



MAY 06 2013

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

Re: **Proposed Authority to Construct / Certificate of Conformity (Minor Mod)**  
**District Facility # C-447**  
**Project # C-1130919**

Dear Mr. Rios:

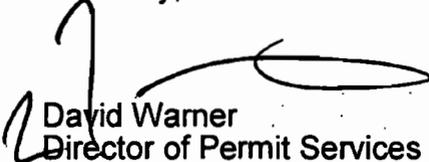
Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for E & J Gallo Winery, located at 5610 East Olive Ave in Fresno, CA, which has been issued a Title V permit. E & J Gallo Winery is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. This ATC is being issued for the installation of a new Diatomaceous earth material receiving and storage operation.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authority to Construct # C-447-328-0 with Certificate of Conformity. After demonstrating compliance with the Authority 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. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

  
David Warner  
Director of Permit Services

Enclosures  
cc: Thom Maslowski, Permit Services

**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  
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**MAY 06 2013**

Phillip Castro  
E & J Gallo Winery  
5610 East Olive Ave  
Fresno, CA 93727

**Re: Proposed Authority to Construct / Certificate of Conformity (Minor Mod)  
District Facility # C-447  
Project # C-1130919**

Dear Mr. Castro:

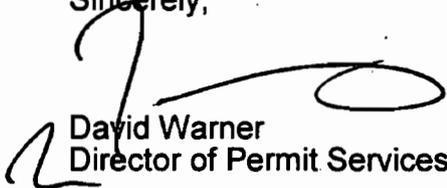
Enclosed for your review is the District's analysis of your application for Authority to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. This ATC is being issued for the installation of a new Diatomaceous earth material receiving and storage operation.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority 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. Jim Swaney, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,



David Warner  
Director of Permit Services

Enclosures  
cc: Thom Maslowski, Permit Services

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**San Joaquin Valley Air Pollution Control District  
Authority to Construct  
Application Review  
Diatomaceous Earth Material Receiving and Storage Operation**

Facility Name:	E & J Gallo Winery	Date:	April 30, 2013
Mailing Address:	5610 East Olive Avenue Fresno, CA 93727	Engineer:	Thom Maslowski
Contact Person:	Phillip Castro	Lead Engineer:	Joven Refuerzo
Telephone:	(209) 341-5568		
Application #(s):	C-447-328-0		
Project #:	C-1130919		
Deemed Complete:	April 9, 2013		

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**I. PROPOSAL:**

E & J Gallo Winery is requesting an Authority to Construct (ATC) permit to install a new Diatomaceous Earth (DE) material receiving and storage operation.

E & J Gallo Winery received their Title V Permit on December 12, 1997. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. E & J Gallo Winery must apply to administratively amend their Title V Operating Permit to include the requirements of the ATCs issued with this project.

**II. APPLICABLE RULES:**

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)  
Rule 2410 Prevention of Significant Deterioration (6/16/11)  
Rule 2520 Federally Mandated Operating Permits (6/21/01)  
Rule 4101 Visible Emissions (02/17/05)  
Rule 4102 Nuisance (12/17/92)  
Rule 4201 Particulate Matter Concentration (12/17/92)  
Rule 4202 Particulate Matter – Emission Rate (12/17/92)  
CH&SC 41700 Health Risk Assessment  
CH&SC 42301.6 School Notice  
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387:  
CEQA Guidelines

### III. PROJECT LOCATION:

This facility is located at 5610 East Olive Avenue in Fresno, California. There is no K-12 school within 1,000 feet of this address. Therefore, this project is not subject to the requirements of California Health and Safety Code 42301.6.

### IV. PROCESS DESCRIPTION:

The silo is used to store and dispense the Diatomaceous Earth (DE) to the Rotary Vacuum Filters to act as a filter aid to filter solids from the flotation units and wine lees. When the level in the silo is at 50% a truck refills the silo pneumatically using the blower on the truck, the dust from the transfer is collected with a bin vent filter located on top of the silo and the DE is dropped into the silo. The DE is transferred from the silo using sealed screw conveyor is discharged into a tank full of water, the tank has a large volume (200 GPM) of water circulating through it so there is minimal chance of any fugitive emissions. The DE is then pumped into a water bath, where a rotary vacuum filter gets the slurry onto the filter, the DE is retained on the filter and the water is circulated back to the slurry tank.

### V. EQUIPMENT LISTING:

#### Equipment Description:

C-447-328-0 DIATOMACEOUS EARTH RECEIVING AND STORAGE OPERATION WITH A 6,000 CUBIC FEET STORAGE SILO SERVED BY A BIN VENT FILTER SYSTEM

### VI. EMISSION CONTROL TECHNOLOGY EVALUATION:

To ensure the proper operation of the proposed bin vent filter system, the visible emissions (VE) will be limited to less than 5% opacity. This VE limit is in accordance with the guidelines provided in District Policy SSP 1005. The following condition will be placed on the permit:

- Visible emissions from the bin vent filter serving the storage silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201]

The bin vent filter system is a passive filter in which a forced air fan is not used to pass air through the filter media. The filter primarily operates only for a brief period during filling of the silo and filtering only occurs when there is displaced air resulting from the filling operation.

FYI-125 (1/12/07) requires the permittee to operate the bin within the manufacturer recommended pressure range. Thus, the following conditions will be placed on the permit:

- Replacement bags numbering at least 10% of the total number of bags shall be maintained on the premises. [District Rule 2201]
- Records of all maintenance of the bin vent filter system, including all change outs of bags or filter media, shall be maintained. These records shall include identification of the equipment, date of inspection, any corrective action taken, and identification of the personnel performing the inspection. [District Rules 2201 and 2520, 9.4.2]

## VII. CALCULATIONS:

### A. Assumptions:

- Particulate Matter (PM) is the only pollutant of concern related to this project.
- Operation of this equipment is 365 days/year
- Daily Throughput = 25 tons-DE/day (proposed by applicant)

### B. Emission Factors (EFs):

According to AP-42 Table 11.12-2 (6/06), 0.72 lb-PM/ton of material will be emitted from pneumatic loading of cement into a silo. This emission factor is adjusted by multiplying the ratio of Diatomaceous Earth density and cement density.

Per applicant, the density of Diatomaceous Earth is 10.0 lb/ft<sup>3</sup>. According to [www.powderandbulk.com](http://www.powderandbulk.com), cement density is 85.0 lb/ft<sup>3</sup>.

$$\begin{aligned} &= (0.72 \text{ lb-PM/ton of material})(10 \text{ lb/ft}^3 + 85 \text{ lb/ft}^3) \\ &= 0.085 \text{ lb-PM/ton of material} \end{aligned}$$

Bin vent filter is expected to control 99% of particulate matter emissions. It is assumed here that all the particulates passed through the filter are less than or equal to 10 microns in size. Therefore,

$$\begin{aligned} \text{EF2} &= (0.085 \text{ lb-PM/ton of material})(1-0.99)(\text{lb-PM}_{10}/\text{lb-PM}) \\ &= 0.00085 \text{ lb-PM}_{10}/\text{ton of material} \end{aligned}$$

### C. Calculations:

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

Since this is a new emissions unit, PE1 = 0 for all pollutants.

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

$$\begin{aligned} \text{Daily PE2} &= 0.00085 \text{ lb-PM}_{10}/\text{ton of material} \times 25 \text{ tons-DE/day} \\ &= 0.02 \text{ lb-PM}_{10}/\text{day} \\ &= 0.0 \text{ lb-PM}_{10}/\text{day} \rightarrow 0 \text{ lb-PM}_{10}/\text{day}^* \end{aligned}$$

$$\begin{aligned}\text{Annual PE2} &= 0.00085 \text{ lb-PM}_{10}/\text{ton of material} \times 25 \text{ tons-DE/day} \times 365 \text{ days/year} \\ &= 8 \text{ lb-PM}_{10}/\text{year} \rightarrow 0 \text{ lb-PM}_{10}/\text{year}^*\end{aligned}$$

\* Per District Policy APR 1130, District policy is to consider an IPE of less than 0.5 lb/day to be rounded to zero for the purposes of triggering NSR requirements and therefore the requirements are not triggered. However, to minimize rounding errors, DELs, SSPE, PE and all other associated figures will be reflected in the EE and the permits without setting a daily increase in emissions of less than 0.5 lb/day to zero.

### **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.

$$\text{SSPE1}_{\text{Total}} = \text{SSPE1}_{\text{Permit Unit}} + \text{Total}_{\text{ERC}}$$

<b>Stationary Source Potential to Emit [SSPE1] (lb/year)</b>					
	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>CO</b>	<b>VOC</b>
C-447-1-12 <sup>1</sup>	5,366	300	1195	40,191	1,358
C-447-2-13 <sup>1</sup>	12,264	3,541	2,993	184,106	3,358
C-447-3-12 <sup>1</sup>	5,220	3,979	1,168	73,073	1,351
C-447-4-10 <sup>1</sup>	5,220	1,424	1,168	73,073	1,351
C-447-5-3 <sup>4</sup>	0	0	69	0	0
C-447-6-3 <sup>4</sup>	0	0	69	0	0
C-447-8-3 <sup>2</sup>	0	0	69	0	0
C-447-9-3 <sup>3</sup>	0	0	0	0	380
C-447-10-3 <sup>5</sup>	0	0	5,142	0	0
C-447-11-3 <sup>5</sup>	0	0	5,142	0	0
C-447-12-3 <sup>5</sup>	0	0	5,142	0	0
C-447-13-3 <sup>5</sup>	0	0	5,142	0	0
C-447-14-3 <sup>5</sup>	0	0	5,142	0	0
C-447-16-3 <sup>2</sup>	0	0	2,525	0	11,020
C-447-17-1 <sup>1</sup>	0	0	12,702	0	0
C-447-18-1 <sup>1</sup>	0	0	1,460	0	0
C-447-19-1 <sup>1</sup>	0	0	8,760	0	0
C-447-20-1 <sup>1</sup>	0	0	8,760	0	0
C-447-21-1 <sup>1</sup>	0	0	0	0	1,136
C-447-23-1 <sup>1</sup>	2,066	50	336	698	233
C-447-226-9 <sup>6</sup>	6,308	1,262	841	31,539	210
C-447-230-2 <sup>1</sup>	0	0	745	0	0
C-447-233-2 <sup>1</sup>	0	0	2	0	0
C-447-268-1 <sup>1</sup>	0	0	242	0	156,105
C-447-269-1 <sup>1</sup>	0	0	66	0	47,3335
C-447-270-0 <sup>1</sup>	0	0	69	0	0
Red Wine Fermentation <sup>7</sup>	0	0	0	0	171,249,251
White Wine Fermentation <sup>7</sup>	0	0	0	0	91,892,965
Wine Storage <sup>7</sup>	0	0	0	0	126,573,651
ERCs	0	0	0	84,488	37,360
<b>SSPE1</b>	<b>36,444</b>	<b>10,556</b>	<b>68,949</b>	<b>487,168</b>	<b>390,403,064</b>

1 Emissions are from the emissions profile screen in PAS.

2 Emissions are from the original engineering evaluation.

3 Emissions are from the emission profile screen for ATC 9-2.

4 Emissions from units 5-2 and 6-2 are based on the emissions from unit 8-2.

5 See calculations in Appendix D

6 Emissions taken from emissions profile screen in PAS and include units C-447-225 and -227.

7 Emissions taken from project C-1071388

#### **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.

$$\text{SSPE2}_{\text{Total}} = \text{SSPE2}_{\text{Permit Unit}} + \text{Total}_{\text{ERC}}$$

<b>Stationary Source Potential to Emit [SSPE2] (lb/year)</b>					
	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>CO</b>	<b>VOC</b>
C-447-1-12 <sup>1</sup>	5,366	300	1195	40,191	1,358
C-447-2-13 <sup>1</sup>	12,264	3,541	2,993	184,106	3,358
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C-447-5-3 <sup>4</sup>	0	0	69	0	0
C-447-6-3 <sup>4</sup>	0	0	69	0	0
C-447-8-3 <sup>2</sup>	0	0	69	0	0
C-447-9-3 <sup>3</sup>	0	0	0	0	380
C-447-10-3 <sup>5</sup>	0	0	5,142	0	0
C-447-11-3 <sup>5</sup>	0	0	5,142	0	0
C-447-12-3 <sup>5</sup>	0	0	5,142	0	0
C-447-13-3 <sup>5</sup>	0	0	5,142	0	0
C-447-14-3 <sup>5</sup>	0	0	5,142	0	0
C-447-16-3 <sup>2</sup>	0	0	2,525	0	11,020
C-447-17-1 <sup>1</sup>	0	0	12,702	0	0
C-447-18-1 <sup>1</sup>	0	0	1,460	0	0
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C-447-269-1 <sup>1</sup>	0	0	66	0	47,3335
C-447-270-0 <sup>1</sup>	0	0	69	0	0
C-447-328-0 (ATC)	0	0	8	0	0
Red Wine Fermentation <sup>7</sup>	0	0	0	0	171,249,251
White Wine Fermentation <sup>7</sup>	0	0	0	0	91,892,965
Wine Storage <sup>7</sup>	0	0	0	0	126,573,651
ERCs	0	0	0	84,488	37,360
<b>SSPE2</b>	<b>36,444</b>	<b>10,556</b>	<b>68,957</b>	<b>487,168</b>	<b>390,403,064</b>

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4 Emissions from units 5-2 and 6-2 are based on the emissions from unit 8-2.

5 See calculations in Appendix D

6 Emissions taken from emissions profile screen in PAS and include units C-447-225 and -227.

7 Emissions taken from project C-1071388

**5. Major Source Determination**

**Rule 2201 Major Source Determination:**

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

<b>Rule 2201 Major Source Determination (lb/year)</b>					
	<b>NO<sub>x</sub></b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>CO</b>	<b>VOC</b>
Facility emissions pre-project	<b>36,444</b>	<b>10,556</b>	<b>68,949</b>	<b>487,168</b>	<b>390,403,064</b>
Facility emissions – post project	<b>36,444</b>	<b>10,556</b>	<b>68,957</b>	<b>487,168</b>	<b>390,403,064</b>
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	Yes	No	No	Yes	Yes

As seen in the table above, the facility is an existing Major Source for NO<sub>x</sub>, CO and VOC.

**Rule 2410 Major Source Determination**

As determined in Section VII.D.4 of this document, this facility is an existing Rule 2201 major source for VOC emissions. The following table summarizes the potential VOC emissions from previous permitting actions for this stationary source before the proposed project.

<b>Project Number</b>	<b>Proposed Permitting Actions</b>	<b>PE (lb-VOC/year)</b>	<b>PE (ton-VOC/year)</b>
C-1130919	Installing DE silo	390,403,064	195,202
<b>Total</b>		<b>390,403,064</b>	<b>195,202</b>

As indicated above, the SSPE VOC emission before the proposal project is calculated to be 390,403,064 pounds per year, equivalent to 195,202 tons per year.

The facility evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21(b)(1)(i). Therefore, the following PSD Major Source threshold for VOC is applicable.

<b>PSD Major Source Determination (tons/year)</b>	
	VOC
Facility PE before Project Increase	195,202
PSD Major Source Thresholds	250
PSD Major Source?	Yes

As shown above, the facility is an existing major source for PSD for VOC.

#### **6. Baseline Emissions (BE)**

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project, to calculate the QNEC and if applicable, to determine the amount of offsets required.

Pursuant to Section 3.7 of District Rule 2201, 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.

As shown in Section VII.C.5 above, the facility is not a Major Source for PM10.

Therefore Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1).

As calculated in Section VII.C.1 above, PE1 is summarized in the following table:

<b>Baseline Emissions [BE] (lb/year)</b>	
	PM <sub>10</sub>
C-447-328-0	0

#### **7. SB 288 Major Modification**

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is not a major source for any of the pollutants addressed in this project, this project does not constitute an SB288 major modification.

## **8. Federal Major Modification**

District Rule 2201, Section 3.17 states that Federal Major Modifications are the same as "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

Since this facility is not a Major Source for PM<sub>10</sub>, this project does not constitute a Federal Major Modification. Additionally, since the facility is not a major source for PM<sub>10</sub> (140,000 lb/year), it is not a major source for PM<sub>2.5</sub> (200,000 lb/year).

## **9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination**

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO<sub>2</sub> (as a primary pollutant)
- SO<sub>2</sub> (as a primary pollutant)
- CO
- PM
- PM<sub>10</sub>
- Greenhouse gases (GHG): CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, HFCs, PFCs, and SF<sub>6</sub>

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

In the case the facility is new source, the second step of the PSD evaluation is to determine if this new facility will become a new PSD major Source as a result of the project and if so, to determine which pollutant will result in a PSD significant increase.

### **I. Project Location Relative to Class 1 Area**

As demonstrated in the "PSD Major Source Determination" Section above, the facility was determined to be an existing major source for PSD. Because the

project is not located within 10 km of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

**II. Significance of Project Emission Increase Determination**

**a. Potential to Emit of attainment/unclassified pollutant for New or Modified Emission Units vs PSD Significant Emission Increase Thresholds**

As a screening tool, the potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if total potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

<b>PSD Significant Emission Increase Determination: Potential to Emit (tons/year)</b>						
	NO2	SO2	CO	PM	PM10	CO2e
Total PE from New and Modified Units	0	0	0	0	0	0
PSD Significant Emission Increase Thresholds	40	40	100	25	15	75,000
PSD Significant Emission Increase?	N	N	N	N	N	N

As demonstrated above, because the project has a total potential to emit from all new and modified emission units below the PSD significant emission increase thresholds, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

**10. 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 A.

## VIII. COMPLIANCE:

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

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

##### 1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless exempted pursuant to Section 4.2, BACT shall be required for the following actions:\*

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

\*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

##### a. New emissions units – PE > 2 lb/day

As seen in Section VII.C.2 of this evaluation, the applicant is proposing to install a new DE silo with a PE less than 2 lb/day for PM<sub>10</sub>. BACT is not triggered for PM<sub>10</sub> since the PE is less than 2 lb/day.

##### b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

##### c. Modification of emissions units – AIPE > 2 lb/day

As discussed in Section I above, there are no modified emissions units associated with this project; therefore BACT is not triggered.

##### d. SB 288/Federal Major Modification

As discussed in Section VII.C.7 above, this project does not constitute a SB 288 and/or Federal Major Modification; therefore BACT is not triggered for any pollutant.

## 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>	
	<b>PM<sub>10</sub></b>
Post Project SSPE (SSPE2)	68,957
Offset Threshold	29,200
Offsets triggered?	Yes

### 2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset threshold for PM10 emissions; therefore offset calculations will be required for this project. However, District policy is to consider an IPE of less than 0.5 lb/day for each emission unit to be rounded to zero for the purposes of triggering NSR requirements and therefore offsets are not required for this project.

## C. Public Notification

### 1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

#### **a. New Major Sources, Federal Major Modifications, and SB288 Major Modifications**

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.

As demonstrated in VII.C.7, this project does not constitute a SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

**b. 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. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

**c. 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>				
<b>Pollutant</b>	<b>SSPE1 (lb/year)</b>	<b>SSPE2 (lb/year)</b>	<b>Offset Threshold</b>	<b>Public Notice Required?</b>
PM <sub>10</sub>	68,949	68,957	29,200 lb/year	No

As detailed above, the PM10 threshold was not surpassed with this project; therefore public noticing is not required for offset purposes.

**d. 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:

<b>Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice</b>					
<b>Pollutant</b>	<b>SSPE2 (lb/year)</b>	<b>SSPE1 (lb/year)</b>	<b>SSIPE (lb/year)</b>	<b>SSIPE Public Notice Threshold</b>	<b>Public Notice Required?</b>
PM <sub>10</sub>	68,957	68,949	8	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

## **2. Public Notice Action**

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, 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 3.16 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.16.1 and 3.16.2, 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.

### **Proposed Rule 2201 (DEL) Conditions:**

- The amount of diatomaceous earth loaded into the silo shall not exceed 25 tons/day. [District Rule 2201]
- Controlled PM<sub>10</sub> emissions shall not exceed 0.00085 pounds per ton of diatomaceous earth loaded into the silo. [District Rule 2201]

## **E. Compliance Assurance**

### **1. Source Testing**

As stated in District Policy APR 1705, non-combustion equipment served by a baghouse with expected PM<sub>10</sub> emissions of 30 pounds per day or greater must be tested upon initial start-up. Units with PM<sub>10</sub> emissions in excess of 70 pounds per day should also be tested on annual basis.

As shown in the calculation section above, all equipment have PM<sub>10</sub> emissions below the above levels. Therefore, pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

### **2. Monitoring**

No monitoring is required to demonstrate compliance with Rule 2201.

### **3. Recordkeeping**

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following conditions will appear on the permit to operate:

- Records of all maintenance of each bin vent, including all change outs of filter media, shall be maintained. [District Rule 2201]

#### **4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

#### **Rule 2410 Prevention of Significant Deterioration**

The prevention of significant deterioration (PSD) program is a construction permitting program for new major stationary sources and major modifications to existing major stationary sources located in areas classified as attainment or in areas that are unclassifiable for any criteria air pollutant.

As demonstrated above, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

#### **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:

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC) (see Appendix C); therefore, the facility must apply to modify their Title V permit with an

administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected.

**Rule 4101 Visible Emissions**

District Rule 4101, Section 5.0, indicates that 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 dark or darker than Ringelmann 1 or equivalent to 20% opacity.

For operation served by a bin vent, visible emissions shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour.

A permit condition will be listed on permit as follows:

- Visible emissions from each bin vent shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in one hour. [District Rule 2201]

**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.

**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 one. According to the Technical Services Memo for this project (**Appendix B**), the total facility prioritization score including this project was greater than one. Therefore, an HRA was required to determine the short-term acute and long-term chronic exposure from this project.

The cancer risk for this project is shown below:

<b>HRA Summary</b>		
<b>Unit</b>	<b>Cancer Risk</b>	<b>T-BACT Required</b>
C-447-328-0	0.00023 per million	No

## Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is not required for this project because the HRA indicates that the risk is not above the District's thresholds for triggering T-BACT requirements; therefore, compliance with the District's Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 10 in a million). As outlined by the HRA Summary in Appendix B of this report, the emissions increases for this project was determined to be less than significant.

### Rule 4201 Particulate Matter Concentration

Section 3.0 of this Rule states: A person shall not release or discharge into the atmosphere from any single source operation, dust, fumes, or total suspended particulate matter emissions in excess of 0.1 grain per cubic foot of gas at dry standard conditions.

This silo is served by a bin vent filter, which has no exhaust fan. The only airflow through each filter unit is due to the air displaced as the material is being conveyed into each silo. It is therefore not possible to accurately calculate the particulate matter emission concentration from each the filter unit. Nevertheless, based on past experience with several similar types of bin vent filter units, compliance with this rule is expected.

### Rule 4202 Particulate Matter – Emission Rate

This rule limits the allowable PM emission rate based on the equipment process weight rate. Section 3.1 defines the process weight as "the total weight of all materials introduced into any specific process, which process may cause any discharge into the atmosphere."

Per section 4.1, particulate matter (PM) emissions from any source operation shall not exceed the allowable hourly emission rate (E) as calculated using the following applicable formulas:

$$E = 3.59 P^{0.62} \text{ (when, } P = \text{ process weight rate } \leq 30 \text{ tons/hr)}$$
$$E = 17.31 P^{0.16} \text{ (when, } P = \text{ process weight rate } > 30 \text{ tons/hr)}$$

The post-project process weight rate of the material handling operation is 1.04 tons per hour (equivalent to 25 tons/day).

$$\begin{aligned} \text{Rule 4202 emission limit} &= 3.59 * P^{0.62} \text{ (where } P \text{ less than } 30 \text{ tons/hr)} \\ &= 3.59 * (1.04)^{0.62} \end{aligned}$$

= 3.68 lb/hr

The operation has a maximum Post Project Potential to Emit (PE2) of 0.00 lb/hr (0.02 lb/day ÷ 24 hr/day).

Therefore, the PM emissions are within allowable limits and compliance with the rule is expected.

#### **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 California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District conducted a Risk Management Review and concludes that potential health impacts are less than significant.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA

those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

#### **IX. RECOMMENDATION**

Compliance with all applicable rules and regulations is expected. Issue Authority to Construct C-447-328-0 subject to the permit conditions on the attached draft Authority to Construct in Appendix C.

#### **X. BILLING INFORMATION**

<b>Annual Permit Fees</b>			
<b>Permit Number</b>	<b>Fee Schedule</b>	<b>Fee Description</b>	<b>Annual Fee</b>
C-447-328-0	3020-5-C	44,880 gallons (6,000 cu ft)	\$135.00

#### **APPENDICES**

- Appendix A: QNEC Calculations
- Appendix B: HRA Summary
- Appendix C: Draft Authority to Construct Permit
- Appendix D: SSPE Calculations
- Appendix E: Compliance Certification Form

**Appendix A**  
**QNEC Calculations**

## 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:

QNEC = PE2 - PE1, where:

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

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

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

Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$$\begin{aligned} \text{PE2}_{\text{quarterly}} &= \text{PE2}_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 8 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 2 \text{ lb PM}_{10}\text{/qtr} \end{aligned}$$

$$\begin{aligned} \text{PE1}_{\text{quarterly}} &= \text{PE1}_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 0 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 0 \text{ lb PM}_{10}\text{/qtr} \end{aligned}$$

Quarterly NEC [QNEC]			
	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NO <sub>x</sub>	0	0	0
SO <sub>x</sub>	0	0	0
PM <sub>10</sub>	2	0	2
CO	0	0	0
VOC	0	0	0

**Appendix B**  
**HRA Summary**

# San Joaquin Valley Air Pollution Control District Risk Management Review

To: Dennis Roberts – Permit Services  
 From: Kyle Melching – Technical Services  
 Date: April 9, 2013  
 Facility Name: Gallo – Fresno  
 Location: 5610 E. Olive Ave., Fresno  
 Application #(s): C-447-328-0  
 Project #: C-1130919

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## A. RMR SUMMARY

RMR Summary			
Categories	Diatomaceous Earth Operation (328-0)	Project Totals	Facility Totals
<b>Prioritization Score</b>	0.00	0.00	>1
<b>Acute Hazard Index</b>	0.00	0.00	0.06
<b>Chronic Hazard Index</b>	0.00	0.00	0.2
<b>Maximum Individual Cancer Risk</b>	2.3E-10	2.3E-10	1.67E-06
<b>T-BACT Required?</b>	No		
<b>Special Permit Conditions?</b>	No		

### I. Project Description

Technical Services received a request on April 8, 2013, to perform a Risk Management Review to install a diatomaceous earth operation served by a baghouse.

### II. Analysis

Toxic emissions from the project were calculated using PM10 emission rates provided by the engineer and District approved emission factors based on the 1995 version of AP 42 in chapter 11 section 22 *Diatomite Processing*. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEART's database. The prioritization score for the project was less than 1.0 (see RMR Summary Table); however, the facility's combined prioritization scores totaled to greater than one. Therefore, a refined Health Risk Assessment was required and performed for the project. AERMOD was used with area source parameters outlined below and concatenated 5-year meteorological data from Fresno to determine maximum dispersion factors at the nearest residential and business receptors. The dispersion factors were input into the HARP model to calculate the Chronic and Acute Hazard Indices and the Carcinogenic Risk.

The following parameters were used for the review:

<b>Analysis Parameters (Unit 328-0)</b>			
<b>Source Type</b>	<b>Point</b>	<b>Closest Receptor (m)</b>	335
<b>Stack Height (m)</b>	18.29	<b>Type of Receptor</b>	Business
<b>Stack Diameter (m)</b>	0.5	<b>Location Type</b>	Urban
<b>Stack Velocity (m/s)</b>	2.39	<b>PM10 Emission Rate (lb/hr)</b>	0.0142
<b>Stack Temperature (K)</b>	297	<b>PM10 Emission Rate (lb/yr)</b>	2.125
<b>Exhausts</b>	Horizontally*		

\*Modeled using AERMOD's NON-Default Beta Option for "Capped & Horizontal Stack Releases."

### III. Conclusions

The acute and chronic indices are below 1.0; and the maximum individual cancer risk associated with the project is **2.3E-10**, which is less than the 1 in a million threshold. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

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.

### IV. Attachments

- A. RMR request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Stack Parameter Worksheet
- D. Prioritization score w/ toxic emissions summary
- E. HARP Risk Report
- F. Facility Summary

## **Appendix C**

### **Draft Authority to Construct Permit and Emissions Profile**

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** C-447-328-0

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 5610 E OLIVE AVE  
FRESNO, CA 93727

**LOCATION:** 5610 E OLIVE AVE  
FRESNO, CA 93727

**EQUIPMENT DESCRIPTION:**  
DIATOMACEOUS EARTH RECEIVING AND STORAGE OPERATION WITH A 6,000 CUBIC FEET STORAGE SILO  
SERVED BY A BIN VENT FILTER SYSTEM

**CONDITIONS**

1. {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 Rule 2201] Federally Enforceable Through Title V Permit
2. {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] 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. Visible emissions from the bin vent filter serving the storage silo shall not equal or exceed 5% opacity for a period or periods aggregating more than three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The bin vent filter system shall be equipped with a pressure differential gauge to indicate the pressure drop across the filters. The gauge shall be maintained in good working condition at all times and shall be located in an easily accessible location. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The differential pressure gauge reading range (inches of water column gauge) shall be established per manufacturer's recommendation at time of start-up inspection. The established gauge reading shall be listed on the Permit to Operate. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 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**

C-447-328-0; May 1 2013 7:28AM - MASLOWBT : Joint Inspection NOT Required

7. Replacement bags numbering at least 10% of the total number of bags shall be maintained on the premises. [District Rule 2201] Federally Enforceable Through Title V Permit
8. Material removed from the bin vent filter system shall be disposed of in a manner preventing entrainment into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
9. Bin vent filter shall be thoroughly inspected annually for tears, scuffs, abrasions, holes, or any evidence of particulate matter breakthrough and shall be replaced as needed. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. PM10 emissions shall not exceed 0.00085 pounds per ton of diatomaceous earth loaded into the silo. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The amount of diatomaceous earth loaded into the silo shall not exceed 25 tons in any one day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The permittee shall keep records of date and quantity of diatomaceous earth loaded into the silo. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Differential operating pressure shall be monitored and recorded on each day that the bin vent filter system is in operation. [District Rule 2201] Federally Enforceable Through Title V Permit
14. Records of all maintenance of the bin vent filter system, including all change outs of bags or filter media, shall be maintained. These records shall include identification of the equipment, date of inspection, any corrective action taken, and identification of the personnel performing the inspection. [District Rules 2201 and 2520, 9.4.2] Federally Enforceable Through Title V Permit
15. Visible emissions shall be inspected annually during operation. If visible emissions are observed, corrective action shall be taken to eliminate visible emissions. If visible emissions cannot be corrected within 24 hours, a visible emissions test using EPA Method 9 shall be conducted. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. All records shall be retained for a minimum of five years and made available for District inspection upon request. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

DRAFT

**Appendix D**  
**SSPE Calculations**

## SSPE Calculations

C-447-10-2, 11-2, 12-2, 13-2, 14-2

Assumptions and Emission Factors are from project 970831 EE.

### **Assumptions:**

Operation Hours: 24 hours per day, 7 days per week, 52 weeks per year (worst case scenario)

Abrasive Media Throughput for each unit: 2,024 lb/hr (from application)

Only dry abrasive blasting is performed

Cyclone/Bagfilter PM Control Efficiency: 99%

### **Emission Factors:**

EF = 0.029 lb-PM10/lb sand (used for worst case scenario)

### **Calculations:**

$$\begin{aligned} \text{PE} &= (2,024 \text{ lb/hr}) \times (24 \text{ hr/day}) \times (0.029 \text{ lb-PM10/lb abrasive}) \times (1-0.99) \\ &= 14.1 \text{ lb-PM10/day} \end{aligned}$$

$$14.1 \text{ lb/day} \times 365 \text{ days/yr} = 5142 \text{ lb-PM10/yr}$$

## **Appendix E**

### **Compliance Certification Form**

