Permit
19. Each container or accompanying data sheet of any coating shall display the maximum VOC content of the coating, as applied, and after any thinning recommended by the manufacturer. The VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). Each container or accompanying data sheet shall display a statement of the manufacturer's recommendation regarding thinning of the coating. [District Rule 4603, 6.1] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. VOC content of any coating shall be determined through the use of either product formulation data or analyzed by EPA Method 24 on an annual basis. [District Rule 4603, 6.3; 40 CFR 60 Subpart EE] Federally Enforceable Through Title V Permit
21. The permittee shall maintain a record of the daily VOC and PM10 emissions. [District Rule 2201] Federally Enforceable Through Title V Permit
22. The permittee shall maintain a record of the cumulative annual VOC and PM10 emissions. The record shall be updated at least once during each week that the equipment operates. An annual period, for the purposes of this condition, is any rolling 12-month period. [District Rule 2201]
23. The permittee shall maintain a record of the quarterly VOC emissions from this equipment. The record shall be updated at least once during each week that the equipment operates, [District Rule]
24. The permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios by volume of components added to each coating applied, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent. [District Rule 4603, 6.2; 40 CFR 60 Subpart EE and 40 CFR Part 64] Federally Enforceable Through Title V Permit
25. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the quantity of cleanup solvents used. [District Rule 4603, 6.1 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
26. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rule 4603] Federally Enforceable Through Title V Permit
27. Compliance with permit conditions in the Operating Permit shall be deemed compliance with the following applicable District requirements: Rule 4102 (12/17/92); Rule 4201(12/17/92); Rule 4603 (12/20/01); and 40 CFR 60, Subpart EE. The requirements for District Rule 4603 are more stringent than 40 CFR Part 60, Subpart EE and satisfy all its requirements. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1002-4-4

**LEGAL OWNER OR OPERATOR:** EXCEL STORAGE PRODUCTS LP

**MAILING ADDRESS:** 213 KELLY ST  
LODI, CA 95240

**LOCATION:** 214 KELLY ST  
LODI, CA 95240

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF A POWDER COATING OPERATION TO REMOVE A MANUAL POWDER COATING BOOTH FROM THE EQUIPMENT DESCRIPTION AND DERATE THE 5.4 MMBTU/HR CURING OVEN TO 4.9 MMBTU/HR SUCH THAT THE EQUIPMENT DESCRIPTION BECOMES: CONVEYORIZED METAL PARTS AND PRODUCTS POWDER COATING LINE CONSISTING OF A GBD INDUSTRIES WASH/RINSE BOOTH WITH A PERMIT EXEMPT 1.9 MMBTU/HR NATURAL GAS INDIRECT-FIRED WATER HEATER, A GEMA MODEL DIAMOND POWDER COATING BOOTH WITH AUTOMATED ELECTROSTATIC APPLICATION EQUIPMENT AND DRY CARTRIDGE FILTERS, A 1.9 MMBTU/HR NATURAL GAS DIRECT-FIRED INFRA-RED DRYING OVEN, AND A 5.4 MMBTU/HR (DERATED TO 4.9 MMBTU/HR) GBD NATURAL GAS DIRECT-FIRED INFRA-RED CURING OVEN.

## CONDITIONS

1. Authority to Construct N-1002-2-9 shall be implemented prior to, or simultaneously with this Authority to Construct. As an alternative to the implementation of ATC N-1002-2-9, Permit to Operate N-1002-2 may be cancelled. [District Rule 2201] Federally Enforceable Through Title V Permit
2. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2520] Federally Enforceable Through Title V Permit
3. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule] Federally Enforceable Through Title V Permit
4. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

**DAVID WARNER**, Director of Permit Services

N-1002-4-4: Feb 23 2010 7:54AM - SCHOINHOM : Joint Inspection NOT Required

5. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
6. Visible emissions from the dust collector shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in anyone hour. [District Rule 2201]
7. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit
8. All coating shall be conducted in the booth with dust collector in place and fan(s) operating. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The filter cleaning frequency shall be adjusted to optimize the control efficiency in accordance with the manufacturer's recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Filter cleaning and replacement shall be performed in a manner preventing material entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The drying and curing ovens shall be fired only on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
12. Powder coating throughput shall not exceed 3,000 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. PM10 emissions from this powder coating operation shall not exceed 0.0025 lb/lb of powder throughput. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Powder coating used in this operation shall not contain any VOC's. [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit
15. The maximum heat input for the curing oven shall not exceed 4.9 MMBtu/hr. The maximum heat input shall be maintained by limiting the number of burners installed in the curing oven so that the heat input does not exceed 4.9 MMBtu/hr. [District Rule 4309] Federally Enforceable Through Title V Permit
16. Only electrostatic coating application equipment shall be used, and it shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit
17. Emissions from the natural gas-fired drying and curing ovens shall not exceed the following: 0.1 lb-NO<sub>x</sub>/MMBtu, 0.00285 lb-SO<sub>x</sub>/MMBtu, 0.0076 lb-PM10/MMBtu, 0.084 lb-CO/MMBtu, and 0.0055 lb-VOC/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
18. No solvents with VOC shall be used for clean-up or surface preparation. [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit
19. The permittee shall maintain a record for the 5.4 MMBtu/hr curing oven that includes: the date that burners are installed or removed; the manufacturer, model number, and maximum heat input for each type of burner installed ; the quantity of each type of burner installed; and of the combined heat input of the burners installed. [District Rule 4309]
20. The permittee shall maintain daily records of the quantity, type, and VOC content of powder coatings used. [District Rules 2201, 2520, 9.3.2, and 4603] Federally Enforceable Through Title V Permit
21. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request. [District Rules 2201, 2520, 9.4.2, and 4603] Federally Enforceable Through Title V Permit

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## **APPENDIX B**

### **Coating and Natural Gas Usage Records**

Months

Jan. 2007  
Feb. 2007  
Mar. 2007  
April 2007  
May 2007  
June 2007  
July 2007  
Aug. 2007  
Sept. 2007  
Oct. 2007  
Nov. 2007  
Dec. 2007  
Jan. 2008

THIRMS

22021  
25062  
21,802  
20,658  
21,599  
20,385  
16,082  
6,451  
3,575  
3,509  
2,274  
4,862

6025 *incomplete*

168,280

# DAILY VOC LOG SEP 07

Date	Color	Type	Gal	Voc/Amount	Total
9-5-07	Gray	Air	2	2.50	5xx 5.0
9-6-07	Gray	Air	5	2.50	13xx 12.5
	Green	Bake	40	1.14	46 45.6
	LMT-Red	Bake	3	1.07	3 3.2
	Black	Bake	<u>2</u>	1.19	<u>2</u> 2.3
			45		51 63.6
9-7-07	Orange	Air	4	2.46	10xx 9.8
	Green	Bake	50	1.14	<u>57</u> 57.0
					57 66.8
9-8-07	Green	Bake	50	1.14	57 57.0
	Blue	Bake	15	1.13	17 17.0
	Andersen Grn	Bake	<u>2</u>	1.15	<u>2</u> 2.3
			67		76 76.3
9-10-07	Toy Gray	Bake	20	1.19	24 23.8
	Red	Bake	<u>4</u>	1.07	<u>4</u> 4.3
			24		28 28.1
9-11-07	Gray	Air	4	2.50	10xx 10.0
	Green	Bake	20	1.14	<u>23</u> 22.8
					23 32.8
9-12-07	Gray	Air	2	2.50	5xx 5.0
	Blue	Air	3	2.58	8xx 7.7
	Gray	Bake	85	1.16	<u>99</u> 98.6
					99 111.3
9-14-07	Blue	Air	4	2.58	<u>10xx</u> 10.3

9-15-07	Green	Bake	35	1.14	40	39.9
	Blue	Bake	<u>10</u>	1.13	<u>11</u>	<u>11.3</u>
			45		51	51.2
9-17-07	Gray	Air	3	2.50	<u>8xx</u>	7.5
9-18-07	Blue	Air	5	2.58	<u>13xx</u>	12.9
9-19-07	Gray	Air	5	2.50	13xx	12.5
	Knight white	Bake	5	1.33	7	6.7
	Rudolph Red	Bake	5	1.17	6	5.9
	Black	Bake	<u>5</u>	1.19	<u>6</u>	<u>6.0</u>
			15		19	31.1
9-20-07	Gray	Air	7	2.50	<u>18xx</u>	17.5
9-21-07	Gray	Air	5	2.50	13xx	12.5
	Green	Bake	10	1.14	<u>11</u>	<u>11.4</u>
					11	23.9
9-22-07	Green	Bake	45	1.14	<u>51</u>	51.3
9-24-07	Gray	Air	4	2.50	10xx	10.0
	Blue	Air	2	2.58	5xx	5.2
	HB2	Bake	10	1.15	<u>12</u>	<u>11.5</u>
					12	26.7
9-25-07	Gray	Air	4	2.50	<u>10xx</u>	10.0
9-26-07	Gray	Air	4	2.50	10xx	10.0
	Blue	Air	1	2.58	3xx	2.6
	Orange	Bake	55	1.18	65	64.9
	Lowes Gray	Bake	50	1.17	59	58.5
	Lozier Almond	Bake	<u>9</u>	1.20	<u>11</u>	<u>10.8</u>
			114		135	116.8

9-27-07	Gray	Air	1	2.50	<u>3xx</u>	2.5
9-28-07	Gray	Air	4	2.50	<u>10xx</u>	10.0
9-29-07	Kwal Red	Bake	15	1.14	<u>13</u>	17.1
						<u>802.7</u>
		Binks	69		Binks	177
		Bake	545		Paint Line	626
			<u>614</u>			
3 <sup>rd</sup> Quarter		Bake	2467			

# DAILY VOC LOGOCT-07

Date	Color	Type	Gal	Voc/Amount	Total	
10-01-07	Gray	Air	3	2.50	<u>8xx</u>	7.5
10-3-07	Logo Gray	Air	50	1.14	<u>57</u>	57.0
10-4-07	Yellow	Air	3	2.73	<u>8xx</u>	8.2
10-05-07	Gray	Air	3	2.50	8xx	7.5
	Green	Bake	15	1.14	17	17.1
	And Orange	Bake	3	1.18	4	3.5
	Blue	Bake	5	1.13	6	5.7
	Pan Yellow	Bake	10	1.29	13	12.9
	And White	Bake	<u>15</u>	1.21	<u>18</u>	<u>18.2</u>
			48		58	64.9
10-8-07	Gray	Air	4	2.50	<u>10xx</u>	10.0
10-09-07	Gray	Air	4	2.50	10xx	10.0
	Blue	Air	1	2.58	<u>1xx</u>	<u>2.6</u> 12.6
10-10-07	Gray	Air	4	2.50	10xx	10.0
	Vista Gn	Bake	16	1.16	19	18.6
	And-Or	Bake	<u>15</u>	1.18	<u>18</u>	<u>17.7</u>
			31		37	46.3
10-11-07	Gray	Air	4	2.50	<u>10xx</u>	10.0
10-12-07	Gray	Air	2	2.50	<u>5xx</u>	5.0
10-13-07	Lowes Gray	Bake	5	1.17	6	5.9
	H.B.L.	Bake	50	1.15	58	57.5
	Food Max Beige	Bake	<u>10</u>	1.36	<u>14</u>	<u>13.6</u>
			65		78	77.0
10-15-07	Gray	Air	3	2.50	<u>8xx</u>	7.5
10-16-07	Gray	Air	3	2.50	<u>8xx</u>	7.5

10-17-07	Gray	Air	4	2.50	<u>10xx</u>	10.0
10-18-07	Gray	Air	4	2.50	<u>10xx</u>	10.0
10-19-07	Gray	Air	5	2.50	<u>13xx</u>	12.5
10-20-07	Lowes Gray	Bake	15	1.17	18	17.6
	Navy Blue	Bake	12	1.15	14	13.8
	Black	Bake	3	1.19	4	3.6
	Aquater White	Bake	<u>16</u>	1.33	<u>21</u>	<u>21.3</u>
			46		57	54.3
10-22-07	Gray	Air	3	2.50	<u>8xx</u>	7.5
10-23-07	Gray	Air	1	2.50	3xx	2.5
	Blue	Air	2	2.58	<u>1xx</u>	<u>5.2</u>
					4xx	7.7
10-24-07	Gray	Air	2	2.50	5xx	5.0
	Blue	Air	1	2.58	<u>1xx</u>	<u>2.6</u>
					6xx	7.6
10-25-07	Gray	Air	3	2.50	<u>8xx</u>	7.5
10-26-07	Gray	Air	4	2.50	<u>10xx</u>	10.0
10-27-07	FM Green	Bake	7	1.14	8	8.0
	And Orange	Bake	13	1.18	15	15.3
	Brown	Bake	<u>20</u>	1.15	<u>23</u>	<u>23.0</u>
			40		118	46.3
10-29-07	Gray	Air	4	2.5	<u>10xx</u>	10.0
10-31-07	Orange	Bake	30	1.17	35	35.1
	Gray	Air	3	2.5	<u>8xx</u>	<u>7.5</u>
					35	42.6
		Binks	120	Binks	173	
		Bake	<u>260</u>	Paint Line	440	
			380			<u>541.5</u>

# DAILY VOC LOG NOVEMBER 2007

DATE	COLOR	TYPE	--- Input one or the other ---		VOC/AMOUNT	Total VOC (Air)	Total VOC (Bake)
			GAL of Air	GAL of Bake			
11/1/07	Gray	Air	4		2.5	10	-
11/2/07	Gray	Air	3		2.5	8	-
11/5/07	Gray	Air	2		2.5	5	-
11/6/07	Gray	Air	2		2.5	5	-
11/7/07	Gray	Air	2		2.5	5	-
11/8/07	Gray	Air	3		2.5	8	-
11/8/07	LMT Blue	Bake		15	1.15	-	17
11/9/07	Gray	Air	3		2.5	8	-
11/10/07	Green	Bake		30	1.14	-	34
11/10/07	LMT Gray	Bake		10	1.16	-	12
11/10/07	WNB-Blue	Bake		15	1.14	-	17
11/10/07	Andersen Yellow	Bake		5	1.29	-	6
11/10/07	Fred Meyer Green	Bake		10	1.14	-	11
11/12/07	Gray	Air	4		2.5	10	-
11/13/07	Gray	Air	3		2.5	8	-
11/13/07	Green	Bake		15	1.14	-	17
11/14/07	Gray	Air	6		2.5	15	-
11/15/07	Gray	Air	8		2.5	20	-
11/16/07	Gray	Bake		2	1.16	-	2
11/16/07	HB2-Blue	Bake		20	1.15	-	23
11/16/07	Andersen Yellow	Bake		1	1.29	-	1
11/16/07	Ford White	Bake		10	1.3	-	13
11/19/07	Gray	Air	7		2.5	18	-
11/20/07	Gray	Air	7		2.5	18	-
11/21/07	Gray	Air	6		2.5	15	-
11/26/07	Gray	Air	6		2.5	15	-
11/27/07	Gray	Air	6		2.5	15	-
11/28/07	Gray	Air	6		2.5	15	-
11/28/07	Fred Meyer Green	Bake		15	1.14	-	17
11/28/07	Andersen Orange	Bake		40	1.18	-	47
11/28/07	R.U.R.	Bake		10	1.17	-	12
11/28/07	Knight White	Bake		8	1.33	-	11
11/28/07	Platinum	Bake		30	1.18	-	35
11/28/07	L.M.T. Red	Bake		25	1.08	-	27
11/29/07	L.M.T. Gray	Bake		35	1.16	-	41
11/30/07	Gray	Air	5		2.5	13	-

**\$ 7,598.00**

\$

1,826.00

83.00

296.00

\$

379

5,772.00

208

344

552 lbs

# DAILY VOC LOG DECEMBER 2007

DATE	COLOR	TYPE	--- Input one or the other ---		VOC/AMOUNT	Total VOC (Air)	Total VOC (Bake)
			GAL of Air	GAL of Bake			
12/1/07	Gray	Bake		3	1.16	-	3
12/1/07	LMT Blue	Bake		20	1.13	-	23
12/1/07	LMT Red	Bake		15	1.07	-	16
12/3/07	Gray	Air	5		2.5	13	-
12/4/07	Green	Air	20		1.14	23	-
12/5/07	Gray	Air	4		2.5	10	-
12/6/07	LMT Red	Bake		40	1.07	-	43
12/7/07	GREEN	Bake		10	1.14	-	11
12/7/07	LMT Blue	Bake		2	1.13	-	2
12/8/07	FERD M. GREEN	Bake		7	1.14	-	8
12/8/07	AND ORANGE	Bake		30	1.18	-	35
12/8/07	KWAL RED	Bake		15	1.14	-	17
12/10/07	Green	Bake		25	1.14	-	29
12/11/07	AND ORANGE	Bake		15	1.18	-	18
12/11/07	LMT YELLOW	Bake		7	1.29	-	9
12/12/07	Gray	Air	2		2.5	5	-
12/13/07	Gray	Bake		15	1.16	-	17
12/14/07	Gray	Air	3		2.5	8	-
12/14/07	LMT Blue	Bake		25	1.13	-	28
12/14/07	AND YELLOW	Bake		10	1.29	-	13
12/17/07	Gray	Air	5		2.5	13	-
12/19/07	Orange	Bake		10	1.17	-	12
12/19/07	HB2 Blue	Bake		25	1.15	-	29
12/19/07	And-Blue	Bake		2	1.11	-	2
12/27/07	Gray	Air	5		2.5	13	-
12/27/07	Yellow Ribbon	Bake		30	1.2	-	36
12/28/07	Gray	Air	4		2.5	10	-
12/30/07	Navy Blue	Bake		65	1.15	-	75
12/30/07	Lozier Almond	Bake		9	1.2	-	11
12/30/07	LMT YELLOW	Bake		3	1.29	-	4

\$ 8,524.50	\$	1,056.00	48.00	383.00	\$	7,468.50	93	441
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431

534.50

Month	Therms Wet	Therms Powder	Gal of Air	Gal of Bake	LBS Powder	PM-10 Gas/Wet	Total VOC Air	Total VOC Bake
1/31/2008	6801	23,836	5	506	511	17474	13	629
2/28/2008	4814	21,920	62	382	449	15402	156	450
3/31/2008	4830	26,615	68	610	678	17310	170	727
4/30/2008	2469	25,456	11	312	323	22283	28	373
5/31/2008	1899	20,867	10	138	148	20853	25	164
6/30/2008	656	16,455		61		19136		72
7/31/2008	1337	11,871		59		14924		69
8/31/2008	1328	8,472	2	158	160	5777	5	183
9/30/2008	283	16,114	3	130	133	9409	8	152
10/31/2008	439	15,868		22		12523		26
11/30/2008	730	9,563		22		5144		26
12/31/2008	1580	11,670				7852		
Totals	27166	208,707	161.00	2400.00		168087	405	2871

3276

Month	Therms Wet	Therms Powder	Gal of Air	Gal of Bake	LBS Powder	PM-10 Gas/Wet	Total VOC Air	Total VOC Bake
1/31/2009	1633	12,617	40	38 28	5,482	10.7391	109	44 153
2/28/2009	753	13,063	0	0	7,734			
3/31/2009		9,832	15	0	6,661	4.2464	38	
4/30/2009		11,676			7,407			
5/31/2009		14,187			11,159			
6/30/2009		7,312			5,561			
7/31/2009		9,252			5,419			
8/31/2009								
9/30/2009								
10/31/2009								
11/30/2009								
12/31/2009								
Totals	2386	77,939	55.00	38.00	49423.00	14.99	147	44

**PM 10 Emissions for August, 2009  
Powder Line**

Date	Gas Therms	Gas PM 10	Pounds Powder	Powder PM 10	Hours Painted	Total PM 10
8/1/2009			<b>Saturday No Painting</b>			
8/2/2009			<b>Sunday No Painting</b>			
8/3/2009	334.2075	0.253998	135	0.3375	1.75	0.591498
8/4/2009	40.51	0.030788	<b>No Painting</b>			
8/5/2009	729.18	0.554177	517	1.2925	7	1.846677
8/6/2009	627.905	0.477208	542	1.355	5.75	1.832208
8/7/2009	668.415	0.507995	650	1.625	7	2.132995
8/8/2009			<b>Saturday No Painting</b>			
8/9/2009			<b>Sunday No Painting</b>			
8/10/2009			<b>No Painting</b>			
8/11/2009			<b>No Painting</b>			
8/12/2009			650	1.625	6	1.625
8/13/2009			466	1.165	5.25	1.165
8/14/2009			<b>No Painting</b>			
8/15/2009			<b>Saturday No Painting</b>			
8/16/2009			<b>Sunday No Painting</b>			
8/17/2009			<b>No Painting</b>			
8/18/2009			446	1.115	4	1.115
8/19/2009			580	1.45	5.5	1.45
8/20/2009			700	1.75	5	1.75
8/21/2009			316	0.79	4.5	0.79
8/22/2009						
8/23/2009						
8/24/2009			339	0.8475	4.25	0.8475
8/25/2009			331	0.825	3	0.825
8/26/2009			657	1.6425	4.5	1.6425
8/27/2009			757	1.8925	8	1.8925
8/28/2009			<b>Inventory</b>			
8/29/2009			<b>Saturday No Painting</b>			
8/30/2009			<b>Sunday No Painting</b>			
8/31/2009			<b>No Painting</b>			
<b>Totals</b>	<b>2400.2175</b>	<b>1.824166</b>	<b>7086</b>	<b>17.7125</b>	<b>71.5</b>	<b>19.536666</b>

## **APPENDIX C**

### **Quarterly Net Emissions Change**

### Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

$$\text{QNEC} = (\text{PE2} - \text{PE1}) \div (4 \text{ qtr/yr})$$

where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post-Project Potential to Emit for each emissions unit, lb/yr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/yr.

#### N-1002-2, Metal Parts and Products Liquid Coating Operation:

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	NEC (lb/qtr)
NO <sub>x</sub>	1,059	1,059	0
SO <sub>x</sub>	37	37	0
PM <sub>10</sub>	17,690	22,727	-1,259.25
CO	876	876	0
VOC	50,200	64,533	-3583.25

#### N-1002-4, Metal Parts and Products Powder Coating Operation:

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	NEC (lb/qtr)
NO <sub>x</sub>	6,424	6,424	0
SO <sub>x</sub>	183	183	0
PM <sub>10</sub>	3,213	1,461	438
CO	5,366	5,366	0
VOC	366	366	0

## **APPENDIX D**

### **BACT Guideline**

Per » B A C T » Bact Guideline.asp?category Level1=4&category Level2=3&category Level3=2&last Update=12 » 9 :

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[Details Page](#)

**Best Available Control Technology (BACT ) Guideline 4.3.2**  
**Last Update: 12/9/1997**

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**Metal Parts and Products Coating - Heat Dried**

<b>Pollutant</b>	<b>Achieved in Practice or in the SIP</b>	<b>Technologically Feasible</b>	<b>Alternate Basic Equipment</b>
PM10	Enclosed paint booth with dry filters and use of HVLP gun		
VOC	HVLP guns, the use of an enclosed gun cleaner & coatings compliant with District Rule 4603	1. Thermal oxidation 2. Catalytic oxidation 3. Carbon adsorption 4. The use of an enclosed gun cleaner & low-VOC coatings (2.1 lb VOC/gal as applied)	Electrostatic Application

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

**This is a Summary Page for this Class of Source - Permit Specific BACT Determinations on Details Page.**

San Joaquin Valley  
Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 4.3.7\***

Last Update: 10/30/2000

**Powder Coating Operation = or >1.5 MMBtu/hr**

Pollutant	Achieved In Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
CO	Natural gas fired fusing oven		
NOx	Natural gas fired fusing oven		
PM10	Enclosed booth vented to 99% effective control device (cyclone vented to a filter; dual filter system) or equal, and Natural gas fired fusing oven		
SOx	Natural gas fired fusing oven		
VOC	Low-VOC Coating (< 1.5% VOC by weight) and Natural gas fired fusing oven	1. Thermal or catalytic incineration 2. Carbon Adsorption	

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

**\*This is a Summary Page for this Class of Source - Permit Specific BACT Determinations on Next Page(s)**

## **APPENDIX E**

### **Top Down BACT Analysis**

# Top Down BACT Analysis for the Powder Coating Operation

## 1. BACT Analysis for PM<sub>10</sub> Emissions:

### a. Step 1 - Identify all control technologies

The SJVUAPCD BACT Clearinghouse Guideline 4.3.7, 3<sup>rd</sup> Quarter 2009, identifies achieved in practice BACT for PM<sub>10</sub> emissions from a powder coating operation with curing oven  $\geq 1.5$  MMBtu/hr as follows:

- 1) Enclosed booth vented to 99% effective control device (cyclone vented to a filter; duel filter system) or equal, and natural gas fired fusing oven. (achieved in practice)

No technologically feasible alternatives or control alternatives identified as alternate basic equipment for this class and category of source are listed.

### b. Step 2 - Eliminate technologically infeasible options

There are no technologically infeasible options to eliminate from step 1.

### c. Step 3 - Rank remaining options by control effectiveness

- 1) Enclosed booth vented to 99% effective control device (cyclone vented to a filter; duel filter system) or equal, and natural gas fired fusing oven. (achieved in practice)

### d. Step 4 - Cost Effectiveness Analysis

The only control listed in step 4 is achieved in practice. Therefore, per SJVUAPCD BACT policy, a cost effectiveness analysis is not required.

### e. Step 5 - Select BACT

BACT for PM<sub>10</sub> emissions from this powder coating operation is having an enclosed booth vented to 99% effective control device (cyclone vented to a filter; duel filter system) or equal, and natural gas fired fusing oven. The applicant operates a powder coating operation with an enclosed booth vented to 99% effective control device, and uses a natural gas fired curing oven. Therefore, BACT for PM<sub>10</sub> emissions is satisfied.

To enforce the 99% control requirement, the visible emissions from the dust collector will be limited to 5% for a period or periods not exceeding 3 minutes per hour, as required by District policy SSP 1005.

## **APPENDIX F**

### **HRA Summary**

## San Joaquin Valley Air Pollution Control District Risk Management Review

To: John Fowler – Permit Services  
 From: Yu Vu – Technical Services  
 Date: January 6, 2010  
 Facility Name: Excel Storage Products  
 Location: 214 Kelly St., Lodi, CA 95240  
 Application #(s): N-1002-2-9 and -4-4  
 Project #: N-1093677

### A. RMR SUMMARY

RMR Summary				
Categories	Motor Vehicle Coating Operation (Unit 2-9)	Powder Coating Operation (Unit 4-4)	Project Totals	Facility Totals
<b>Prioritization Score</b>	0.00	0.01	0.01	0.01
<b>Acute Hazard Index</b>	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>
<b>Chronic Hazard Index</b>	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>
<b>Maximum Individual Cancer Risk (10<sup>-6</sup>)</b>	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>	N/A <sup>1</sup>
<b>T-BACT Required?</b>	No	No		
<b>Special Permit Conditions?</b>	No	No		

<sup>1</sup> The prioritization score for this project is below the District significance threshold (1.0); therefore no further analysis was needed.

### Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Units # 2-9 and 4-4

No special conditions are required.

## B. RMR REPORT

### I. Project Description

Technical Services received a request on December 28, 2009, to perform a Risk Management Review for proposed modifications to a motor vehicle and powder coating operation. The modifications consisted of:

- 1) Increasing the powder coating usage from 1,000 lb/day to 3,000 lb/day (N-1009-4-4);
- 2) Derating the NG-fired curing oven from 5.4 MMbtu/hr to 4.9 MMbtu/hr (N-1009-4-4); and
- 3) Limiting the annual VOC emissions from permit unit N-1009-2-9 to 50,200 lb/yr from 64,533 lb/yr.

### II. Analysis

The limiting of VOC emissions for unit N-1009-2-9 results in a decrease in emissions and therefore is not contributing to any increase in risk so no further analysis was necessary.

Technical Services reviewed MSDS sheets from the powder coating products being used for unit N-1002-4-4. It was determined that no hazardous air pollutants are present in any of the products being used. Therefore, no prioritization was required or performed, and the effective prioritization score for this unit is considered to be 0.00. No further analysis was necessary.

Toxic emissions for the curing oven in unit N-1009-4-4 were calculated using Ventura County's emission factors for external combustion sources (NG <10 MMbtu/hr). In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905, March 2, 2001), risks from the proposed unit's toxic emissions were prioritized using the procedure in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEARTs database. The prioritization score for this proposed unit was less than 1.0 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

Analysis Parameters Unit 2-9			
NG Consumption (MMscf/hr)	0.0049	Max Hours per Year	8760
Closest Receptor (m)	50.3		

### III. Conclusion

The prioritization score is less than 1.0. In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on page 1 of this report must be included for this proposed unit.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

**Attachments:**

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Toxic emissions summary
- D. Prioritization score

## **APPENDIX G**

### **Current PTOs**

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1002-2-5

**EXPIRATION DATE:** 05/31/2007

**EQUIPMENT DESCRIPTION:**

METAL PARTS & PRODUCTS COATING OPERATION WITH HVLP SPRAY GUN(S), SPRAY PAINT BOOTH WITH EXHAUST AND SPRAY GUN CLEANER AND 1.2 MMBTU/HR NATURAL GAS-FIRED CURING OVEN

## PERMIT UNIT REQUIREMENTS

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1. The particulate matter emissions from the stack of the paint spray booth shall not exceed 0.1 gr/scf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Exhaust fans shall be switched on prior to the start of paint spraying operations. [District Rule 4102]
3. The exhaust filters shall be properly maintained and shall be in place during the painting operation. [District Rule 4102]
4. VOC content of any coatings as applied, excluding water and exempt compounds, used for any metal parts or product shall not exceed any of the following limits, except as allowed elsewhere in this permit: baked coating 275 g/l (2.3 lb/gal), air-dried coating: 340 g/l (2.8 lb/gal), air-dried dip coating of steel joists with coating viscosity, as applied, of more than 45.6 centistokes at 78 °F or an average dry-film thickness of greater than 2.0 millimeters: 340 g/l (2.8 lb/gal), air-dried dip coating of steel joists with coating viscosity, as applied, of less than or equal to 45.6 centistokes at 78 °F or an average dry-film thickness of less than or equal to 2.0 millimeters: 400 g/l (3.32 lb/gal). [District Rule 4603, 5.1; 40 CFR 60 Subpart EE and 40 CFR Part 64] Federally Enforceable Through Title V Permit
5. VOC content of baked specialty coatings as applied, excluding water and exempt compounds, used for metal parts or product shall not exceed any of the following limits: camouflage 360 g/l (3.0 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 360 g/l (3.0 lb/gal), high gloss: 360 g/l (3.0 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic topcoat: 360 g/l (3.0 lb/gal), pretreatment wash primer: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), solar absorbant: 360 g/l (3.0 lb/gal), and solid film lubricant: 880 g/l (7.3 lb/gal). [District Rule 4603, 5.2; 40 CFR 60 Subpart EE and 40 CFR Part 64] Federally Enforceable Through Title V Permit
6. VOC content of air-dried specialty coatings as applied, excluding water and exempt compounds, used for metal parts or product shall not exceed any of the following limits: camouflage 420 g/l (3.5 lb/gal), extreme performance: 420 g/l (3.5 lb/gal), heat resistant: 420 g/l (3.5 lb/gal), high gloss: 420 g/l (3.5 lb/gal), high performance architectural: 420 g/l (3.5 lb/gal), high temperature: 420 g/l (3.5 lb/gal), metallic topcoat: 420 g/l (3.5 lb/gal), pretreatment wash primer: 420 g/l (3.5 lb/gal), silicone release: 420 g/l (3.5 lb/gal), solar absorbant: 420 g/l (3.5 lb/gal), and solid film lubricant: 880 g/l (7.3 lb/gal). [District Rule 4603, 5.2; 40 CFR 60 Subpart EE and 40 CFR Part 64] Federally Enforceable Through Title V Permit
7. Only HVLP, electrostatic, electrodeposition, flow, roll, dip, brush or continuous coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rule 4603, 5.6 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
8. Permittee shall demonstrate that HVLP guns manufactured prior to 1/1/96 operate between 0.1 and 10 psig air atomizing pressure, by manufacturer's published technical material or by use of a certified air pressure tip gauge. [District Rule 4603, 5.6.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

9. Effective November, 15, 2003, cleaning activities that use solvents with a VOC content greater than 50 g/l (0.42 lb/gallon) shall be performed by one or more of the following methods: wipe cleaning; application of solvent from hand-held spray bottles from which solvents are dispensed without a propellant-induced force; non-atomized solvent flow method in which the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; or solvent flushing method in which the cleaning solvent is discharged into a container that is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure, or by pumping. [District Rule 4603, 5.5.6 and 5.5.7 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
10. Permittee shall not use materials with a VOC content greater than 50 g/l (0.42 lb/gallon) for spray equipment clean-up unless an enclosed system or equipment proven to be equally effective is used for cleaning. [District Rule 4603, 5.5.6 and 5.5.9 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
11. Until 11/14/03, VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 70 g/l (0.58 lb/gal), repair and maintenance cleaning (except, until June 30, 2005, cleaning of ultraviolet lamps used for the curing of ultraviolet coatings): 50 g/l (0.42 lb/gal), and cleaning of coating application equipment: 950 g/l (7.9 lb/gal) and solvent vapor pressure of 35 mm Hg at standard conditions. [District Rule 4603, 5.5.2 and 5.5.4 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
12. Effective 11/15/03, VOC content of solvents used shall not exceed any of the following limits: product cleaning during manufacturing process or surface preparation for coating application: 50 g/l (0.42 lb/gal), repair and maintenance cleaning (except, until June 30, 2005, cleaning of ultraviolet lamps used for the curing of ultraviolet coatings): 50 g/l (0.42 lb/gal), and cleaning of coating application equipment: 550 g/l (4.6 lb/gal). [District Rule 4603, 5.5.3 and 5.5.4 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
13. An owner or operator shall store or dispose of fresh or spent solvents, waste solvent cleaning materials such as cloth, paper, etc., coatings, adhesives, catalysts, and thinners in closed, non-absorbent and non-leaking containers. The containers shall remain closed at all times except when depositing or removing the contents of the containers or when the container is empty. [District Rule 4603, 5.5.10] Federally Enforceable Through Title V Permit
14. Permittee shall maintain daily records of the following: quantity and type of coatings and solvents used, mix ratios of volume of components added to each coating, volume of coatings applied, VOC content of each coating as applied, and VOC content of each solvent. [District Rule 4603, 6.2; 40 CFR 60 Subpart EE and 40 CFR Part 64] Federally Enforceable Through Title V Permit
15. Permittee shall keep the following records for solvent cleaning activities: manufacturers product data sheet or MSDS of solvents used, VOC content of solvents in g/l or lb/gal, and the type of cleaning activity for which each solvent is used. [District Rule 4603, 6.1 and 40 CFR Part 64] Federally Enforceable Through Title V Permit
16. Each container or accompanying data sheet of any coating shall display the maximum VOC content of the coating, as applied, and after any thinning recommended by the manufacturer. The VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). Each container or accompanying data sheet shall display a statement of the manufacturer's recommendation regarding thinning of the coating. [District Rule 4603, 6.1] Federally Enforceable Through Title V Permit
17. VOC content of any coating shall be determined through the use of either product formulation data or analyzed by EPA Method 24 on an annual basis. [District Rule 4603, 6.3; 40 CFR 60 Subpart EE] Federally Enforceable Through Title V Permit
18. The VOC emission rate shall not exceed 276.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
19. The VOC emission rate shall not exceed 15,912 lb during the first quarter, 16,089 lb during the second quarter, 16,266 lb during the third quarter, nor 16,266 lb during the fourth quarter. [District NSR Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

20. Compliance with permit conditions in the Operating Permit shall be deemed compliance with the following applicable District requirements: Rule 4102 (12/17/92); Rule 4201(12/17/92); Rule 4603 (12/20/01); and 40 CFR 60, Subpart EE. The requirements for District Rule 4603 are more stringent than 40 CFR Part 60, Subpart EE and satisfy all its requirements. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1002-4-1

EXPIRATION DATE: 05/31/2007

## EQUIPMENT DESCRIPTION:

METAL PARTS AND PRODUCTS CONVEYORIZED-LINE POWDER COATING OPERATION CONSISTING OF A GBD INDUSTRIES WASH/RINSE BOOTH WITH A PERMIT EXEMPT 1.9 MMBTU/HR NATURAL GAS INDIRECT-FIRED WATER HEATER, A 1.9 MMBTU/HR POLLUTION CONTROL PRODUCTS MODEL PRC-150 NATURAL GAS DIRECT-FIRED INFRA-RED DRYING OVEN, ONE ITW GEMA POWDER COATING BOOTH WITH MANUAL ELECTROSTATIC GUNS, AND ONE GEMA MODEL DIAMOND, POWDER COATING BOOTH WITH AUTOMATED GUNS, AND A 5.4 MMBTU/HR GED NATURAL GAS DIRECT-FIRED INFRA-RED CURING OVEN. BOTH POWDER COATING BOOTHS ARE SERVED BY DRY CARTRIDGE FILTERS

## PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit
2. All coating shall be conducted in the booth (automated or manual) with dust collector in place, fan(s) operating. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Only electrostatic coating application equipment shall be used, and the application equipment shall be operated in accordance with the manufacturer's recommendations. [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit
4. The filter cleaning frequency shall be adjusted to optimize the control efficiency in accordance with the manufacturer's recommendations. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Filter cleaning and replacement shall be performed in a manner preventing material entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The drying and curing ovens shall be fired only on PUC-regulated natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Emissions from the natural gas-fired drying and curing ovens shall not exceed either 0.1 lb-NO<sub>x</sub>/MMBtu or 0.084 lb-CO/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Powder coating usage in the automated coating booth shall not exceed 1,000 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Powder coating usage in the manual coating booth shall not exceed 60 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Powder coating used in this operation shall not contain any VOCs. [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit
11. PM<sub>10</sub> emissions from this powder coating operation shall not exceed 0.0025 lb/lb of powder used. [District Rule 2201] Federally Enforceable Through Title V Permit
12. No solvents with VOC shall be used for clean up or surface preparation. [District Rules 2201 and 4603] Federally Enforceable Through Title V Permit
13. Permittee shall maintain daily records of the quantity, type, and VOC content of powder coatings used. [District Rules 2201, 2520, 9.3.2, and 4603] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

14. Records shall be retained on-site for a minimum of five years and made available for District inspection upon request.  
[District Rules 2201, 2520, 9.4.2, and 4603] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.