



**JUL 30 2013**

Mr. Dan Martin  
E & J Gallo Winery  
18000 W River Rd  
Livingston, CA 95334

**Re: Proposed ATC / Certificate of Conformity (Significant Mod)**  
**District Facility # N-1237**  
**Project # N-1131559**

Dear Mr. Martin:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The applicant proposes the modification of 68 wine tanks to increase storage throughput of four tanks, increase fermentation volume of 16 tanks and add the capability to ferment in 52 tanks.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authorities to Construct with Certificates of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. 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. 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: Mike Tollstrup, CARB (w/enclosure) via email  
cc: Gerardo C. Rios, EPA (w/enclosure) via email

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

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Bakersfield, CA 93308-9725  
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**NOTICE OF PRELIMINARY DECISION  
FOR THE ISSUANCE OF AUTHORITY TO CONSTRUCT AND  
THE PROPOSED SIGNIFICANT MODIFICATION OF FEDERALLY  
MANDATED OPERATING PERMIT**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed significant modification of E & J Gallo Winery at 18000 W River Rd, Livingston, California. The applicant proposes the modification of 68 wine tanks to increase storage throughput of four tanks, increase fermentation volume of 16 tanks and add the capability to ferment in 52 tanks.

The District's analysis of the legal and factual basis for this proposed action, project #N-1131559, is available for public inspection at [http://www.valleyair.org/notices/public\\_notices\\_idx.htm](http://www.valleyair.org/notices/public_notices_idx.htm) and at any District office. This will be the public's only opportunity to comment on the specific conditions of the modification. If requested, the District will hold a public hearing regarding issuance of this modification. For additional information, please contact the District at (559) 230-6000. Written comments on the proposed initial permit must be submitted by September 5, 2013 to **DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 1990 EAST GETTYSBURG AVENUE, FRESNO, CA 93726.**

**San Joaquin Valley Air Pollution Control District**  
**Authority to Construct Application Review**  
Modification of 68 Wine Storage/Fermentation Tanks

Facility Name:	E & J Gallo Winery	Date:	July 29, 2013
Mailing Address:	18000 W River Rd Livingston, CA 95334	Engineer:	Jesse A. Garcia
Contact Person:	Dan Martin	Lead Engineer:	Joven Refuerzo
Telephone:	(209) 394-6211		
Fax:	(209) 394-5936		
Application #(s):	N-1237-498-2 through -565-2		
Project #:	N-1131559		
Deemed Complete:	June 6, 2013		

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## **I. Proposal**

E & J Gallo Winery has requested Authority to Construct (ATC) permits for the modification of four 35,000 gallon (PTOs<sup>1</sup> N-1237-498 through -501), sixteen 70,000 gallon (PTOs N-1237-502 through -517), sixteen 105,000 gallon (PTOs N-1237-518 through -533), sixteen 215,000 gallon (PTOs N-1237-534 through -549) and sixteen 350,000 gallon (ATCs to be implemented N-1237-550 through -565) tanks. The sixteen 215,000 gallon tanks (N-1237-534 through -549) were permitted as both storage and fermentation and the 52 remaining tanks (N-1237-498 through -533 and N-1237-550 through -565) were storage tanks only; all tanks will be modified to become storage and fermentation tanks.

The applicant also proposes to modify the tanks to list the actual tank volume as opposed to the nominal tank volume.

E & J Gallo Winery received their Title V Permit. This modification can be classified as a Title V significant 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 ATC permits issued with this project.

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<sup>1</sup> PTOs = Permits to Operate

## 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 4001 New Source Performance Standards (4/14/99)  
Rule 4002 National Emissions Standards for Hazardous Air Pollutants (5/20/04)  
Rule 4102 Nuisance (12/17/92)  
Rule 4694 Wine Fermentation and Storage Tanks (12/15/05)  
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

The facility is located at 18000 W River Road in Livingston, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

## IV. Process Description

E & J Gallo Winery produces both red and white table wines, as well as other specialty wine products, from the fermentation of grapes. During the "crush season," typically from late August to late November, both red and white grapes are received by truck and delivered to a crusher-stemmer which serves to crush the grapes and remove the stems. In the case of red wines, the resultant juice (termed "must" and containing the grape skins, pulp and seeds) is pumped to red wine fermentation tanks for fermentation, a batch process. The red wine fermentation tanks are specifically designed to ferment the must in contact with the skins and to allow the separation of the skins and seeds from the wine after fermentation. In the case of white wines, the must is sent to screens and presses for separation of grape skins and seeds prior to fermentation. After separation of the skins and seeds, the white must is transferred to a fermentation tank. White wine fermentation can be carried out in a tank without design provisions for solids separation since the skins and seeds have already been separated.

After transfer of the must (for red or white wine) to the fermentation tank, the must is inoculated with yeast which initiates the fermentation reactions. During fermentation, the yeast metabolizes the sugar in the grape juice, converting it to ethanol and carbon dioxide (CO<sub>2</sub>) while releasing heat. Temperature is typically controlled by refrigeration, and is maintained at 45–65 °F for white wine fermentation and 70–95 °F for red wine fermentation. The sugar content of the fermentation mass is measured in °Brix (weight %) and is typically 22–26° for unfermented grape juice, dropping to 4° or less at the end of fermentation. Finished ethanol concentration is approximately 10 to 14 percent by volume. Batch fermentation requires 3-5 days per batch for red wine and 1-2 weeks per batch for white wine. VOCs are emitted during the fermentation process along with the CO<sub>2</sub>. The VOCs consist primarily of ethanol along with small quantities of other fermentation byproducts.

Following the completion of fermentation, white wine is transferred directly to storage tanks. Red wine is first directed to the presses for separation of solids and then routed to the storage tanks. All tanks in the winery typically operate as two separate emissions units: (1) a fermentation operation during which the tank is vented directly to the atmosphere to release the evolved CO<sub>2</sub> byproduct from the fermentation reaction; and (2) a storage operation during which the tank is closed to minimize contact with air and refrigerated to preserve the wine. Post-fermentation operations such as cold stabilization, racking, and filtration are conducted in the tanks, resulting in a number of inter-tank transfers during the period between the end of fermentation and bottling or bulk shipment. Storage operations are conducted year-round. VOC emissions occur primarily as a result of the inter-tank transfers which are necessitated by the post fermentation operations.

## V. Equipment Listing

This project proposes modification of 68 wine tanks. See the detailed equipment description for all tanks in Appendix A.

## VI. Emission Control Technology Evaluation

VOCs (ethanol) are emitted from wine storage tanks as a result of both working losses (which occur when the liquid level in the tank changes) and breathing losses (expansion and contraction effects due to temperature variations). The proposed pressure/vacuum valve limits these emissions by requiring the maximum amount of variation in tank pressure before allowing the tank to vent to the atmosphere or allowing air admission to the tank.

The temperature of the fermentation is controlled to maintain an average fermentation temperature not exceeding 95 °F which avoids higher temperatures that might be damaging to the yeast cells and reduces the potential for an out-of-control fermentation reaction in the tank. Temperature control serves to minimize VOC emissions relative to a tank without temperature control since the potential emissions increase with fermentation temperature.

## VII. General Calculations

### A. Assumptions

- Pre-project, 16 tanks are classified wine storage and fermentation and all other 52 tanks are storage only.
- Post-project, all tanks will be classified red and white wine storage and fermentation.

#### Storage

- Typically, for enclosed tanks with refrigeration and/or insulation (or equivalent) and P/V valves, breathing losses from storage of wine are assumed to be negligible.
- Maximum storage tank liquid storage temperature = 81.0°F (per FYI-295)
- Annual average storage tank liquid storage temperature = 63.3 °F for all tanks (per FYI-295)

- Storage tank daily maximum ethanol content of stored wine is 23.9% (per applicant)
- Storage tank annual average ethanol content of stored wine is 15% (per applicant)
- Pre and post project daily throughput = 1 tank turnover (per applicant)
- Pre and post project annual throughput is proposed by the applicant as follows:

Permit	Pre Project Throughput (gal/year)	Post Project Throughput (gal/year)
N-1237-498 through -501	350,000	700,000
N-1237-502 through -517	1,400,000	1,400,000
N-1237-518 through -533	2,100,000	2,100,000
N-1237-534 through -549	4,300,000	4,300,000
N-1237-550 through -565	3,500,000	3,500,000

### Fermentation

- Daily VOC fermentation emissions will be determined using a worst case of one tank turnover per day (proposed by the applicant).
- The fermentation tanks are subject to the fermentation tank emission reduction measures of District Rule 4694. The actual production in the tanks is subject to a minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. This reduction will not be taken into account for determining the potential to emit of the tanks, but will be considered when determining the amount of offsets required.

Permit	Pre Project Wine Fermented <sup>2</sup> (gal/day)	Post Project Wine Fermented <sup>2</sup> (gal/day)
N-1237-498 through -501	N/A	35,000
N-1237-502 through -517	N/A	70,000
N-1237-518 through -533	N/A	105,000
N-1237-534 through -549	215,000	215,000
N-1237-550 through -565	N/A	350,000

Permit	Pre Project Wine Fermented (gal/year)	Post Project Wine Fermented <sup>3</sup> (gal/year)
N-1237-498 through -501	N/A	105,000
N-1237-502 through -517	N/A	140,000
N-1237-518 through -533	N/A	420,000
N-1237-534 through -549	645,000	1,290,000
N-1237-550 through -565	N/A	700,000

<sup>2</sup> Applicant proposes to allow fermentation of red and white wine; however, annual PE shall only be based on white wine fermentation.

<sup>3</sup> Applicant proposes to allow fermentation of red and white wine; however, emissions shall only be based on white wine fermentation.

**B. Emission Factors**

**Pre-Project**

Storage

Tanks 4.0 will be used to calculate the emissions from the new storage tanks.

Fermentation (N-1237-534 through -549)

The uncontrolled emission factors below are taken from the current PTOs.

Wine Type	EF (lb-VOC/1,000 gallon of wine)		Source
	Daily	Annual	
White	1.62	1.6	Permit
Red	3.46	N/A	Permit

Per District Policy APR 1110, the above annual white wine emission factor will be revised in this project. The above annual white wine emission factor was developed by taking the emission factor from District FYI-114, *VOC Emission Factors for Wine Fermentation and Storage Tanks* and applying a 35% reduction because fermentation tanks subject to Rule 4694 are subject to a 35% reduction in emissions. District Policy allows emission reduction credits (ERCs) for wine fermentation to be discounted by 35% due to the requirement of Rule 4694 for wine fermentation tanks to be controlled by 35%; therefore, the 35% reduction will only be applied to the amount of offsets required and not to the emission factor used to determine the potential to emit from each tank.

Therefore, the uncontrolled emissions factors are taken from District FYI-114, *VOC Emission Factors for Wine Fermentation and Storage Tanks*.

Wine Type	EF (lb-VOC/1,000 gallon of wine)		Source
	Daily	Annual	
White	1.62	2.5	FYI-114
Red	3.46	6.2	FYI-114

Since the applicant proposed that all annual fermentation emissions be calculated based off the white fermentation operations the emission factors of white wine will be used to calculate the maximum annual potential emissions and the permits will be limited based off of that assumption to ensure compliance. The worst case daily emissions will be calculated using the red wine emission factor.

**Post-Project**

Storage

Tanks 4.0 will be used to calculate the emissions from the new storage tanks.

Fermentation

Uncontrolled emissions factors are taken from District FYI-114, *VOC Emission Factors for Wine Fermentation and Storage Tanks*.

Wine Type	EF (lb-VOC/1,000 gallon of wine)		Source
	Daily	Annual	
White	1.62	2.5	FYI-114
Red	3.46	6.2	FYI-114

Since the applicant proposed that all annual fermentation emissions be calculated based off the white fermentation operations the emission factors of white wine will be used to calculate the maximum annual potential emissions and the permits will be limited based off of that assumption to ensure compliance. The worst case daily emissions will be calculated using the red wine emission factor.

**C. Calculations**

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

Two Tanks 4.0 runs have been performed one using a daily throughput multiplied by 31 (per FYI-295) as listed in the table below to calculate the daily pre-project potential to emit by dividing the month of July emissions by the number of days in the month and one using the annual throughput as listed in the table below to calculate the annual post-project potential to emit. See Appendix C for the Tanks 4.0 runs for each tank.

Pre-Project Potential to Emit from Storage Operations (PE1)					
Permit Unit	Max Daily Throughput (gal/day)	Max Annual Throughput (gal/yr)	Daily PE1 (lb/day, each)	Annual PE1 (lb/yr, each)	Total Annual PE1 (lb/yr)
Tank Model B (N-1237-498 through -501)	35,000	350,000	3.4	51	204
Tank Model C (N-1237-502- through -517)	70,000	1,400,000	6.9	202	3,232
Tank Model D (N-1237-518 through -533)	105,000	2,100,000	10.5	303	4,848
Tank Model E (N-1237-534 through -549)	215,000	4,300,000	21.5	621	9,936
Tank Model F (N-1237-550 through -565)	350,000	3,500,000	35.0	506	8,096
Total for all 68 Tanks					26,316

PE1 for fermentation emissions are calculated as follows and summarized in the table below:



Fermentation emissions = Amount of wine fermented (gallons) x EF (lb-VOC/1000 gal)

Permit Unit	Daily EF	Annual EF	Nominal Tank Capacity	Turnover Rate	Max Annual White Wine Production	Daily PE1 (each)	Annual PE1 (each)
	(lb-VOC/1,000 gal)		(gallon)	(tank/day)	(gal/year)	(lb/day)	(lb/year)
Tank Model E (N-1237-534 through -549)	3.46	2.5	215,000	1	645,000	348.3	1,613
Total for all 16 Tanks							25,808

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

Since the post project tank volumes for tanks within each group differ slightly due to inherit construction variations, the daily PE2 from the tank with the smallest measured capacity will be compared to the daily PE2 from the tank with the largest tank capacity within each tank group. See Appendix C for Tanks 4.0 runs and the table below for the summarized results:

Daily Post-Project Potential to Emit from Storage Operations (PE2)				
Permit Unit	Throughput for Tank with Smallest Capacity (gal/day)	Throughput for Tank with Largest Capacity (gal/day)	Smallest Daily PE2 (lb/day)	Largest Daily PE2 (lb/day)
Tank Model B (N-1237-498 through -501)	35,494	35,621	3.5	3.5
Tank Model C (N-1237-502- through -517)	70,090	71,771	6.9	7.1
Tank Model D (N-1237-518 through -533)	105,185	105,617	10.5	10.6
Tank Model E (N-1237-534 through -549)	215,001	215,998	21.5	21.6
Tank Model F (N-1237-550 through -565)	359,494	367,931	36.0	36.2

As shown above, the daily PE2 from the tank with the largest capacity is equal to or greater than the tank with the smallest capacity; therefore, as a worst case scenario, the daily PE2 from the tank with the largest capacity will be used for each tank within the group.

<b>Annual Post-Project Potential to Emit from Storage Operations (PE2)</b>			
<b>Permit Unit</b>	<b>Max Annual Throughput (gal/yr)</b>	<b>Annual PE2 (lb/yr, each)</b>	<b>Total PE2 (lb/yr)</b>
Tank Model B (N-1237-498 through -501)	700,000	101	404
Tank Model C (N-1237-502- through -517)	1,400,000	202	3,232
Tank Model D (N-1237-518 through -533)	2,100,000	303	4,848
Tank Model E (N-1237-534 through -549)	4,300,000	621	9,936
Tank Model F (N-1237-550 through -565)	3,500,000	506	8,096
Total for all 68 Tanks			26,516

Fermentation

<b>Daily Post-Project Potential to Emit from Fermentation Operations (PE2)</b>			
<b>Permit Unit</b>	<b>Nominal Tank Capacity (gal)</b>	<b>EF2 per FYI-114 (lb/1000 gal per day)</b>	<b>Daily PE2 (lb/day, each)</b>
Tank Model B (N-1237-498 through -501)	35,000	3.46	121.1
Tank Model C (N-1237-502- through -517)	70,000		242.2
Tank Model D (N-1237-518 through -533)	105,000		363.3
Tank Model E (N-1237-534 through -549)	215,000		743.9
Tank Model F (N-1237-550 through -565)	350,000		1,211.0

<b>Annual Post-Project Potential to Emit from Fermentation Operations (PE2)</b>				
<b>Permit Unit</b>	<b>Max Annual White Wine Production (gal/year)</b>	<b>EF2 per FYI-114 (lb/1000 gal)</b>	<b>Annual PE2 (lb/year, each)</b>	<b>Total Annual PE2 (lb/year)</b>
Tank Model B (N-1237-498 through -501)	105,000	2.5	263	1,052
Tank Model C (N-1237-502-through -517)	140,000		350	5,600
Tank Model D (N-1237-518 through -533)	420,000		1,050	16,800
Tank Model E (N-1237-534 through -549)	1,290,000		3,225	51,600
Tank Model F (N-1237-550 through -565)	700,000		1,750	28,000
<b>Total for all 68 Tanks</b>				<b>103,052</b>

**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.

This project only concerns VOC emissions. This facility acknowledges that its VOC emissions are already above the Offset and Major Source Thresholds for VOC emissions; therefore, SSPE1 calculations are not necessary.

**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.

This project only concerns VOC emissions. This facility acknowledges that its VOC emissions are already above the Offset and Major Source Thresholds for VOC emissions; therefore, SSPE2 calculations are not necessary.

## 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

This source is an existing Major Source for VOC emissions and will remain a Major Source for VOC. No change in other pollutants are proposed or expected as a result of this project.

### Rule 2410 Major Source Determination:

The following table summarizes the potential VOC emissions from previous permitting actions for this stationary source prior to the proposed project.

<b>Project Number</b>	<b>Proposed Permitting Actions</b>	<b>PE (lb-VOC/year)</b>
N-1072605	Applying for In-house PTOs for existing wine storage and fermentation tanks	470,985
N-1110129	Install 2 wine fermentation tanks	8,432
N-1110722	Convert 7 existing grape juice tanks to wine fermentation tanks	15,680
N-1113344	Install 104 wine storage and fermentation tanks	94,430
N-1113395	Install 3 wine storage and fermentation tanks	10,173
N-1113047	Install 2 distilled spirit tanks	188
N-1113864	Install an ethanol evaporator system	7,719
<b>Total</b>		<b>607,607</b>

As indicated above, the SSPE VOC emission before the proposal project is calculated to 607,607 pounds per year, equivalent to 303.8 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	303.8
PSD Major Source Thresholds	250
PSD Major Source?	<b>Yes</b>

As shown above, the facility is an existing Major Source for PSD for VOC. Therefore, the facility is an existing Major Source for PSD.

**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.

Since the tanks in this project are new tanks or are clean emissions units (per Project N-1113344), BE = PE1 for all pollutants for each unit. For the new tanks, BE = 0 for all pollutants.

**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 a major source for VOC, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if the SB 288 Major Modification calculation is required.

<b>SB 288 Major Modification Thresholds (Existing Major Source)</b>			
Pollutant	Project PE (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
VOC	26,516 + 103,052 = 129,568	50,000	Yes

Since the project's PE2 surpasses the SB 288 Major Modification Threshold for VOCs, the Net Emissions Increase (NEI) will be compared to the SB 288 Major Modification threshold in order to determine if this project constitutes an SB 288 Major Modification.

The NEI is the total of emission increases for every permit unit addressed in this project and is calculated as follows:

$$\text{NEI} = \text{PE2} - \text{BAE}$$

Where: PE2 = the sum of all the PE2s for each permit unit in this project  
 BAE = for units that are fully offset, the BAE = the PE1 for every unit, otherwise, the BAE is the actual annual emissions averaged over the baseline period for every unit.

The PE2 is used to calculate the NEI and make the SB 288 Major Modification determination in the following table.

SB 288 Major Modification Calculation and Determination					
Pollutant	PE2 (lb/yr)	PE1 (lb/yr)	NEI (lb/yr)	Thresholds (lb/yr)	SB2 88 Major Modification?
VOC	129,568	52,124	77,444	50,000	Yes

As demonstrated in the preceding table, this project constitutes an SB 288 Major Modification for VOC.

### 8. Federal Major Modification

District Rule 2201 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. SB 288 Major Modifications are not federal major modifications if they meet the criteria of the "Less-Than-Significant Emissions Increase" exclusion.

A Less-Than-Significant Emissions Increase exclusion is for an emissions increase for the project, or a Net Emissions Increase for the project (as defined in 40 CFR 51.165 (a)(2)(ii)(B) through (D), and (F)), that is not significant for a given regulated NSR pollutant, and therefore is not a federal major modification for that pollutant.

- To determine the post-project projected actual emissions from existing units, the provisions of 40 CFR 51.165 (a)(1)(xxviii) shall be used.
- To determine the pre-project baseline actual emissions, the provisions of 40 CFR 51.165 (a)(1)(xxxv)(A) through (D) shall be used.
- If the project is determined not to be a federal major modification pursuant to the provisions of 40 CFR 51.165 (a)(2)(ii)(B), but there is a reasonable possibility that the project may result in a significant emissions increase, the owner or operator shall comply with all of the provisions of 40 CFR 51.165 (a)(6) and (a)(7).

- Emissions increases calculated pursuant to this section are significant if they exceed the significance thresholds specified in the table below.

<b>Significant Threshold (lb/year)</b>	
Pollutant	Threshold (lb/year)
VOC	0

The Net Emissions Increases (NEI) for purposes of determination of a “Less-Than-Significant Emissions Increase” exclusion will be calculated below to determine if this project qualifies for such an exclusion.

Net Emission Increase for New Units<sup>4</sup> (NEI<sub>N</sub>)

Per 40 CFR 51.165 (a)(2)(ii)(D) for new emissions units in this project,

$$NEI_N = PE2_N - BAE$$

Since the existing units have not fully been operated and annual emission data is not yet available, they will be considered as new units, BAE for these units is zero and,

$$NEI_N = PE2_N$$

where PE2<sub>N</sub> is the Post Project Potential to Emit for the emissions units.

$$NEI_N = PE2_N = 26,516 + 103,052 \text{ lb-VOC/year} = 129,568 \text{ lb-VOC/year}$$

The NEI for this project is thus calculated as follows:

$$NEI = NEI_N$$

$$NEI = 129,568 \text{ lb-VOC/year}$$

The NEI for this project will be greater than the federal Major Modification threshold of 0 lb-VOC/year. Therefore, this project does not qualify for a “Less-Than-Significant Emissions Increase” exclusion and is thus determined to be a Federal Major Modification for VOC.

**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)

<sup>4</sup> The units being modified in this project will be considered new for Federal Major Modification calculations as the units have not been operated and there is no historical data.

- 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 a 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.

#### **CO<sub>2</sub> Emissions from Fermentation**

##### **Basis**

- Project total annual fermentation emissions = 41,220,000 gallons/year (per applicant)
- Maximum practical ethanol content for wine fermentation is 15 volume percent (higher concentrations have a negative impact on yeast reproduction with death of the yeast occurring at around 18 vol %)
- Molecular weight of ethanol and CO<sub>2</sub> are 46 and 44 lb/mole respectively.



- The fermentation reaction produces one mole of carbon dioxide for each mole of ethanol produced.
- Liquid density for ethanol is 6.61 lb/gal at 60 deg F.

Calculation

Maximum Annual Wine  
Production Based on 100% White Wine' = 41,220,000 gallons per year

Maximum Annual Ethanol Production = 41,220,000  $\frac{\text{gal}}{\text{year}}$  x 15% ethanol x 6.61  $\frac{\text{lb-ethanol}}{\text{gallon}}$

Maximum Annual Ethanol Production = 40,869,630 lb-ethanol per year

Maximum Annual CO2 Production = 40,869,630  $\frac{\text{lb}}{\text{year}}$  x  $\frac{1 \text{ mole}}{46 \text{ lb ethanol}}$  x  $\frac{1 \text{ mole CO2}}{1 \text{ mole ethanol}}$  x  $\frac{44 \text{ lb CO2}}{\text{mole CO2}}$

Maximum Annual CO2 Production = 39,092,690 lb-CO2 per year

**Maximum Annual CO2 Production = 19,546 ton-CO2 per year**

<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	19,546
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 E.

## **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 for the following\*:

- 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**

There are no new emissions units being installed in this project, hence BACT is not triggered under this category.

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

There are no emissions units being relocated from one stationary source to another, hence BACT is not triggered under this category.

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

Since this project is an SB 288/Federal Major Modification and triggers BACT (See Section VIII.A.1.d below), AIPE calculations are not required.

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

As discussed in Section VII.C.7 and VII.C.8 above, this project constitutes an SB288 and Federal Major Modification for VOC. Therefore BACT is triggered for VOC.

### **2. BACT Guideline**

BACT Guideline 5.4.14, applies to the wine fermentation tanks. [Wine Fermentation Tanks] (Appendix F)

BACT Guideline 5.4.13, applies to the wine storage tanks. [Wine Storage Tanks] (Appendix G)

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

Per Permit Services Policies and Procedures for BACT, 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.

Pursuant to the attached Top-Down BACT Analyses (Appendix F and G), since the technologically feasible options are not cost effective and BACT has been satisfied with the following:

#### Fermentation

VOC: Temperature-Controlled Open Top Tank with Maximum Average Fermentation Temperature of 95 deg F.

#### Storage

VOC: Insulated tank, pressure/vacuum valve set within 10% of the maximum allowable working pressure of the tank, "gas tight" tank operation and achieve and maintain a continuous storage temperature not exceeding 75 °F within 60 days of completion of fermentation.

### **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.

Facility emissions are already above the Offset and Major Source Thresholds for VOC emissions; therefore, offsets are triggered.

## 2. Quantity of Offsets Required

As discussed above, the facility is an existing Major Source for VOC and the SSPE2 is greater than the offset thresholds; therefore offset calculations will be required for this project.

Per Sections 4.7.1 and 4.7.3, the quantity of offsets in pounds per year for VOC is calculated as follows for sources with an SSPE1 greater than the offset threshold levels before implementing the project being evaluated.

Offsets Required (lb/year) =  $(\Sigma[PE2 - BE] + ICCE) \times DOR$ , for all new or modified emissions units in the project,

Where,

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

BE = Baseline Emissions, (lb/year)

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

DOR = Distance Offset Ratio, determined pursuant to Section 4.8

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)

There are no increases in cargo carrier emissions due to this project. Therefore,

Offsets Required (lb/year) =  $\Sigma[PE2 - BE] \times DOR$

Where, BE = PE1 since all units in this project are clean emissions units as they all are equipped with emission control technology that meets the requirements for achieved-in-practice BACT (See Appendix F and G) during the five years immediately prior to the submission of the complete application.

Storage

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

Offsets Required for Storage				
Tank Model (ATCs)	PE2, each (lb-VOC/yr)	Annual BE, each (lb-VOC/yr)	Offsets Required, each (lb-VOC/yr)	Total Offsets Required (lb-VOC/yr)
Tank Model B (N-1237-498 through -501)	101	51	50	200
Tank Model C (N-1237-502- through -517)	202	202	0	0
Tank Model D (N-1237-518 through -533)	303	303	0	0
Tank Model E (N-1237-534 through -549)	621	621	0	0
Tank Model F (N-1237-550 through -565)	506	506	0	0
Total (N-1237-498 through -565)				200

Fermentation

These fermentation tanks are subject to the fermentation emission reduction requirements of Rule 4694 and are considered to be controlled sources subject to a 35% reduction in emissions. The facility is currently performing an annual demonstration that sufficient Certified Emission Reductions (CER) are provided to meet the requirements of Rule 4694 Section 5.1. The CERs are achieved by controlling the emissions from brandy tanks and barrels at a brandy plant in Modesto via an air handling system and combustion in an RTO (regenerative thermal oxidizer). Both the Fresno location and Livingston location have CERs assigned to each facility (generated from the control of the brandy plant) to cover the uncontrolled fermentation emissions at each facility. The annual compliance emissions report demonstrates the amount of CERs assigned to each facility is at least 35% of the uncontrolled fermentation emissions at each facility. As these tanks are subject to Rule 4694 and the facility is mitigating 35% of the uncontrolled fermentation emissions each year, requiring offsets for 100% of the fermentation emissions in this project would be requiring double mitigation. Therefore, the offsets required for the fermentation emissions in this project will be reduced by 35% and calculated as follows:

$$\text{Offsets Required (lb/year)} = \Sigma[\text{PE2} - \text{BE}] \times (1 - 0.35) \times \text{DOR}$$

Offsets Required for Fermentation				
Tank Model (ATCs)	PE2, each (lb-VOC/yr)	Annual BE, each (lb-VOC/yr)	Offsets Required, each (lb-VOC/yr)	Total Offsets Required (lb-VOC/yr)
Tank Model B (N-1237-498 through -501)	263	0	171	684
Tank Model C (N-1237-502- through -517)	350	0	228	3,648
Tank Model D (N-1237-518 through -533)	1,050	0	683	10,928
Tank Model E (N-1237-534 through -549)	3,225	1,613	1,048	16,768
Tank Model F (N-1237-550 through -565)	1,750	0	1,138	18,208
Total (N-1237-498 through -565)				50,236

Total

$$\begin{aligned} \text{Offsets Required (lb/year)} &= (200 + 50,236) \text{ lb/year} \times \text{DOR} \\ &= 50,436 \text{ lb/year} \times \text{DOR} \end{aligned}$$

The applicant has stated that the facility plans to use ERC certificates C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1, or their successors, to offset the increases in VOC emissions associated with this project. The DOR for the proposed ERC certificates is 1.5:1; the amount of VOC ERCs that need to be withdrawn are  $50,436 \text{ lb-VOC/year} \times 1.5 = 75,654 \text{ lb-VOC/year}$ .

Calculating the appropriate quarterly emissions to be offset is as follows:

<u>1<sup>st</sup> Quarter</u>	<u>2<sup>nd</sup> Quarter</u>	<u>3<sup>rd</sup> Quarter</u>	<u>4<sup>th</sup> Quarter</u>
18,913	18,913	18,914	18,914

The above certificates have available quarterly VOC credits as follows:

	<u>1<sup>st</sup> Quarter</u>	<u>2<sup>nd</sup> Quarter</u>	<u>3<sup>rd</sup> Quarter</u>	<u>4<sup>th</sup> Quarter</u>
ERC #C-1189-1	9,357	9,357	9,323	9,323
ERC #S-3805-1	18,000	18,000	18,000	18,000
ERC #S-3808-1	8,098	8,041	8,086	8,086
ERC #S-4025-1	44,473	44,472	44,465	44,397
ERC #S-4050-1	60,000	60,000	60,000	60,000

As seen above, the facility has sufficient credits to fully offset the quarterly VOC emissions increases associated with this project.

$$\text{Total Offsets Required} = \text{Offsets}_{\text{storage}} + \text{Offsets}_{\text{fermentation}}$$

Summary of Offsets Required for Each Tank			
Tank Model (ATCs)	Offsets <sub>storage</sub> , each (lb-VOC/yr)	Offsets <sub>fermentation</sub> , each (lb-VOC/yr)	Total Offsets Required, each (lb-VOC/yr)
Tank Model B (N-1237-498 through -501)	50	171	221
Tank Model C (N-1237-502- through -517)	0	228	228
Tank Model D (N-1237-518 through -533)	0	683	683
Tank Model E (N-1237-534 through -549)	0	1,048	1,048
Tank Model F (N-1237-550 through -565)	0	1,138	1,138

Quarterly Offset Requirements for Each Tank - VOCs				
Tank Model (ATCs)	1 <sup>st</sup> Qtr (lb/qtr)	2 <sup>nd</sup> Qtr (lb/qtr)	3 <sup>rd</sup> Qtr (lb/qtr)	4 <sup>th</sup> Qtr (lb/qtr)
Tank Model B (N-1237-498 through -501)	55	55	55	56
Tank Model C (N-1237-502- through -517)	57	57	57	57
Tank Model D (N-1237-518 through -533)	170	171	171	171
Tank Model E (N-1237-534 through -549)	262	262	262	262
Tank Model F (N-1237-550 through -565)	284	284	285	285

**Proposed Rule 2201 (offset) Conditions:**

- ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201]

**Permit units N-1237-498 through -501 (Tank Model B)**

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 55 lb, 2nd quarter - 55 lb, 3rd quarter - 55 lb, and fourth quarter - 56 lb. The quantity of offsets required have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

Permit units N-1237-502 through -517 (Tank Model C)

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter 57 lb. The quantity of offsets required have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

Permit units N-1237-518 through -533 (Tank Model D)

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

Permit units N-1237-534 through -549 (Tank Model E)

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

Permit units N-1237-550 through -565 (Tank Model F)

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]



**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 is a Federal Major Modification for VOC; therefore, public noticing for Federal Major Modification purposes is required.

**b. PE > 100 lb/day**

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project. Therefore public noticing is not required for this project for PE > 100 lb/day.

**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.

Offset Threshold				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
VOC	> 20,000	> 20,000	20,000 lb/year	No

As detailed above, there were no thresholds 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>					
Pollutant	$\Sigma$ Project PE2 (lb/year)	$\Sigma$ Project PE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
VOC	129,052	52,124	77,444	20,000 lb/year	Yes

As demonstrated above, the SSIPE is greater than 20,000 lb/year for VOC; therefore public noticing for SSIPE purposes is required.

**2. Public Notice Action**

As discussed above, public noticing is required for this project for SB288 and Federal Major Modification for VOC, and SSIPE greater than 20,000 lb/year for VOC. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB), US Environmental Protection Agency (US EPA), and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATC permits for this equipment.

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

Daily Emissions Limitations (DELs) and other enforceable conditions are required to restrict a unit’s maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. 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:**

**All Permit Units:**

- The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]
- The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rules 2201 and 4694, 5.2.2]

- The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
- The daily VOC emissions for wine fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201]

The following conditions are typical conditions for each tank in each tank group:

Permit units N-1237-498 through -501 (Tank Model B)

- The maximum wine storage throughput in this tank shall not exceed 35,621<sup>5</sup> gallons per day. [District Rule 2201]
- The daily VOC emissions from wine fermentation in this tank shall not exceed 121.1 lb/day. [District Rule 2201]

Permit units N-1237-502 through -517 (Tank Model C)

- The maximum wine storage throughput in this tank shall not exceed 69,409<sup>5</sup> gallons per day. [District Rule 2201]
- The daily VOC emissions from wine fermentation in this tank shall not exceed 224.4 lb/day. [District Rule 2201]

Permit units N-1237-518 through -533 (Tank Model D)

- The maximum wine storage throughput in this tank shall not exceed 105,185<sup>5</sup> gallons per day. [District Rule 2201]
- The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201]

Permit units N-1237-534 through -549 (Tank Model E)

- The maximum wine storage throughput in this tank shall not exceed 215,381<sup>5</sup> gallons per day. [District Rule 2201]
- The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201]

Permit units N-1237-550 through -565 (Tank Model F)

- The maximum wine storage throughput in this tank shall not exceed 359,494<sup>6</sup> gallons per day. [District Rule 2201]
- The daily VOC emissions from wine fermentation in this tank shall not exceed 1,120.4 lb/day. [District Rule 2201]

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<sup>5</sup> Equivalent to respective tank capacity

<sup>6</sup> Equivalent to respective tank capacity

## **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**

No monitoring is required to demonstrate compliance with Rule 2201.

### **3. Recordkeeping**

Recordkeeping is required to demonstrate compliance with the offsets, public notification and daily emission limit requirements of Rule 2201. Recordkeeping is also required for winery tanks pursuant to District Rule 4694, *Wine Fermentation and Storage Tanks*. The following conditions will be placed on the permits:

#### All Permit Units

- When this tank is used for wine storage, the operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2]
- When this tank is used for wine storage, daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201]
- For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694]
- The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694]
- All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694]
- Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

#### **4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

#### **F. Ambient Air Quality Analysis**

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. However, since this project involves only VOC and no ambient air quality standard exists for VOC, an AAQA is not required for this project.

#### **G. Compliance Certification**

Rule 2201 requires the owner of a new Major Source or a source undergoing a Title I Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Section VIII above, this facility is a Federal Major Modification and this project does constitute a Title I modification, therefore this requirement is applicable. The facility's compliance certification is included in Appendix H.

#### **H. Alternative Siting Analysis**

Alternative siting analysis is required for any project, which constitutes a New Major Source or a Federal Major Modification.

In addition to winery tanks, the operation of a winery requires a large number support equipment, services and structures such as raw material receiving stations, crushers, piping, filtering and refrigeration units, warehouses, laboratories, bottling and shipping facilities, and administration buildings.

Since the current project involves only a minimal increase in the winery's total tank volume and no change to any other facets of the operation, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures and facilities on a much greater scale, and would therefore result in a much greater impact.

#### **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. Section 3.29 defines a significant permit modification as a “permit amendment that does not qualify as a minor permit modification or administrative amendment.”

Section 3.20.5 states that a minor permit modification is a permit modification that does not meet the definition of modification as given in Section 111 or Section 112 of the Federal Clean Air Act. Since this project is a Title I modification (i.e. Federal Major Modification), the proposed project is considered to be a modification under the Federal Clean Air Act. As a result, the proposed project constitutes a Significant Modification to the Title V Permit pursuant to Section 3.29.

As discussed above, the facility has applied for a Certificate of Conformity (COC) (see Appendix I); 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. The facility shall not implement the changes requested until the final permit is issued.

### **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. However, no subparts of 40 CFR Part 60 apply to wine fermentation and/or storage tank operations.

### **Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63. However, no subparts of 40 CFR Part 61 or 40 CFR Part 63 apply to wine fermentation and/or storage tank operations.

### **Rule 4102 Nuisance**

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Public nuisance conditions are not expected as a result of the proposed operations provided the equipment is well maintained. Therefore, the following condition will be listed on each permit to ensure compliance:

- {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.

Ethanol is not a HAP as defined by Section 44321 of the California Health and Safety Code. Therefore, there are no increases in HAP emissions associated with any emission units in this project, therefore a health risk assessment is not necessary and no further risk analysis is required.

### **District Rule 4694 Wine Fermentation and Storage Tanks**

The purpose of this rule is to reduce emissions of volatile organic compounds (VOC) from the fermentation and bulk storage of wine, or achieve equivalent reductions from alternative emission sources. This rule is applicable to all facilities with fermentation emissions in excess of 10 tons-VOC/year. The storage tank provisions of this rule apply to all tanks with capacity in excess of 5,000 gallons.

Section 5.1 requires the winery operator achieve Required Annual Emissions Reductions (RAER) equal to at least 35% of the winery's Baseline Fermentation Emissions (BFE). Per the definition of RAER in Section 3.25 of the Rule, the RAER may be achieved by any combination of Fermentation Emission Reductions (FER), Certified Emission Reductions (CER) or District Obtained Emission Reductions (DOER) as established in the facility's District-approved Rule 4694 Compliance Plan, due every three years on December 1<sup>st</sup> beginning in 2006. The facility has submitted the required plan to the District and is currently satisfying the required emission reductions in the form of Certified Emission Reductions.

The following condition on the facility-wide permit (unit 0-2) ensures compliance:

- A Three-Year Compliance Plan that demonstrates compliance with the requirements of Section 5.1 of District Rule 4694 (12/15/05) for each year of the applicable compliance period shall be submitted to the District by no later than December 1, 2006, and every three years thereafter on or before December 1. [District Rule 4694, 6.1]

Section 5.2 places specific restrictions on wine storage tanks with 5,000 gallons or more in capacity when such tanks are not constructed of wood or concrete. Section 5.2.1 requires these tanks to be equipped and operated with a pressure-vacuum relief valve meeting all of the following requirements:

- The pressure-vacuum relief valve shall operate within 10% of the maximum allowable working pressure of the tank,
- The pressure-vacuum relief valve shall operate in accordance with the manufacturer's instructions, and
- The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings.
- The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21.

The following conditions will be placed on the permits for stainless steel tanks  $\geq$  5,000 gallons in capacity and used for storage to ensure compliance with the requirements of Section 5.2.1:

- This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1]
- The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1]

Section 5.2.2 requires that the temperature of the stored wine be maintained at or below 75° F. The following condition will be placed on the permits for stainless steel tanks  $\geq$  5,000 gallons in capacity and used for storage to ensure compliance with the requirements of Section 5.2.2:

- The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2]

Every three years, Section 6.1 and 6.2 require the facility to submit a Three-Year Compliance Plan and a Three-Year Compliance Plan Verification respectively. Section 6.3 requires that an Annual Compliance Plan Demonstration be submitted to the District no later than February 1 of each year to show compliance with the applicable requirements of the Rule. Section 6.4.3 requires that all monitoring be performed for any Certified Emission Reductions as identified in the facility's Three-Year Compliance Plan and that the records of all monitoring be maintained. The following conditions on the facility-wide permit (unit 0-2) ensure compliance:

- A Three-Year Compliance Plan that demonstrates compliance with the requirements of Section 5.1 of District Rule 4694 (12/15/05) for each year of the applicable compliance period shall be submitted to the District by no later than December 1, 2006, and every three years thereafter on or before December 1. [District Rule 4694, 6.1]
- A Three-Year Compliance Plan Verification that demonstrates that the Three-Year Compliance Plan elements are in effect shall be submitted to the District by no later than July 1, 2007, and every three years thereafter on or before July 1. [District Rule 4694, 6.2]
- An Annual Compliance Plan Demonstration that shows compliance with the applicable requirements of this rule shall be submitted to the District by no later than February 1, 2008, and every year thereafter on or before February 1. [District Rule 4694, 6.3]
- Operators using CER to mitigate fermentation emissions shall perform all monitoring and recordkeeping, as established in their approved Three-Year Compliance Plan, and shall maintain all records necessary to demonstrate compliance. [District Rule 4694]



Section 6.4.1 requires that records be kept for each fermentation batch. The following condition will be placed on the ATCs for each fermentation tank to ensure compliance:

- For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694]

Section 6.4.2 requires that weekly records be kept of wine volume and temperature in each storage tank. The following conditions will be placed on the permit for each storage tank to ensure compliance with the requirements of Section 6.4.2:

- The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2]

Section 6.4.3 requires that all monitoring be performed for any Certified Emission Reductions as identified in the facility's Three-Year Compliance Plan and that the records of all monitoring be maintained. The following condition on the facility-wide permit (N-1237-0-2) ensures compliance:

- Operators using CER to mitigate fermentation emissions shall perform all monitoring and recordkeeping, as established in their approved Three-Year Compliance Plan, and shall maintain all records necessary to demonstrate compliance. [District Rule 4694]

Section 6.4 requires that records required by this rule be maintained, retained on-site for a minimum of five years, and made available to the APCO upon request. The following conditions will be placed on all permits to ensure compliance:

- All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694]

### **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 County of Merced (County) is the public agency having principal responsibility for approving the project. As such, the County served as the Lead Agency (CCR §15367). In approving the project, the Lead Agency prepared and adopted a Mitigated Negative Declaration. The Lead agency filed a Notice of Determination, stating that the environmental document was adopted pursuant to the provisions of CEQA and concluding that the project would not have a significant effect on the environment.

The District is a Responsible Agency for the project because of its discretionary approval power over the project via its Permits Rule (Rule 2010) and New Source Review Rule (Rule 2201), (CCR §15381). As a Responsible Agency the District complies with CEQA by considering the environmental document prepared by the Lead Agency, and by reaching its own conclusion on whether and how to approve the project (CCR §15096).

The District has considered the Lead Agency's environmental document. Furthermore, the District has conducted an engineering evaluation of the project, this document, which demonstrates that Stationary Source emissions from the project would be below the District's thresholds of significance for criteria pollutants. Thus, the District finds that through a combination of project design elements, compliance with applicable District rules and regulations, and compliance with District air permit conditions, project specific stationary source emissions will have a less than significant impact on air quality. The District does not have authority over any of the other project impacts and has, therefore, determined that no additional findings are required (CEQA Guidelines §15096(h)).

**IX. Recommendation**

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue Authority to Construct permits N-1237-498-2 through -565-2 subject to the permit conditions on the attached draft Authority to Construct permits in Appendix D.

**X. Billing Information**

<b>Annual Permit Fees</b>			
<b>Permit Number</b>	<b>Fee Schedule</b>	<b>Fee Description</b>	<b>Annual Fee</b>
N-1237-498-2 through -501-2	3020-05-C	35,000 gallons	\$135.00
N-1237-502-1 through -517-1	3020-05-D	70,000 gallons	\$185.00
N-1237-518-1 through -533-1	3020-05-E	105,000 gallons	\$246.00
N-1237-534-1 through -549-1	3020-05-E	215,000 gallons	\$246.00
N-1237-550-1 through -565-1	3020-05-E	350,000 gallons	\$246.00

## **XI. Appendices**

- A: Equipment Descriptions
- B: Current PTOs and ATCs to be Implemented
- C: Summary of Emissions from Storage Operations and Tanks 4.0 Calculations
- D: Draft ATCs
- E: Quarterly Net Emissions Change
- F: BACT Guideline 5.4.14 and Analysis
- G: BACT Guideline 5.4.13 and Analysis
- H: Compliance Certification
- I: Certificate of Conformity

# **Appendix A**

## **Equipment Descriptions**







## **Appendix B**

### **Current PTOs and ATCs to be Implemented**



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-498-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

35,000 GALLON STEEL WINE STORAGE TANK (TANK 351) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 35,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 350,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-499-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

35,000 GALLON STEEL WINE STORAGE TANK (TANK 352) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 35,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 350,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-500-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

35,000 GALLON STEEL WINE STORAGE TANK (TANK 353) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 35,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 350,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-501-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

35,000 GALLON STEEL WINE STORAGE TANK (TANK 354) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 35,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 350,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD,LIVINGSTON, CA 95334

N-1237-501-1 : Jul 2 2013 10:02AM -- GARCIAJ



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-502-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 701) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-502-1 : Jul 2 2013 10:02AM - GARCIAJ

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-503-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 702) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-503-1 Jul 2 2013 10:02AM - GARCIAJ

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-504-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 703) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-504-1 Jul 2 2013 10:02AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-505-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 704) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-505-1 : Jul 2 2013 10:03AM - GARCIAJ



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-506-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 705) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-506-1 : Jul 2 2013 10:03AM - GARCIAJ

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-507-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 706) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-508-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 707) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-508-1: Jul 2 2013 10:03AM - GARCIAJ

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-509-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 708) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-509-1 : Jul 2 2013 10.03AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-510-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 709) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-510-1: Jul 2 2013 10:03AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-511-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 710) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-512-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 711) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-513-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 712) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-513-1: Jul 2 2013 10:03AM - GARCIAJ



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-514-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 713) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-514-1: Jul 2 2013 10:03AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-514-1 : Jul 2 2013 10:03AM - GARCIAJ

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-515-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 714) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-516-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 715) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-516-1 : Jul 2 2013 10:03AM -- GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-517-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

70,000 GALLON STEEL WINE STORAGE TANK (TANK 716) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 70,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 1,400,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-518-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1401) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-518-1: Jul 2 2013 10:03AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-519-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1402) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-519-1; Jul 2 2013 10:03AM -- GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-520-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1403) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-521-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1404) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-521-1 : Jul 2 2013 10:03AM -- GARCIAJ



# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** N-1237-522-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1405) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-523-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1406) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-524-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1407) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-525-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1408) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-525-1: Jul 2 2013 10:04AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-526-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1409) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-527-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1410) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-527-1 : Jul 2 2013 10:04AM -- GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-528-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1411) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-528-1 : Jul 2 2013 10:04AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-529-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1412) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-529-1 Jul 2 2013 10:04AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-530-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1413) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-531-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1414) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-532-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1415) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-533-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

105,000 GALLON STEEL WINE STORAGE TANK (TANK 1416) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The maximum wine storage throughput in this tank shall not exceed 105,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 2,100,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
8. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
9. The operator shall maintain records of the calculated 12 month rolling wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per 12 month rolling period, calculated monthly). [District Rule 2201] Federally Enforceable Through Title V Permit
10. If the throughput or ethanol content calculated for any rolling 12-month period exceeds the annual throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year throughput and ethanol content are below the annual throughput and ethanol content limitations. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-533-1 : Jul 2 2013 10:04AM - GARCIAJ

11. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]  
Federally Enforceable Through Title V Permit
12. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-534-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2101) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

---

1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-535-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2102) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-536-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2103) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-537-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2104) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-538-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2105) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-539-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2106) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-540-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2107) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-541-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2108) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-542-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2109) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-543-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2110) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-544-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2111) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-545-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2112) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

Facility Name: E & J GALLO WINERY

Location: 18000 W RIVER RD, LIVINGSTON, CA 95334

N-1237-545-1: Jul 2 2013 10:05AM - GARCIAJ

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-546-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2113) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-547-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2114) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-548-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2115) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] 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-1237-549-1

**EXPIRATION DATE:** 09/30/2015

**EQUIPMENT DESCRIPTION:**

215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2116) WITH PRESSURE/VACUUM VALVE AND INSULATION

## PERMIT UNIT REQUIREMENTS

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1. When used for wine storage, this tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
2. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
3. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
4. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
6. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,032 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of tank capacity. [District Rule 2201] Federally Enforceable Through Title V Permit
11. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] 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.

12. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 4.0 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 1.6 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
13. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
14. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
15. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
16. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
19. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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





## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-550-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3201) WITH PRESSURE/VACUUM VALVE AND INSULATION


### 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 2201] 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 2520. 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-551-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3202) WITH PRESSURE/VACUUM VALVE AND INSULATION


### 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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-552-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3203) WITH PRESSURE/VACUUM VALVE AND INSULATION


### 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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-553-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3204) WITH PRESSURE/VACUUM VALVE AND INSULATION

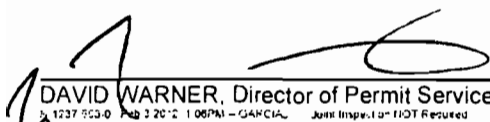
### CONDITIONS

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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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-1237-553-0 Feb 2 2012 1:06PM - GARCIA Joint Inspection NOT Required

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit





## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-554-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3205) WITH PRESSURE/VACUUM VALVE AND INSULATION

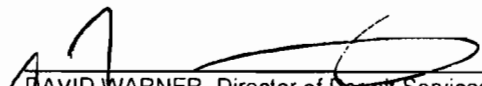
### CONDITIONS

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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO



DAVID WARNER, Director of Permit Services  
N-1237-554-0 Feb 3 2012 2:26AM - QARC AJ - Joint Inspection NOT Required

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-555-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3206) WITH PRESSURE/VACUUM VALVE AND INSULATION

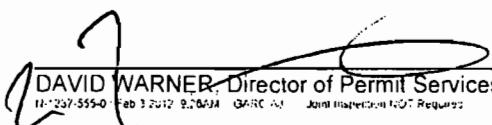
### CONDITIONS

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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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-1237-555-0 Feb 3 2012 2:06PM QARC-01 Joint Inspection NOT Required

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-556-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY

**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

350,000 GALLON STEEL WINE STORAGE TANK (TANK 3207) WITH PRESSURE/VACUUM VALVE AND INSULATION

### 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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-557-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3208) WITH PRESSURE/VACUUM VALVE AND INSULATION

### 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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit





## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-558-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3209) WITH PRESSURE/VACUUM VALVE AND INSULATION

### 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 2201 | 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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-1237-558-0, Feb 3 2012 9:26AM - GARCIA Joint Inspection 1021 Required

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-559-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3210) WITH PRESSURE/VACUUM VALVE AND INSULATION


### 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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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-1237-559-0, Feb 3 2012 4:28AM - GARC AJ - Job Inspection NOT Required

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-560-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3211) WITH PRESSURE/VACUUM VALVE AND INSULATION

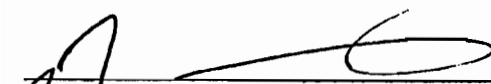
### CONDITIONS

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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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-1237-560-0 (Feb. 3, 2012) v. 1/3/AM GAVC/D/J Joint Inspection/FOI Request

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-561-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY

**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

350,000 GALLON STEEL WINE STORAGE TANK (TANK 3212) WITH PRESSURE/VACUUM VALVE AND INSULATION


### 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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. 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

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit





## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-562-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3213) WITH PRESSURE/VACUUM VALVE AND INSULATION

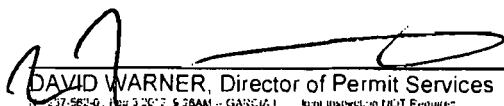
### CONDITIONS

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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO



**DAVID WARNER, Director of Permit Services**

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-563-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3214) WITH PRESSURE/VACUUM VALVE AND INSULATION

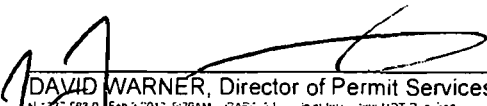
### CONDITIONS

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 2201] 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 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services  
N-1237-563-0 Feb 3 2012 9:09AM - GARC AL Joint Public Notice NOT Required

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-564-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3215) WITH PRESSURE/VACUUM VALVE AND INSULATION

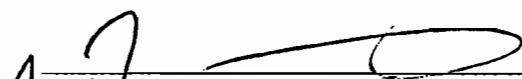
### CONDITIONS

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 2201] Federally Enforceable Through Title V Permit
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3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 159 lb, 2nd quarter - 159 lb, 3rd quarter - 159 lb, and fourth quarter - 159 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers C-1066-1 and S-3666-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

  
DAVID WARNER, Director of Permit Services

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694, 5.2.2] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## AUTHORITY TO CONSTRUCT

**PERMIT NO:** N-1237-565-0

**ISSUANCE DATE:** 02/03/2012

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
350,000 GALLON STEEL WINE STORAGE TANK (TANK 3216) WITH PRESSURE/VACUUM VALVE AND INSULATION

### 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 2201] Federally Enforceable Through Title V Permit
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CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

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DAVID WARNER, Director of Permit Services

N-1237-565-0 Feb 3 2012 9:27AM - GARCIA - Joint Inspection, NOT Required

6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694, 5.2.1] Federally Enforceable Through Title V Permit
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9. The weighted annual average ethanol content of wine stored in this tank shall not exceed 12 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The maximum liquid temperature of wine stored in this tank shall not exceed 75 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 3,500,000 gallons per year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Daily VOC emissions from wine stored in this tank shall not exceed 118.4 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The operator shall record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694, 6.4.2] Federally Enforceable Through Title V Permit
15. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
16. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit



## **Appendix C**

### **Summary of Emissions from Storage Operations and Tanks 4.0 Calculations**

## Summary of Alcohol Emissions from Storage Operations:

### Summary of Daily PE1:

Tank ID	Daily Throughput	% by Volume Alcohol	Average Ya	AMW Average	Output from Tank 4.0 total emissions no speciation	Alcohol Emissions (lb/day)
					Total Pound of Emissions divided by 31	
Tank Model B (N-1237-498 through -501)	35,000	23.9%	0.4398	30.34	5.17	3.4
Tank Model C (N-1237-502 through -517)	70,000	23.9%	0.4398	30.34	10.37	6.9
Tank Model D (N-1237-518 through -533)	105,000	23.9%	0.4398	30.34	15.81	10.5
Tank Model E (N-1237-533 through -549)	215,000	23.9%	0.4398	30.34	32.23	21.5
Tank Model F (N-1237-550 through -565)	350,000	23.9%	0.4398	30.34	52.47	35.0

### Summary of Annual PE1:

Tank ID	Annual Throughput	% by Volume Alcohol	Average Ya	AMW Average	Output from Tank 4.0 total emissions no speciation	Alcohol Emissions (lb/yr)
					Total Pound of Emissions	
Tank Model B (N-1237-498 through -501)	350,000	15.0%	0.3252	27.13	91.66	51
Tank Model C (N-1237-502 through -517)	1,400,000	15.0%	0.3252	27.13	366.63	202
Tank Model D (N-1237-518 through -533)	2,100,000	15.0%	0.3252	27.13	549.95	303
Tank Model E (N-1237-533 through -549)	4,300,000	15.0%	0.3252	27.13	1,126.08	621
Tank Model F (N-1237-550 through -565)	3,500,000	15.0%	0.3252	27.13	916.58	506

Summary of Maximum Daily PE2:

Tank ID	Smallest Daily Throughput	Largest Daily Throughput	% by Volume Alcohol	Average Ya	AMW Average	Output from Tank 4.0 total emissions no speciation		Smallest Alcohol Emissions (lb/day)	Largest Alcohol Emissions (lb/day)
						Smallest Total Pound of Emissions divided by 31	Largest Total Pound of Emissions divided by 31		
Tank Model B (N-1237-498 through -501)	35,494	35,621	23.9%	0.4398	30.34	21.50	21.50	3.5	3.5
Tank Model C (N-1237-502 through -517)	70,090	71,771	23.9%	0.4398	30.34	42.98	42.98	6.9	7.1
Tank Model D (N-1237-518 through -533)	105,185	105,617	23.9%	0.4398	30.34	64.47	64.47	10.5	10.6
Tank Model E (N-1237-533 through -549)	215,001	215,998	23.9%	0.4398	30.34	132.00	132.00	21.5	21.6
Tank Model F (N-1237-550 through -565)	359,494	367,931	23.9%	0.4398	30.34	53.89	54.27	36.0	36.2

Summary of Annual PE2:

Tank ID	Annual Throughput	% by Volume Alcohol	Average Ya	AMW Average	Output from Tank 4.0 total emissions no speciation	
					Total Pound of Emissions	Alcohol Emissions (lb/yr)
Tank Model B (N-1237-498 through -501)	700,000	15.0%	0.3252	27.13	183.45	101
Tank Model C (N-1237-502 through -517)	1,400,000	15.0%	0.3252	27.13	366.63	202
Tank Model D (N-1237-518 through -533)	2,100,000	15.0%	0.3252	27.13	549.95	303
Tank Model E (N-1237-533 through -549)	4,300,000	15.0%	0.3252	27.13	1,126.08	621
Tank Model F (N-1237-550 through -565)	3,500,000	15.0%	0.3252	27.13	916.58	506

# **Attachment I**

## **Daily PE1 Tanks 4.0d Runs**

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-498-1 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 12.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 33,436.56  
Turnovers: 32.45  
Net Throughput(gal/yr): 1,085,000.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft): 3.00  
Slope (ft/ft) (Cone Roof): 0.50

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig): 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-498-1 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-498-1 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):							0.0000					
Vapor Space Volume (cu ft):							229.2207					
Vapor Density (lb/cu ft):							0.0044					
Vapor Space Expansion Factor:							0.0000					
Vented Vapor Saturation Factor:							0.9173					
Tank Vapor Space Volume:							229.2207					
Vapor Space Volume (cu ft):							12.0800					
Tank Diameter (ft):							2.0000					
Vapor Space Outage (ft):							40.0000					
Tank Shell Height (ft):							39.0000					
Average Liquid Height (ft):							1.0000					
Roof Outage (ft):												
Roof Outage (Cone Roof)												
Roof Outage (ft):							1.0000					
Roof Height (ft):							3.0000					
Roof Slope (ft/ft):							0.5000					
Shell Radius (ft):							6.0400					
Vapor Density												
Vapor Density (lb/cu ft):							0.0044					
Vapor Molecular Weight (lb/lb-mole):							30.3355					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg. R):							540.6700					
Daily Average Ambient Temp. (deg. F):							81.8500					
Ideal Gas Constant R												
(psia cuft / (lb-mol-deg R)):							10.731					
Liquid Bulk Temperature (deg. R):							540.6700					
Tank Paint Solar Absorptance (Shell):							0.1700					
Tank Paint Solar Absorptance (Roof):							0.1700					
Daily Total Solar Insulation												
Factor (Btu/sqft day):							2,551.4853					
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:							0.0000					
Daily Vapor Temperature Range (deg. R):							0.0000					
Daily Vapor Pressure Range (psia):							0.0000					
Breather Vent Press. Setting Range(psia):							0.0000					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Minimum Liquid												
Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Maximum Liquid												
Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg R):							540.6700					
Daily Min. Liquid Surface Temp. (deg R):							540.6700					
Daily Max. Liquid Surface Temp. (deg R):							540.6700					
Daily Ambient Temp. Range (deg. R):							33.5000					
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:							0.9173					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Vapor Space Outage (ft):							2.0000					

Working Losses (lb):	666.1451
Vapor Molecular Weight (lb/lb-mole):	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500
Net Throughput (gal/mo.):	1,085,000.0000
Annual Turnovers:	32.4495
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	33,436.5572
Maximum Liquid Height (ft):	39.0000
Tank Diameter (ft):	12.0800
Working Loss Product Factor:	1.0000
Total Losses (lb):	666.1451



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-498-1 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	666.15	0.00	666.15

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-502-1 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 17.17  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 67,550.45  
Turnovers: 32.12  
Net Throughput(gal/yr): 2,170,000.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.35

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-502-1 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-502-1 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):							0.0000					
Vapor Space Volume (cu ft):							463.0847					
Vapor Density (lb/cu ft):							0.0044					
Vapor Space Expansion Factor:							0.0000					
Vented Vapor Saturation Factor:							0.9173					
Tank Vapor Space Volume:							463.0847					
Vapor Space Volume (cu ft):							17.1700					
Tank Diameter (ft):							2.0000					
Vapor Space Outage (ft):							40.0000					
Tank Shell Height (ft):							39.0000					
Average Liquid Height (ft):							1.0000					
Roof Outage (ft):												
Roof Outage (Cone Roof)												
Roof Outage (ft):							1.0000					
Roof Height (ft):							3.0000					
Roof Slope (ft/ft):							0.3500					
Shell Radius (ft):							8.5850					
Vapor Density												
Vapor Density (lb/cu ft):							0.0044					
Vapor Molecular Weight (lb/lb-mole):							30.3355					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg. R):							540.6700					
Daily Average Ambient Temp. (deg. F):							81.8500					
Ideal Gas Constant R												
(psia cuft / (lb-mol-deg R)):							10.731					
Liquid Bulk Temperature (deg. R):							540.6700					
Tank Paint Solar Absorptance (Shell):							0.1700					
Tank Paint Solar Absorptance (Roof):							0.1700					
Daily Total Solar Insulation												
Factor (Btu/sqft day):							2,551.4853					
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:							0.0000					
Daily Vapor Temperature Range (deg. R):							0.0000					
Daily Vapor Pressure Range (psia):							0.0000					
Breather Vent Press. Setting Range(psia):							0.0000					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Minimum Liquid												
Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Maximum Liquid												
Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg R):							540.6700					
Daily Min. Liquid Surface Temp. (deg R):							540.6700					
Daily Max. Liquid Surface Temp. (deg R):							540.6700					
Daily Ambient Temp. Range (deg. R):							33.5000					
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:							0.9173					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Vapor Space Outage (ft):							2.0000					

Working Losses (lb):	1,332.2903
Vapor Molecular Weight (lb/lb-mole):	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500
Net Throughput (gal/mo.):	2,170,000.0000
Annual Turnovers:	32.1241
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	67,550.4544
Maximum Liquid Height (ft):	39.0000
Tank Diameter (ft):	17.1700
Working Loss Product Factor:	1.0000
Total Losses (lb):	1,332.2903

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-502-1 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	1,332.29	0.00	1,332.29

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-518-1 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 21.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 105,000.00  
Turnovers: 31.00  
Net Throughput(gal/yr): 3,255,000.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft): 3.00  
Slope (ft/ft) (Cone Roof): 0.28

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig): 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-518-1 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-518-1 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):							0.0000					
Vapor Space Volume (cu ft):							698.0091					
Vapor Density (lb/cu ft):							0.0044					
Vapor Space Expansion Factor:							0.0000					
Vented Vapor Saturation Factor:							0.9173					
Tank Vapor Space Volume:							698.0091					
Vapor Space Volume (cu ft):							21.0800					
Tank Diameter (ft):							2.0000					
Vapor Space Outage (ft):							40.0000					
Tank Shell Height (ft):							39.0000					
Average Liquid Height (ft):							1.0000					
Roof Outage (ft):												
Roof Outage (Cone Roof)												
Roof Outage (ft):							1.0000					
Roof Height (ft):							3.0000					
Roof Slope (ft/ft):							0.2800					
Shell Radius (ft):							10.5400					
Vapor Density												
Vapor Density (lb/cu ft):							0.0044					
Vapor Molecular Weight (lb/lb-mole):							30.3355					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg. R):							540.6700					
Daily Average Ambient Temp. (deg. F):							81.8500					
Ideal Gas Constant R												
(psia cuft / (lb-mol-deg R)):							10.731					
Liquid Bulk Temperature (deg. R):							540.6700					
Tank Paint Solar Absorptance (Shell):							0.1700					
Tank Paint Solar Absorptance (Roof):							0.1700					
Daily Total Solar Insulation												
Factor (Btu/sqft day):							2,551.4853					
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:							0.0000					
Daily Vapor Temperature Range (deg. R):							0.0000					
Daily Vapor Pressure Range (psia):							0.0000					
Breather Vent Press. Setting Range (psia):							0.0000					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Minimum Liquid												
Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Maximum Liquid												
Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg R):							540.6700					
Daily Min. Liquid Surface Temp. (deg R):							540.6700					
Daily Max. Liquid Surface Temp. (deg R):							540.6700					
Daily Ambient Temp. Range (deg. R):							33.5000					
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:							0.9173					
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):							0.8500					
Vapor Space Outage (ft):							2.0000					

Working Losses (lb):	1,998.4354
Vapor Molecular Weight (lb/lb-mole):	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500
Net Throughput (gal/mo.):	3,255,000.0000
Annual Turnovers:	31.0000
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	105,000.0000
Maximum Liquid Height (ft):	39.0000
Tank Diameter (ft):	21.0800
Working Loss Product Factor:	1.0000
Total Losses (lb):	1,998.4354

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-518-1 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	1,998.44	0.00	1,998.44

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-534-1 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 30.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 215,000.00  
Turnovers: 31.00  
Net Throughput(gal/yr): 6,665,000.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft): 3.00  
Slope (ft/ft) (Cone Roof): 0.20

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig): 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-534-1 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-534-1 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):							0.0000					
Vapor Space Volume (cu ft):							1,421.2666					
Vapor Density (lb/cu ft):							0.0044					
Vapor Space Expansion Factor:							0.0000					
Vented Vapor Saturation Factor:							0.9173					
Tank Vapor Space Volume:							1,421.2666					
Vapor Space Volume (cu ft):							30.0800					
Tank Diameter (ft):							2.0000					
Vapor Space Outage (ft):							40.0000					
Tank Shell Height (ft):							39.0000					
Average Liquid Height (ft):							1.0000					
Roof Outage (ft):												
Roof Outage (Cone Roof)												
Roof Outage (ft):							1.0000					
Roof Height (ft):							3.0000					
Roof Slope (ft/ft):							0.2000					
Shell Radius (ft):							15.0400					
Vapor Density												
Vapor Density (lb/cu ft):							0.0044					
Vapor Molecular Weight (lb/lb-mole):							30.3355					
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg. R):							540.6700					
Daily Average Ambient Temp. (deg. F):							81.8500					
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):							10.731					
Liquid Bulk Temperature (deg. R):							540.6700					
Tank Paint Solar Absorptance (Shell):							0.1700					
Tank Paint Solar Absorptance (Roof):							0.1700					
Daily Total Solar Insulation Factor (Btu/sqft day):							2,551.4853					
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:							0.0000					
Daily Vapor Temperature Range (deg. R):							0.0000					
Daily Vapor Pressure Range (psia):							0.0000					
Breather Vent Press. Setting Range (psia):							0.0000					
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg R):							540.6700					
Daily Min. Liquid Surface Temp. (deg R):							540.6700					
Daily Max. Liquid Surface Temp. (deg R):							540.6700					
Daily Ambient Temp. Range (deg. R):							33.5000					
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:							0.9173					
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):							0.8500					
Vapor Space Outage (ft):							2.0000					

Working Losses (lb):	4,092.0344
Vapor Molecular Weight (lb/lb-mole)	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500
Net Throughput (gal/mo.):	6,665,000.0000
Annual Turnovers:	31.0000
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	215,000.0000
Maximum Liquid Height (ft):	39.0000
Tank Diameter (ft):	30.0800
Working Loss Product Factor:	1.0000
Total Losses (lb):	4,092.0344

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-534-1 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	4,092.03	0.00	4,092.03



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-550-1 (daily)  
 City:  
 State:  
 Company:  
 Type of Tank: Vertical Fixed Roof Tank  
 Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
 Diameter (ft): 39.08  
 Liquid Height (ft): 39.00  
 Avg. Liquid Height (ft): 39.00  
 Volume (gallons): 350,000.00  
 Turnovers: 31.00  
 Net Throughput(gal/yr): 10,850,000.00  
 Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
 Shell Condition: Good  
 Roof Color/Shade: White/White  
 Roof Condition: Good

**Roof Characteristics**

Type: Cone  
 Height (ft): 3.00  
 Slope (ft/ft) (Cone Roof): 0.15

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
 Pressure Settings (psig): 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):							0.0000					
Vapor Space Volume (cu ft):							2,398.9930					
Vapor Density (lb/cu ft):							0.0044					
Vapor Space Expansion Factor:							0.0000					
Vented Vapor Saturation Factor:							0.9173					
Tank Vapor Space Volume:							2,398.9930					
Vapor Space Volume (cu ft):							39.0800					
Tank Diameter (ft):							2.0000					
Vapor Space Outage (ft):							40.0000					
Tank Shell Height (ft):							39.0000					
Average Liquid Height (ft):							1.0000					
Roof Outage (ft):												
Roof Outage (Cone Roof)												
Roof Outage (ft):							1.0000					
Roof Height (ft):							3.0000					
Roof Slope (ft/ft):							0.1500					
Shell Radius (ft):							19.5400					
Vapor Density												
Vapor Density (lb/cu ft):							0.0044					
Vapor Molecular Weight (lb/lb-mole):							30.3355					
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg. R):							540.6700					
Daily Average Ambient Temp. (deg. F):							61.8500					
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):							10.731					
Liquid Bulk Temperature (deg. R):							540.6700					
Tank Paint Solar Absorptance (Shell):							0.1700					
Tank Paint Solar Absorptance (Roof):							0.1700					
Daily Total Solar Insulation Factor (Btu/sqft day):							2,551.4853					
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:							0.0000					
Daily Vapor Temperature Range (deg. R):							0.0000					
Daily Vapor Pressure Range (psia):							0.0000					
Breather Vent Press. Setting Range (psia):							0.0000					
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):							0.8500					
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):							0.8500					
Daily Avg. Liquid Surface Temp. (deg R):							540.6700					
Daily Min. Liquid Surface Temp. (deg R):							540.6700					
Daily Max. Liquid Surface Temp. (deg R):							540.6700					
Daily Ambient Temp. Range (deg. R):							33.5000					
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:							0.9173					
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):							0.8500					
Vapor Space Outage (ft):							2.0000					

Working Losses (lb):	6,661.4514
Vapor Molecular Weight (lb/lb-mole):	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500
Net Throughput (gal/mo.):	10,850,000.0000
Annual Turnovers:	31.0000
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	350,000.0000
Maximum Liquid Height (ft):	39.0000
Tank Diameter (ft):	39.0800
Working Loss Product Factor:	1.0000
Total Losses (lb):	6,661.4514

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	6,661.45	0.00	6,661.45

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Total Emissions Summaries - All Tanks in Report**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

Tank Identification	Vertical Fixed Roof Tank	Losses (lbs)
N-1237-498-1 (daily)	Vertical Fixed Roof Tank	666.15
N-1237-502-1 (daily)	Vertical Fixed Roof Tank	1,332.29
N-1237-518-1 (daily)	Vertical Fixed Roof Tank	1,998.44
N-1237-534-1 (daily)	Vertical Fixed Roof Tank	4,092.03
N-1237-550-1 (daily)	Vertical Fixed Roof Tank	6,661.45
Total Emissions for all Tanks:		14,750.36

# **Attachment II**

## **Annual PE1 Tanks 4.0d Runs**

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: Model B Annual Rev 3-5-2012 (63.28 Deg-15%)  
City: Fresno  
State: California  
Company: E and J Gallo Winery  
Type of Tank: Vertical Fixed Roof Tank  
Description: Stainless steel insulated wine tank painted white. Flat sloping roof. Tank model B. 4 tanks to be built. This emission report is for one tank. Tank numbers will be assigned later. Equivalent cone roof volume used for calculations.

**Tank Dimensions**

Shell Height (ft):	40.00
Diameter (ft):	12.08
Liquid Height (ft) :	39.00
Avg. Liquid Height (ft):	39.00
Volume (gallons):	33,453.17
Turnovers:	10.46
Net Throughput(gal/yr):	350,000.00
Is Tank Heated (y/n):	Y

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

**Roof Characteristics**

Type:	Cone
Height (ft)	3.00
Slope (ft/ft) (Cone Roof)	0.50

**Breather Vent Settings**

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**Model B Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 15.0 % Vol Alcohol	Jan	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Feb	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Mar	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Apr	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	May	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jun	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jul	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Aug	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Sep	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Oct	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Nov	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Dec	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**Model B Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345
Tank Diameter (ft):	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000
Shell Radius (ft):	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415
Vapor Density												
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Min. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Max. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Working Losses (lb):	7.6382	7.6382	7.6382	7.6382	7.6382	7.6382	7.6382	7.6382	7.6382	7.6382	7.6382	7.6382
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Net Throughput (gal/mo.):	29,166.6667	29,166.6667	29,166.6667	29,166.6667	29,166.6667	29,166.6667	29,166.6667	29,166.6667	29,166.6667	29,166.6667	29,166.6667	29,166.6667
Annual Turnovers:	10.4624	10.4624	10.4624	10.4624	10.4624	10.4624	10.4624	10.4624	10.4624	10.4624	10.4624	10.4624
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Maximum Liquid Volume (gal):	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668

Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
<b>Total Losses (lb):</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>	<b>7.6382</b>

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**Model B Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 15.0 % Vol Alcohol	91.66	0.00	91.66

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: Model C Annual Rev 3-5-2012 (63.28 Deg-15%)  
City: Fresno  
State: California  
Company: E and J Gallo Winery  
Type of Tank: Vertical Fixed Roof Tank  
Description: Stainless steel insulated wine tank painted white. Flat sloping roof. Tank model C. 16 tanks to be built. This emission report is for one tank. Tank numbers will be assigned later. Equivalent cone roof volume used for calculations.

**Tank Dimensions**

Shell Height (ft):	40.00
Diameter (ft):	17.17
Liquid Height (ft) :	39.00
Avg. Liquid Height (ft):	39.00
Volume (gallons):	67,518.98
Turnovers:	20.00
Net Throughput(gal/yr):	1,400,000.00
Is Tank Heated (y/n):	Y

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

**Roof Characteristics**

Type:	Cone
Height (ft)	3.00
Slope (ft/ft) (Cone Roof)	0.35

**Breather Vent Settings**

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**Model C Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 15.0 % Vol Alcohol	Jan	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Feb	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Mar	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Apr	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	May	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jun	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jul	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Aug	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Sep	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Oct	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Nov	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Dec	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**Model C Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690	462.8690
Tank Diameter (ft):	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500
Shell Radius (ft):	8.5830	8.5830	8.5830	8.5830	8.5830	8.5830	8.5830	8.5830	8.5830	8.5830	8.5830	8.5830
Vapor Density												
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Min. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Max. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Working Losses (lb):	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Net Throughput (gal/mo.):	116,666.6667	116,666.6667	116,666.6667	116,666.6667	116,666.6667	116,666.6667	116,666.6667	116,666.6667	116,666.6667	116,666.6667	116,666.6667	116,666.6667
Annual Turnovers:	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Maximum Liquid Volume (gal):	67,518.9844	67,518.9844	67,518.9844	67,518.9844	67,518.9844	67,518.9844	67,518.9844	67,518.9844	67,518.9844	67,518.9844	67,518.9844	67,518.9844

Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660	17.1660
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527	30.5527



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**Model C Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 15.0 % Vol Alcohol	366.63	0.00	366.63

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification:	Model D Annual Rev 3-5-2012 (63.28 Deg-15%)
City:	Fresno
State:	California
Company:	E and J Gallo Winery
Type of Tank:	Vertical Fixed Roof Tank
Description:	Stainless steel insulated wine tank painted white. Tank model D. 16 tanks to be built. This emission report is for one tank. Tank numbers will be assigned later.

**Tank Dimensions**

Shell Height (ft):	40.00
Diameter (ft):	21.08
Liquid Height (ft) :	39.00
Avg. Liquid Height (ft):	39.00
Volume (gallons):	105,000.00
Turnovers:	20.00
Net Throughput(gal/yr):	2,100,000.00
Is Tank Heated (y/n):	Y

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

**Roof Characteristics**

Type:	Cone
Height (ft)	3.00
Slope (ft/ft) (Cone Roof)	0.28

**Breather Vent Settings**

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**Model D Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 15.0 % Vol Alcohol	Jan	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Feb	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Mar	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Apr	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	May	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jun	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jul	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Aug	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Sep	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Oct	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Nov	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Dec	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**Model D Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078	698.2078
Tank Diameter (ft):	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800
Shell Radius (ft):	10.5415	10.5415	10.5415	10.5415	10.5415	10.5415	10.5415	10.5415	10.5415	10.5415	10.5415	10.5415
Vapor Density												
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Min. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Max. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Working Losses (lb):	45.8290	45.8290	45.8290	45.8290	45.8290	45.8290	45.8290	45.8290	45.8290	45.8290	45.8290	45.8290
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Net Throughput (gal/mo.):	175,000.0000	175,000.0000	175,000.0000	175,000.0000	175,000.0000	175,000.0000	175,000.0000	175,000.0000	175,000.0000	175,000.0000	175,000.0000	175,000.0000
Annual Turnovers:	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Maximum Liquid Volume (gal):	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000

# TANKS 4.0 Report

Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830	21.0830
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
<b>Total Losses (lb):</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>	<b>45.8290</b>

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**Model D Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 15.0 % Vol Alcohol	549.95	0.00	549.95

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: Model E Annual Rev 3-5-2012 (63.28 Deg-15%)  
City: Fresno  
State: California  
Company: E and J Gallo Winery  
Type of Tank: Vertical Fixed Roof Tank  
Description: Stainless steel insulated wine tank painted white. Tank model E. 16 tanks to be built. This emission report is for one tank. Tank numbers will be assigned later.

**Tank Dimensions**

Shell Height (ft):	40.00
Diameter (ft):	30.17
Liquid Height (ft) :	39.00
Avg. Liquid Height (ft):	39.00
Volume (gallons):	200,000.00
Turnovers:	20.00
Net Throughput(gal/yr):	4,300,000.00
Is Tank Heated (y/n):	Y

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

**Roof Characteristics**

Type:	Cone
Height (ft)	3.00
Slope (ft/ft) (Cone Roof)	0.20

**Breather Vent Settings**

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**Model E Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 15.0 % Vol Alcohol	Jan	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Feb	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Mar	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Apr	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	May	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jun	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jul	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Aug	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Sep	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Oct	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Nov	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Dec	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865



### TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

**Model E Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank  
Fresno, California**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051	1,429.4051
Tank Diameter (ft):	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
Shell Radius (ft):	15.0830	15.0830	15.0830	15.0830	15.0830	15.0830	15.0830	15.0830	15.0830	15.0830	15.0830	15.0830
Vapor Density												
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Min. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Max. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Working Losses (lb):	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Net Throughput (gal/mo.):	358,333.3333	358,333.3333	358,333.3333	358,333.3333	358,333.3333	358,333.3333	358,333.3333	358,333.3333	358,333.3333	358,333.3333	358,333.3333	358,333.3333
Annual Turnovers:	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000	20.0000
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Maximum Liquid Volume (gal):	200,000.0000	200,000.0000	200,000.0000	200,000.0000	200,000.0000	200,000.0000	200,000.0000	200,000.0000	200,000.0000	200,000.0000	200,000.0000	200,000.0000

Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660	30.1660
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403	93.8403

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**Model E Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 15.0 % Vol Alcohol	1,126.08	0.00	1,126.08

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification:	Model F Annual Rev 3-5-2012 (63.28 Deg-15%)
City:	Fresno
State:	California
Company:	E and J Gallo Winery
Type of Tank:	Vertical Fixed Roof Tank
Description:	Stainless steel insulated wine tank painted white. Tank model F. 16 tanks to be built. This emission report is for one tank. Tank numbers will be assigned later.

**Tank Dimensions**

Shell Height (ft):	40.00
Diameter (ft):	39.08
Liquid Height (ft) :	39.00
Avg. Liquid Height (ft):	39.00
Volume (gallons):	350,000.00
Turnovers:	10.00
Net Throughput(gal/yr):	3,500,000.00
Is Tank Heated (y/n):	Y

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

**Roof Characteristics**

Type:	Cone
Height (ft)	3.00
Slope (ft/ft) (Cone Roof)	0.15

**Breather Vent Settings**

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**Model F Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 15.0 % Vol Alcohol	Jan	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Feb	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Mar	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Apr	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	May	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jun	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jul	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Aug	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Sep	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Oct	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Nov	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Dec	63.28	63.28	63.28	63.28	0.4055	0.4055	0.4055	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865

### TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

**Model F Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank  
Fresno, California**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614	2,399.3614
Tank Diameter (ft):	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500
Shell Radius (ft):	19.5415	19.5415	19.5415	19.5415	19.5415	19.5415	19.5415	19.5415	19.5415	19.5415	19.5415	19.5415
Vapor Density												
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R												
(psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation												
Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Minimum Liquid												
Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Pressure at Daily Maximum Liquid												
Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Daily Avg. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Min. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Max. Liquid Surface Temp. (deg R):	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500	522.9500
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Vapor Pressure at Daily Average Liquid:												
Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Working Losses (lb):	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055	0.4055
Net Throughput (gal/mo.):	291,666.6667	291,666.6667	291,666.6667	291,666.6667	291,666.6667	291,666.6667	291,666.6667	291,666.6667	291,666.6667	291,666.6667	291,666.6667	291,666.6667
Annual Turnovers:	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000	10.0000
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Maximum Liquid Volume (gal):	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000

Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830	39.0830
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817	76.3817

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**Model F Annual Rev 3-5-2012 (63.28 Deg-15%) - Vertical Fixed Roof Tank**  
**Fresno, California**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 15.0 % Vol Alcohol	916.58	0.00	916.58



# **Attachment III**

## **Smallest Daily PE21 Tanks 4.0d Runs**

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-498-2 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 12.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 33,436.56  
Turnovers: 387.46  
Net Throughput(gal/yr): 12,955,310.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.50

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-498-2 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

### TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

**N-1237-498-2 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207
Tank Diameter (ft):	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000
Shell Radius (ft):	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660	1,079,609.1660
Annual Turnovers:	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594
Turnover Factor:	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441
Maximum Liquid Volume (gal):	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942	161.7942

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-498-2 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	1,941.53	0.00	1,941.53

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-502-2 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 17.17  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 67,550.45  
Turnovers: 378.24  
Net Throughput(gal/yr): 25,582,850.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.35

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-502-2 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-502-2 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847
Tank Diameter (ft):	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500
Shell Radius (ft):	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660	2,131,904.1660
Annual Turnovers:	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358
Turnover Factor:	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460
Maximum Liquid Volume (gal):	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664	321.9664

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-502-2 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	3,863.60	0.00	3,863.60

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-518-2 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 21.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 105,000.00  
Turnovers: 365.00  
Net Throughput(gal/yr): 38,392,525.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.28

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-518-2 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

### TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

**N-1237-518-2 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091
Tank Diameter (ft):	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800
Shell Radius (ft):	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830	3,199,377.0830
Annual Turnovers:	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000
Turnover Factor:	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489
Maximum Liquid Volume (gal):	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290	488.8290

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-518-2 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	5,865.95	0.00	5,865.95



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-534-2 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 30.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 215,000.00  
Turnovers: 365.00  
Net Throughput(gal/yr): 78,475,365.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.20

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-534-2 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-534-2 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666
Tank Diameter (ft):	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
Shell Radius (ft):	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Settling Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500	6,539,613.7500
Annual Turnovers:	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000
Turnover Factor:	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489
Maximum Liquid Volume (gal):	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797	999.1797

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-534-2 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	11,990.16	0.00	11,990.16

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Total Emissions Summaries - All Tanks in Report**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

Tank Identification	Losses (lbs)
N-1237-498-2 (daily) Vertical Fixed Roof Tank ,	1,941.53
N-1237-502-2 (daily) Vertical Fixed Roof Tank ,	3,863.60
N-1237-518-2 (daily) Vertical Fixed Roof Tank ,	5,865.95
N-1237-534-2 (daily) Vertical Fixed Roof Tank ,	11,990.16
Total Emissions for all Tanks:	23,661.23

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-550-1 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 39.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 350,000.00  
Turnovers: 383.70  
Net Throughput(gal/yr): 134,294,815.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.15

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930
Tank Diameter (ft):	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500
Shell Radius (ft):	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	1,682.3730	1,682.3730	1,682.3730	1,682.3730	1,682.3730	1,682.3730	1,682.3730	1,682.3730	1,682.3730	1,682.3730	1,682.3730	1,682.3730
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800	11,191,234.5800
Annual Turnovers:	383.6995	383.6995	383.6995	383.6995	383.6995	383.6995	383.6995	383.6995	383.6995	383.6995	383.6995	383.6995
Turnover Factor:	0.2449	0.2449	0.2449	0.2449	0.2449	0.2449	0.2449	0.2449	0.2449	0.2449	0.2449	0.2449
Maximum Liquid Volume (gal):	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
<b>Total Losses (lb):</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>	<b>1,682.3730</b>

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	20,188.48	0.00	20,188.48



# **Attachment IV**

## **Largest Daily PE2 Tanks 4.0d Runs**

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-498-2 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 12.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 33,436.56  
Turnovers: 387.46  
Net Throughput(gal/yr): 13,001,665.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.50

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-498-2 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

### TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

**N-1237-498-2 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207	229.2207
Tank Diameter (ft):	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000
Shell Radius (ft):	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400	6.0400
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000



Working Losses (lb):	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830	1,083,472.0830
Annual Turnovers:	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594	387.4594
Turnover Factor:	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441	0.2441
Maximum Liquid Volume (gal):	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572	33,436.5572
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800	12.0800
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731	162.3731

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-498-2 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	1,948.48	0.00	1,948.48

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-502-2 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 17.17  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 67,550.45  
Turnovers: 378.24  
Net Throughput(gal/yr): 26,196,415.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.35

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-502-2 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

### TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

**N-1237-502-2 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847	463.0847
Tank Diameter (ft):	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500
Shell Radius (ft):	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850	8.5850
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	329.6883	329.6883	329.6883	329.6883	329.6883	329.6883	329.6883	329.6883	329.6883	329.6883	329.6883	329.6883
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830	2,183,034.5830
Annual Turnovers:	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358	378.2358
Turnover Factor:	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460	0.2460
Maximum Liquid Volume (gal):	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544	67,550.4544
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700	17.1700
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
<b>Total Losses (lb):</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>	<b>329.6883</b>

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-502-2 (daily) - Vertical Fixed Roof Tank**

Components	Losses (lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	3,956.26	0.00	3,956.26

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-518-2 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 21.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 105,000.00  
Turnovers: 365.00  
Net Throughput(gal/yr): 38,550,205.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.28

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-518-2 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

### TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

**N-1237-518-2 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091	698.0091
Tank Diameter (ft):	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800	0.2800
Shell Radius (ft):	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400	10.5400
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830	3,212,517.0830
Annual Turnovers:	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000
Turnover Factor:	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489
Maximum Liquid Volume (gal):	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000	105,000.0000
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800	21.0800
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366	490.8366

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-518-2 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	5,890.04	0.00	5,890.04

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-534-2 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 30.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 215,000.00  
Turnovers: 365.00  
Net Throughput(gal/yr): 78,839,270.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.20

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-534-2 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-534-2 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666	1,421.2666
Tank Diameter (ft):	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000	0.2000
Shell Radius (ft):	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400	15.0400
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range(psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	1,003.8131	1,003.8131	1,003.8131	1,003.8131	1,003.8131	1,003.8131	1,003.8131	1,003.8131	1,003.8131	1,003.8131	1,003.8131	1,003.8131
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660	6,569,939.1660
Annual Turnovers:	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000
Turnover Factor:	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489
Maximum Liquid Volume (gal):	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000	215,000.0000
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800	30.0800
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
 Total Losses (lb):	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131	 1,003.8131



**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-534-2 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	12,045.76	0.00	12,045.76

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Total Emissions Summaries - All Tanks in Report**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

Tank Identification		Losses (lbs)
N-1237-498-2 (daily)	Vertical Fixed Roof Tank ,	1,948.48
N-1237-502-2 (daily)	Vertical Fixed Roof Tank ,	3,956.26
N-1237-518-2 (daily)	Vertical Fixed Roof Tank ,	5,890.04
N-1237-534-2 (daily)	Vertical Fixed Roof Tank ,	12,045.76
Total Emissions for all Tanks:		23,840.53

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification: N-1237-550-1 (daily)  
City:  
State:  
Company:  
Type of Tank: Vertical Fixed Roof Tank  
Description:

**Tank Dimensions**

Shell Height (ft): 40.00  
Diameter (ft): 39.08  
Liquid Height (ft) : 39.00  
Avg. Liquid Height (ft): 39.00  
Volume (gallons): 350,000.00  
Turnovers: 365.00  
Net Throughput(gal/yr): 131,215,310.00  
Is Tank Heated (y/n): Y

**Paint Characteristics**

Shell Color/Shade: White/White  
Shell Condition: Good  
Roof Color/Shade: White/White  
Roof Condition: Good

**Roof Characteristics**

Type: Cone  
Height (ft) 3.00  
Slope (ft/ft) (Cone Roof) 0.15

**Breather Vent Settings**

Vacuum Settings (psig): 0.00  
Pressure Settings (psig) 0.00

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 23.9 % Vol Alcohol	Jan	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Feb	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Mar	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Apr	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	May	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jun	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Jul	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Aug	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Sep	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Oct	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Nov	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869
Wine 23.9 % Vol Alcohol	Dec	81.00	81.00	81.00	81.00	0.8500	0.8500	0.8500	30.3355			20.45	Option 1: VP70 = .58508 VP80 = .81869

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930	2,398.9930
Tank Diameter (ft):	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500	0.1500
Shell Radius (ft):	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400	19.5400
Vapor Density												
Vapor Density (lb/cu ft):	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Daily Avg. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Min. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Max. Liquid Surface Temp. (deg R):	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700	540.6700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173	0.9173
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000

Working Losses (lb):	1,670.6858	1,670.6858	1,670.6858	1,670.6858	1,670.6858	1,670.6858	1,670.6858	1,670.6858	1,670.6858	1,670.6858	1,670.6858	1,670.6858
Vapor Molecular Weight (lb/lb-mole):	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355	30.3355
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
Net Throughput (gal/mo.):	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600	10,934,609.1600
Annual Turnovers:	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000	365.0000
Turnover Factor:	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489	0.2489
Maximum Liquid Volume (gal):	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000	350,000.0000
Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800	39.0800
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
<b>Total Losses (lb):</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>	<b>1,670.6858</b>

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**N-1237-550-1 (daily) - Vertical Fixed Roof Tank**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 23.9 % Vol Alcohol	20,048.23	0.00	20,048.23





# **Attachment V**

## **Annual PE2 Tanks 4.0d Runs**

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification:	Model B 35K Annual Rev 04-01-2013
City:	Fresno
State:	California
Company:	E and J Gallo Winery
Type of Tank:	Vertical Fixed Roof Tank
Description:	Stainless steel insulated wine tank painted white. Flat sloping roof. Tank model B. 4 tanks to be built. This emission report is for one tank. Tank numbers will be assigned later. Equivalent cone roof volume used for calculations.

**Tank Dimensions**

Shell Height (ft):	40.00
Diameter (ft):	12.08
Liquid Height (ft) :	39.00
Avg. Liquid Height (ft):	39.00
Volume (gallons):	33,453.17
Turnovers:	20.92
Net Throughput(gal/yr):	700,000.00
Is Tank Heated (y/n):	Y

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

**Roof Characteristics**

Type:	Cone
Height (ft)	3.00
Slope (ft/ft) (Cone Roof)	0.50

**Breather Vent Settings**

Vacuum Settings (psig):	0.00
Pressure Settings (psig)	0.00

Meterological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**Model B 35K Annual Rev 04-01-2013 - Vertical Fixed Roof Tank**  
**Fresno, California**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Wine 15.0 % Vol Alcohol	Jan	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Feb	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Mar	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Apr	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	May	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jun	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Jul	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Aug	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Sep	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Oct	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Nov	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865
Wine 15.0 % Vol Alcohol	Dec	63.30	63.30	63.30	63.30	0.4058	0.4058	0.4058	27.1255			19.46	Option 1: VP60 = .35513 VP70 = .50865

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**Model B 35K Annual Rev 04-01-2013 - Vertical Fixed Roof Tank**  
**Fresno, California**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Space Volume (cu ft):	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345	229.3345
Tank Diameter (ft):	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Tank Shell Height (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Average Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Outage (Cone Roof)												
Roof Outage (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Roof Height (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Roof Slope (ft/ft):	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000
Shell Radius (ft):	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415	6.0415
Vapor Density												
Vapor Density (lb/cu ft):	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058
Daily Avg. Liquid Surface Temp. (deg. R):	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700
Daily Average Ambient Temp. (deg. F):	45.7500	51.1000	55.0000	61.2000	68.9500	76.5500	81.8500	80.2500	74.4500	65.2000	53.6000	45.4000
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Blu/sqft day):	668.1706	1,022.2439	1,488.6308	1,992.7729	2,390.9467	2,566.7143	2,551.4853	2,279.5850	1,860.7886	1,369.9719	851.5527	592.3431
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Temperature Range (deg. R):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Breather Vent Press. Setting Range (psia):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058
Daily Avg. Liquid Surface Temp. (deg R):	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700
Daily Min. Liquid Surface Temp. (deg R):	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700
Daily Max. Liquid Surface Temp. (deg R):	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700	522.9700
Daily Ambient Temp. Range (deg. R):	16.7000	21.2000	23.2000	27.8000	30.5000	32.3000	33.5000	32.9000	31.3000	29.0000	22.2000	16.6000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588	0.9588
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058
Vapor Space Outage (ft):	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000
Working Losses (lb):	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879
Vapor Molecular Weight (lb/lb-mole):	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255	27.1255
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058	0.4058
Net Throughput (gal/mo.):	58,333.3333	58,333.3333	58,333.3333	58,333.3333	58,333.3333	58,333.3333	58,333.3333	58,333.3333	58,333.3333	58,333.3333	58,333.3333	58,333.3333
Annual Turnovers:	20.9248	20.9248	20.9248	20.9248	20.9248	20.9248	20.9248	20.9248	20.9248	20.9248	20.9248	20.9248
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Maximum Liquid Volume (gal):	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668	33,453.1668

# TANKS 4.0 Report

Maximum Liquid Height (ft):	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000	39.0000
Tank Diameter (ft):	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830	12.0830
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879	15.2879

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December**

**Model B 35K Annual Rev 04-01-2013 - Vertical Fixed Roof Tank**  
**Fresno, California**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Wine 15.0 % Vol Alcohol	183.45	0.00	183.45

# **Appendix D**

## **Draft ATCs**

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-498-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 35,000 GALLON STEEL WINE STORAGE TANK (TANK 351) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION, INCREASE ANNUAL STORAGE THROUGHPUT FROM 350,000 GALLONS TO 700,000 GALLONS AND REVISE TANK CAPACITY TO 35,621 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 55 lb, 2nd quarter - 55 lb, 3rd quarter - 55 lb, and fourth quarter - 56 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-498-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 35,621 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 101 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 121.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 263 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-499-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 35,000 GALLON STEEL WINE STORAGE TANK (TANK 352) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND INCREASE ANNUAL STORAGE THROUGHPUT FROM 350,000 GALLONS TO 700,000 GALLONS AND REVISE TANK CAPACITY TO 35,537 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 55 lb, 2nd quarter - 55 lb, 3rd quarter - 55 lb, and fourth quarter - 56 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**  
N-1237-499-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 35,537 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 101 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 121.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 263 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-500-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 35,000 GALLON STEEL WINE STORAGE TANK (TANK 353) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND INCREASE ANNUAL STORAGE THROUGHPUT FROM 350,000 GALLONS TO 700,000 GALLONS AND REVISE TANK CAPACITY TO 35,560 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 55 lb, 2nd quarter - 55 lb, 3rd quarter - 55 lb, and fourth quarter - 56 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-500-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 35,560 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 101 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 121.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 263 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT



San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-501-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 35,000 GALLON STEEL WINE STORAGE TANK (TANK 354) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND INCREASE ANNUAL STORAGE THROUGHPUT FROM 350,000 GALLONS TO 700,000 GALLONS AND REVISE TANK CAPACITY TO 35,494 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 55 lb, 2nd quarter - 55 lb, 3rd quarter - 55 lb, and fourth quarter - 56 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-501-2 . Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 35,494 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 101 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 121.1 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 263 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-502-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 701) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 69,409 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-502-2 : Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 69,409 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-503-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 702) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 71,771 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-503-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 71,771 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE



20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-504-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 703) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,241 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-504-2: Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,241 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-505-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 704) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,316 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-505-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,316 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-506-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 705) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,151 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-506-2 : Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,151 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

**ISSUANCE DATE: DRAFT**  
**DRAFT**

**PERMIT NO:** N-1237-507-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 706) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,260 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-507-2 : Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,260 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-508-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 707) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,240 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-508-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,240 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-509-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 708) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,322 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-509-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,322 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

**ISSUANCE DATE: DRAFT**  
**DRAFT**

**PERMIT NO:** N-1237-510-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 709) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,204 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-510-2 : Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,204 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-511-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 710) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,136 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-511-2 : Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,136 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit



20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-512-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 711) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,097 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-512-2: Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,097 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-513-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 712) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,204 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-513-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
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6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,204 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-514-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 713) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,314 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-514-2 : Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,314 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

**ISSUANCE DATE: DRAFT**

**PERMIT NO:** N-1237-515-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 714) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,173 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

DAVID WARNER, Director of Permit Services  
N-1237-515-2 - Jul 29 2013 11:31AM - GARCIAJ - Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,173 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-516-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 715) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,179 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-516-2 : Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,179 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT



San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-517-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 70,000 GALLON STEEL WINE STORAGE TANK (TANK 716) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 70,090 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 57 lb, 2nd quarter - 57 lb, 3rd quarter - 57 lb, and fourth quarter - 57 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-517-2 : Jul 29 2013 11:31AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 70,090 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 202 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 242.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 350 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-518-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1401) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,185 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-518-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,185 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-519-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1402) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,467 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-519-2 : Jul 29 2013 11:31AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,467 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE



20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-520-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1403) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,400 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-520-2 : Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,400 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-521-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1404) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,475 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-521-2 : Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,475 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-1237-522-2

LEGAL OWNER OR OPERATOR: E & J GALLO WINERY  
MAILING ADDRESS: ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

LOCATION: 18000 W RIVER RD  
LIVINGSTON, CA 95334

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1405) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,400 GALLONS

## CONDITIONS

- {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
- {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
- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

DAVID WARNER, Director of Permit Services

N-1237-522-2 : Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,400 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-1237-523-2

LEGAL OWNER OR OPERATOR: E & J GALLO WINERY  
MAILING ADDRESS: ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

LOCATION: 18000 W RIVER RD  
LIVINGSTON, CA 95334

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1406) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,337 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

DAVID WARNER, Director of Permit Services  
N-1237-523-2 Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,337 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

PERMIT NO: N-1237-524-2

LEGAL OWNER OR OPERATOR: E & J GALLO WINERY  
MAILING ADDRESS: ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

LOCATION: 18000 W RIVER RD  
LIVINGSTON, CA 95334

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1407) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,582 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

DAVID WARNER, Director of Permit Services

N-1237-524-2 : Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,582 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT



San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-525-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1408) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,480 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-525-2 : Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,480 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-526-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1409) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,444 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-526-2 : Jul 28 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,444 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-527-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1410) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,397 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-527-2: Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,397 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE



20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-528-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1411) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,473 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-528-2 · Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,473 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-529-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1412) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,529 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-529-2: Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,529 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-530-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1413) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,519 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

**DAVID WARNER, Director of Permit Services**

N-1237-530-2 : Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
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6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,519 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT

**DRAFT**

**PERMIT NO:** N-1237-531-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1414) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,487 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

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DAVID WARNER, Director of Permit Services  
N-1237-531-2 : Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,487 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-532-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1415) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,617 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-532-2 : Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,617 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-533-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 105,000 GALLON STEEL WINE STORAGE TANK (TANK 1416) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 105,452 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 170 lb, 2nd quarter - 171 lb, 3rd quarter - 171 lb, and fourth quarter - 171 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-533-2 : Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201]
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 105,452 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 303 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 363.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,050 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-534-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2101) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,381 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-534-2 : Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,381 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-535-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2102) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,552 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services  
N-1237-535-2 : Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,552 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE



20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-536-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2103) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,057 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-536-2: Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,057 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-537-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2104) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,060 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-537-2 : Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,060 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-538-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2105) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,521 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-538-2 : Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,521 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-539-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2106) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,411 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services  
N-1237-539-2, Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,411 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-540-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2107) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,998 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-540-2 : Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,998 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT



San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-541-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2108) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,001 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-541-2: Jul 29 2013 11:32AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,001 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-542-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2109) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,533 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-542-2 : Jul 29 2013 11:32AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,533 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-543-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2110) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,475 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-543-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,475 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE



20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

PERMIT NO: N-1237-544-2

LEGAL OWNER OR OPERATOR: E & J GALLO WINERY  
MAILING ADDRESS: ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

LOCATION: 18000 W RIVER RD  
LIVINGSTON, CA 95334

## EQUIPMENT DESCRIPTION:

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2111) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,173 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER**, Director of Permit Services

N-1237-544-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,173 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-545-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2112) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,467 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-545-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,467 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-546-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2113) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,969 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-546-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,969 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-1237-547-2

LEGAL OWNER OR OPERATOR: E & J GALLO WINERY  
MAILING ADDRESS: ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

LOCATION: 18000 W RIVER RD  
LIVINGSTON, CA 95334

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2114) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,116 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

DAVID WARNER, Director of Permit Services  
N-1237-547-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,116 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-548-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2115) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,116 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-548-2 : Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,116 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT



San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-549-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 215,000 GALLON STEEL RED AND WHITE WINE FERMENTATION AND WINE STORAGE TANK (TANK 2116) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 215,056 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 262 lb, 2nd quarter - 262 lb, 3rd quarter - 262 lb, and fourth quarter - 262 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-549-2 : Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
7. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
9. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The maximum wine storage throughput in this tank shall not exceed 215,056 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 621 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions from wine fermentation in this tank shall not exceed 743.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 3,225 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
16. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
18. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit
19. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

20. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
22. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
23. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-550-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3201) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 366,253 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-550-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-550-0 and N-1237-550-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 366,253 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-551-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**  
MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3202) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 364,297 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

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DAVID WARNER, Director of Permit Services  
N-1237-551-2 : Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-551-0 and N-1237-551-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 364,297 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE



20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-552-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3203) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 361,944 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-552-2 ; Jul 29 2013 11:33AM - GARCIAJ ; Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-552-0 and N-1237-552-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 361,944 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-553-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3204) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 366,028 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

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DAVID WARNER, Director of Permit Services  
N-1237-553-2 : Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-553-0 and N-1237-553-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 366,028 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-554-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3205) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 366,239 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-554-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-554-0 and N-1237-554-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 366,239 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per 1000 gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per 1000 gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-555-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3206) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 363,823 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-555-2: Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-555-0 and N-1237-555-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 363,823 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per 1000 gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per 1000 gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-556-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3207) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 359,494 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-556-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-556-0 and N-1237-556-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 359,494 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

DRAFT



San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-557-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3208) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 365,883 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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-1237-557-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-557-0 and N-1237-557-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 365,883 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

DRAFT

**PERMIT NO:** N-1237-558-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3209) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 363,506 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

DAVID WARNER, Director of Permit Services

N-1237-558-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-558-0 and N-1237-558-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 363,506 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-559-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3210) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 364,454 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-559-2: Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-559-0 and N-1237-559-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 364,454 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE



20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-560-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3211) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 367,931 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-560-2 Jul 29 2013 11:33AM - GARCIAJ - Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-560-0 and N-1237-560-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 367,931 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-561-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3212) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 366,267 GALLONS

**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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

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DAVID WARNER, Director of Permit Services

N-1237-561-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-561-0 and N-1237-561-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 366,267 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-562-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3213) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 365,018 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

**DAVID WARNER, Director of Permit Services**

N-1237-562-2 : Jul 29 2013 11:33AM - GARCIAJ : Joint Inspection NOT Required



4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-562-0 and N-1237-562-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 365,018 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

## AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: N-1237-563-2

LEGAL OWNER OR OPERATOR: E & J GALLO WINERY  
MAILING ADDRESS: ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

LOCATION: 18000 W RIVER RD  
LIVINGSTON, CA 95334

### EQUIPMENT DESCRIPTION:

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3214) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 361,289 GALLONS

## CONDITIONS

- {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
- {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
- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [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

DAVID WARNER, Director of Permit Services

N-1237-563-2; Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-563-0 and N-1237-563-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 361,289 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

# AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-564-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3215) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 364,679 GALLONS

## 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantities of emissions: 1st quarter - 284 lb, 2nd quarter - 284 lb, 3rd quarter - 285 lb, and fourth quarter - 285 lb. The quantity of offsets required for fermentation emissions have been reduced by 35%, as District Rule 4694 Section 5.1 requires this facility to achieve at minimum this level of reduction in their Baseline Fermentation Emissions. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

**DAVID WARNER**, Director of Permit Services

N-1237-564-2 : Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required

4. ERC Certificate Numbers C-1189-1, S-3805-1, S-3808-1, S-4025-1 and/or S-4050-1 (or a certificate split from these certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Authority to Construct (ATC) N-1237-564-0 and N-1237-564-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rule 4694] Federally Enforceable Through Title V Permit
10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 364,679 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
13. The annual VOC emissions from wine storage, calculated on a twelve month rolling basis, in this tank shall not exceed 506 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The daily VOC emissions for fermentation operations in this tank shall not exceed 3.46 lb/day per 1000 gallons of wine fermented. [District Rule 2201] Federally Enforceable Through Title V Permit
15. The daily VOC emissions from wine fermentation in this tank shall not exceed 1,211.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The annual VOC emissions from wine fermentation, calculated on a twelve month rolling basis, in this tank shall not exceed 1,750 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
17. All wine fermented in this tank shall be subject to the fermentation tank emission reduction measures of District Rule 4694 with actual production in this tank included in the minimum facility-wide fermentation emission reduction of 35% pursuant to District Rule 4694. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Annual VOC emissions from wine fermentation in this tank, calculated on a twelve month rolling basis, shall be determined by the following equation:  $E = 6.2 \text{ lb per } 1000 \text{ gallons} \times \text{annual red wine production (in gallons)} + 2.5 \text{ lb per } 1000 \text{ gallons} \times \text{annual white wine production (in gallons)}$ . [District Rule 2201] Federally Enforceable Through Title V Permit
19. The operator shall determine and record, on a weekly basis, the total gallons of wine contained in the tank and the maximum temperature of the stored wine. [District Rule 4694] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. For each batch of must fermented in this tank, the operator shall record the fermentation completion date, the total gallons of must fermented, the average fermentation temperature and the uncontrolled fermentation emissions and fermentation emission reductions (calculated per the emission factors given in District Rule 4694). The information shall be recorded by the tank Permit to Operate number and by wine type, stated as either red wine or white wine. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
21. The permittee shall maintain the following records: red wine and white wine produced by fermentation at this facility, based on values reported to the Alcohol and Tobacco Tax and Trade Bureau (TTB), U.S. Department of the Treasury; the volume of each wine movement; and the calculated 12 month rolling wine ethanol content and throughput rate for storage operations and VOC emission rate for fermentation operations (ethanol percentage by volume, gallons and lb-VOC per 12 month rolling period, calculated monthly). [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
22. Daily throughput records, including records of filling and emptying operations, the dates of such operations, a unique identifier for each batch, the volume percent ethanol in the batch, and the volume of wine transferred, shall be maintained. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
23. If the emissions, throughput or ethanol content calculated for any rolling 12-month period exceeds the annual emissions, throughput or ethanol content limitations of this permit, in a crush season in which the start of the crush season (defined as the day on which the facility's seasonal crushing/fermentation operations commence) occurs less than 365 days after the start of the previous crush season, then no violation of the annual emissions, throughput or ethanol content limits for that rolling 12-month period will be deemed to have occurred so long as the calendar year emissions, throughput and ethanol content are below the annual emissions, throughput and ethanol content limitations. [District Rule 2201] Federally Enforceable Through Title V Permit
24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

ISSUANCE DATE: DRAFT  
**DRAFT**

**PERMIT NO:** N-1237-565-2

**LEGAL OWNER OR OPERATOR:** E & J GALLO WINERY  
**MAILING ADDRESS:** ATTN: EHS MANAGER  
18000 W RIVER RD  
LIVINGSTON, CA 95334

**LOCATION:** 18000 W RIVER RD  
LIVINGSTON, CA 95334

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF 350,000 GALLON STEEL RED AND WHITE WINE STORAGE TANK (TANK 3216) WITH PRESSURE/VACUUM VALVE AND INSULATION: ALLOW TANK TO BE USED FOR FERMENTATION AND REVISE TANK CAPACITY TO 361,209 GALLONS

**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
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Seyed Sadredin, Executive Director, APCO

**DAVID WARNER, Director of Permit Services**

N-1237-565-2 : Jul 29 2013 11:33AM -- GARCIAJ : Joint Inspection NOT Required

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5. Authority to Construct (ATC) N-1237-565-0 and N-1237-565-1 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this ATC. [District Rule 2201] Federally Enforceable Through Title V Permit
6. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
7. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
8. When this tank is used for wine storage, the pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition, except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21. [District Rules 2201 and 4694] Federally Enforceable Through Title V Permit
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10. The average fermentation temperature of each batch of must fermented in this tank shall not exceed 95 degrees Fahrenheit, calculated as the average of all temperature measurements for the batch taken at least every 12 hours over the course of the fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The maximum wine storage throughput in this tank shall not exceed 361,209 gallons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
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CONDITIONS CONTINUE ON NEXT PAGE

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24. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201] Federally Enforceable Through Title V Permit
25. All records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070, 2201 and 4694] Federally Enforceable Through Title V Permit

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## **Appendix E**

### **Quarterly Net Emissions Change**

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.1 and VII.C.2 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$$\begin{aligned}
 PE2_{\text{quarterly}} &= PE2_{\text{annual}} \div 4 \text{ quarters/year} \\
 &= 364 \text{ lb/year} \div 4 \text{ qtr/year} \\
 &= 91 \text{ lb VOC/qtr}
 \end{aligned}$$

$$\begin{aligned}
 PE1_{\text{quarterly}} &= PE1_{\text{annual}} \div 4 \text{ quarters/year} \\
 &= 51 \text{ lb/year} \div 4 \text{ qtr/year} \\
 &= 12.75 \text{ lb VOC/qtr}
 \end{aligned}$$

<b>Quarterly NEC [QNEC] for ATC N-1237-498 through -501</b>			
	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>	0	0	0
CO	0	0	0
VOC	91	12.75	78.25

<b>Quarterly NEC [QNEC] for ATC N-1237-502-1 through -517-1</b>			
	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>	0	0	0
CO	0	0	0
VOC	138	50.5	87.5

<b>Quarterly NEC [QNEC] for ATC N-1237-518 through -533</b>			
	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>	0	0	0
CO	0	0	0
VOC	338.25	75.75	262.5

<b>Quarterly NEC [QNEC] for ATC N-1237-534 through -549</b>			
	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>	0	0	0
CO	0	0	0
VOC	961.5	558.5	403.0

<b>Quarterly NEC [QNEC] for ATC N-1237-550 through -565</b>			
	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>	0	0	0
CO	0	0	0
VOC	564	126.5	437.5

## **Appendix F**

### **BACT Guideline 5.4.14 and Top Down BACT Analysis**

San Joaquin Valley  
Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 5.4.14\***

Last Update 10/6/2009

**Wine Fermentation Tank**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Temperature-Controlled Open Top Tank with Maximum Average Fermentation Temperature of 95 deg F	<ol style="list-style-type: none"> <li>1. Capture of VOCs and Thermal Oxidation or Equivalent (88% control)</li> <li>2. Capture of VOCs and Carbon Adsorption or Equivalent (86% control)</li> <li>3. Capture of VOCs and Absorption or Equivalent (81% control)</li> <li>4. Capture of VOCs and Condensation or Equivalent (81% control)</li> </ol>	

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**



# Top Down BACT Analysis for Wine Fermentation VOC Emissions

## Step 1 - Identify All Possible Control Technologies

The SJVUAPCD BACT Clearinghouse guideline 5.4.14, 3<sup>rd</sup> quarter 2013, identifies achieved in practice BACT for wine fermentation tanks as follows:

- 1) Temperature-Controlled Open Top Tank with Maximum Average Fermentation Temperature of 95 deg F

The SJVUAPCD BACT Clearinghouse guideline 5.4.14, 3<sup>rd</sup> quarter 2013, identifies technologically feasible BACT for wine fermentation tanks as follows:

- 1) Capture of VOCs and thermal oxidation or equivalent (88% control)
- 2) Capture of VOCs and carbon adsorption or equivalent (86% control)
- 3) Capture of VOCs and absorption or equivalent (81% control)
- 4) Capture of VOCs and condensation or equivalent (81% control)

## Step 2 - Eliminate Technologically Infeasible Options

None of the above listed technologies are technologically infeasible.

## Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Rank by Control Effectiveness		
Rank	Control	Overall Capture and Control Efficiency <sup>(*)</sup>
1	Capture of VOCs and thermal or catalytic oxidation or equivalent	88% <sup>(**)</sup>
2	Capture of VOCs and carbon adsorption or equivalent	86%
3	Capture of VOCs and absorption or equivalent	81%
4	Capture of VOCs and condensation or equivalent	81%
5	Temperature-Controlled Open Top Tank with Maximum Average Fermentation Temperature of 95 deg F	Baseline (Achieved-in-Practice)

(\*) Capture efficiency (90%) x removal efficiency for control device.

(\*\*) Following recent District practice, thermal and catalytic oxidation will be ranked together.

## Step 4 - Cost Effectiveness Analysis

A cost-effective analysis is performed for each control technology which is more effective than meeting the requirements of District Rule 4694 (achieved-in-practice BACT), as proposed by the facility.

### Maximum Vapor Flow Rate

Based on the kinetic model provided by the facility, maximum CO<sub>2</sub> production rate for each fermentation tank is as follows:

35,000 gallon tanks = 180.4 scfm

70,000 gallon tanks = 360.8 scfm

105,000 gallon tanks = 541.2 scfm

215,000 gallon tanks = 1,108.1 scfm

350,000 gallon tanks = 1,803.9 scfm

$$\begin{aligned} \text{Maximum Vapor Flow Rate} &= 180.4 \text{ scfm} \times 4 \text{ fermentation tanks} + 360.8 \text{ scfm} \times 16 \\ &\quad \text{fermentation tanks} + 541.2 \text{ scfm} \times 16 \text{ fermentation tanks} + \\ &\quad 1,108.1 \text{ scfm} \times 16 \text{ fermentation tanks} + 1,803.9 \text{ scfm} \times 16 \\ &\quad \text{fermentation tanks} \\ &= 61,746 \text{ scfm} \end{aligned}$$

The submitted kinetic model is based upon a maximum rate 46-hour red wine fermentation with a maximum tank charge of 80% of the nominal tank capacity. Since the planned operation of the proposed tanks (per E & J Gallo Winery) is the production of commercial premium wines with fermentation cycles of 5-8 days, the 46 hour fermentation basis with maximum fill is a very conservative upper limit of the expected flow rate.

### Uncontrolled Fermentation Emissions

For purposes of cost effectiveness analysis, uncontrolled fermentation emissions will be calculated based on the uncontrolled emission factors without consideration of the 35% reduction per Rule 4694 as these are the actual uncontrolled emissions being sent to each control technology option.

$$\begin{aligned} \text{Uncontrolled Fermentation PE} &= EF_{\text{White}} (\text{lb-VOC}/1000 \text{ gal}) \times \text{annual throughput (gal/yr) as} \\ &\quad \text{proposed by applicant} \\ &= 2.5 \text{ lb-VOC}/1000 \text{ gal} \times 41,220,000 \text{ gal/year} \\ &= 103,050 \text{ lb-VOC/year} \end{aligned}$$

### Collection System Capital Investment (based on ductwork)

A common feature of all thermal or catalytic oxidation/carbon adsorption/absorption or condensation options when configured as a large single control device controlling many tanks is that they require installation of a collection system for delivering the VOCs from the tanks to the common control device. Therefore, the requirements and cost of such a collection system will be considered separately.

Collection system to consist of:

- The collection system consists of stainless steel place ductwork (stainless steel is required due to food grade product status) with isolation valving, connecting 68 tanks to a common

manifold system which ducts the combined vent to the common control device. The cost of dampers and isolation valving, installed in the ductwork, will be included in the cost estimate.

- A minimum duct size is established at six inches diameter at each tank to provide adequate strength for spanning between supports. The main header is twelve inches diameter to handle the potential for simultaneous venting.

### Capital Cost Ductwork

Connection from tank to main duct = 68 tanks x 25 feet x \$61.30/foot = \$104,210

Main duct for fermenters = \$239,802 + \$508,871 = \$748,673

Redundant main duct for fermenters = \$748,673

Unit installed cost for 6 inch butterfly valve = \$2,125/valve x 68 valves x 2 systems = \$289,000

Unit installed cost one foot removable spool = \$500/tank x 68 tanks x 2 systems = \$68,000

Knockout drums = \$92,600 x 2 = \$185,200

Duct support allowance = \$5,000/tank x 68 tanks = \$340,000

Total = \$104,210 + \$748,673 + \$748,673 + \$289,000 + \$68,000 + \$185,200 + \$340,000  
= \$2,483,756

<b>Ductwork</b>	
Cost Description	Cost (\$)
Duct Estimate (See Duct Sizing Attachment A)	\$2,483,756
Adjusting factor from 2005 dollars to 2013 dollars (2.75% inflation/year)	1.22
Inflation adjusted duct cost	\$3,030,182
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
<b>Direct Costs (DC)</b>	
Base Equipment Costs (Ductwork) See Above	\$3,030,182
Instrumentation (not required)	-
Sales Tax 3%	\$90,905
Freight 5%	\$151,509
<b>Purchased equipment cost</b>	<b>\$3,272,596</b>
Foundations & supports 8%	\$261,808
Handling & erection 14%	\$458,163
Electrical 4% (not required)	-
Piping 2% (not required)	-
Painting 1% (not required)	-
Insulation 1% (not required)	-
<b>Direct installation costs</b>	<b>\$719,971</b>
<b>Total Direct Costs</b>	<b>\$3,992,567</b>
<b>Indirect Costs (IC)</b>	
Engineering 10%	\$327,260

Construction and field expenses 5%	\$163,630
Contractor fees 10%	\$327,260
Start-up 2%	\$65,452
Performance test 1%	\$32,726
Contingencies 3%	\$98,178
<b>Total Indirect Costs</b>	<b>\$1,014,506</b>
<b>Total Capital Investment (TCI) (DC + IC)</b>	<b>\$5,007,073</b>

Capital Cost Clean-In-Place (CIP) System

A ducting system on a tank farm must have this system to maintain sanitation and quality of the product. The cost of operation of the CIP system has not been estimated. Operation of a CIP system, using typical cleaning agents, will raise disposal and wastewater treatment costs. Most likely, these costs will be significant.

<b>Clean-In-Place (CIP) System</b>	
Cost Description	Cost (\$)
Current cost of CIP system	\$200,000
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
<b>Direct Costs (DC)</b>	
Base Equipment Costs (CIP System) See Above	\$200,000
Instrumentation 10%	\$20,000
Sales Tax 3%	\$6,000
Freight 5%	\$10,000
<b>Purchased equipment cost</b>	<b>\$236,000</b>
Foundations & supports 8%	\$18,880
Handling & erection 14%	\$33,040
Electrical 4%	\$9,440
Piping 2%	\$4,720
Painting 1%	\$2,360
Insulation 1%	\$2,360
<b>Direct installation costs</b>	<b>\$70,800</b>
<b>Total Direct Costs</b>	<b>\$306,800</b>
<b>Indirect Costs (IC)</b>	
Engineering 10%	\$23,600
Construction and field expenses 5%	\$11,800
Contractor fees 10%	\$23,600
Start-up 2%	\$4,720
Performance test 1%	\$2,360
Contingencies 3%	\$7,080

<b>Total Indirect Costs</b>	<b>\$73,160</b>
<b>Total Capital Investment (TCI) (DC + IC)</b>	<b>\$379,960</b>

Annualized Capital Costs

Two CIP systems are required for a redundant ducting system.

$$\begin{aligned}
 \text{Total capital costs} &= \text{Ductwork} + \text{CIP System (x 2)} \\
 &= \$5,007,073 + \$379,960 + \$379,960 \\
 &= \$5,766,993
 \end{aligned}$$

Annualized Capital Investment = Initial Capital Investment x Amortization Factor

$$\text{Amortization Factor} = \left[ \frac{0.1(1.1)^{10}}{(1.1)^{10} - 1} \right] = 0.163 \text{ per District policy, amortizing over 10 years at 10\%}$$

Therefore,

$$\text{Annualized Capital Investment} = \$5,766,993 \times 0.163 = \$940,020$$

# Capture of VOCs and condensation (> 81% collection & control)

## EcoPAS Analysis

Equipment pricing for the refrigerated condenser option was obtained from EcoPAS which has developed technology of this type specific to the control of fermentation emissions. EcoPAS has submitted an analysis to control 24 fermentation tanks in Project N-1131615 using four proprietary PAS control units. Each PAS unit is dedicated to a bay of six fermentation tanks. The units operate based on a small backpressure on the tanks and do not require induced draft fans. Chilled glycol/water is supplied from the winery central facility for condensing the ethanol vapor.

As seen below, EcoPAS has submitted a worst case model which assumes all fermentations are short cycle combined durations of 2-3 days. The fermentations are assumed to be staged in a manner to levelize the combined vapor flow and demonstrates that the full permitted annual capacity of the tanks would be achieved in 79 days of operation.

PAS Bay 1 of 4

**One PAS Unit Servicing Six 56,000-gallon Fermentation Tanks—(no more than 8.125 tons EtOH permitted from these tanks)**

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10	DAY 11	DAY 12	DAY 13	DAY 14	DAY 15	DAY 16	DAY 17	DAY 18	DAY 19	DAY 20	DAY 21	DAY 22	DAY 23	DAY 24
TANK 1	12	8	sanitize	empty	empty	empty	empty	empty	12	8	sanitize	empty	empty	empty	empty	empty	12	8	sanitize	empty	empty	empty	empty	empty
TANK 2	soak	6	10	4	sanitize	empty	empty	empty	soak	6	10	4	sanitize	empty	empty	empty	soak	6	10	4	sanitize	empty	empty	empty
TANK 3	empty*	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty
TANK 4	empty	empty	load	soak	6	10	4	sanitize	empty	empty	load	soak	6	10	4	sanitize	empty	empty	load	soak	6	10	4	sanitize
TANK 5	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize
TANK 6	empty	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8
Daily Briv Reduc for 6-tanks combined	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33
GALLONS - Active Fermentation	44,800	89,600	44,800	89,600	89,600	89,600	134,400	44,800	44,800	89,600	44,800	89,600	89,600	89,600	134,400	44,800	44,800	89,600	89,600	89,600	89,600	89,600	134,400	44,800
GALLONS - Cumulative Fermented	44,800	89,600	89,600	134,400	179,200	224,000	268,800	268,800	313,600	358,400	358,400	403,200	448,000	492,800	537,600	537,600	582,400	627,200	627,200	672,000	716,800	716,800	761,600	806,400
EtOH Emited per day - POUNDS	167	194	139	222	194	139	313	111	167	194	139	222	194	139	313	111	167	194	139	222	194	139	313	111
Cumulative EtOH Emited - TONS	0.08	0.18	0.25	0.36	0.46	0.61	0.78	0.81	0.92	1.01	1.08	1.19	1.29	1.44	1.61	1.67	1.75	1.85	1.92	2.03	2.12	2.21	2.44	2.50

8-day cycle: 46,800 x 6 = 280,800-gallons  
2,820,960-gal/268,800-gal = 9.75 turns MAX

\*empty: Not in active fermentation. May be cold soak or post-fermentation storage. Actual active fermentations likely to extend beyond 2-3 days.  
This model's condition is a reasonable worst-case scenario with short cycles of active fermentation.

PAS Bay 1 of 4

	DAY 25	DAY 26	DAY 27	DAY 28	DAY 29	DAY 30	DAY 31	DAY 32	DAY 33	DAY 34	DAY 35	DAY 36	DAY 37	DAY 38	DAY 39	DAY 40	DAY 41	DAY 42	DAY 43	DAY 44	DAY 45	DAY 46	DAY 47	DAY 48
TANK 1	12	8	sanitize	empty	empty	empty	empty	empty	12	8	sanitize	empty	empty	empty	empty	empty	12	8	sanitize	empty	empty	empty	empty	empty
TANK 2	soak	6	10	4	sanitize	empty	empty	empty	soak	6	10	4	sanitize	empty	empty	empty	soak	6	10	4	sanitize	empty	empty	empty
TANK 3	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty
TANK 4	empty	empty	load	soak	6	10	4	sanitize	empty	empty	load	soak	6	10	4	sanitize	empty	empty	load	soak	6	10	4	sanitize
TANK 5	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize
TANK 6	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	empty	load	soak	12
Daily Briv Reduc for 6-tanks combined	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33
GALLONS - Active Fermentation	44,800	89,600	44,800	89,600	89,600	89,600	134,400	44,800	44,800	89,600	44,800	89,600	89,600	89,600	134,400	44,800	44,800	89,600	89,600	89,600	89,600	89,600	134,400	44,800
GALLONS - Cumulative Fermented	351,200	396,000	396,000	842,800	932,400	1,032,000	1,077,200	1,120,000	1,164,800	1,164,800	1,209,600	1,254,400	1,299,200	1,344,000	1,344,000	1,388,800	1,388,800	1,433,600	1,433,600	1,478,400	1,523,200	1,523,200	1,568,000	1,612,800
EtOH Emited per day - POUNDS	167	194	139	222	194	139	313	111	167	194	139	222	194	139	313	111	167	194	139	222	194	139	313	111
Cumulative EtOH Emited - TONS	2.33	2.65	2.75	2.66	2.96	3.11	3.26	3.33	3.42	3.51	3.58	3.69	3.79	3.94	4.11	4.17	4.23	4.33	4.42	4.53	4.62	4.78	4.94	5.00

PAS Bay 1 of 4

	DAY 49	DAY 50	DAY 51	DAY 52	DAY 53	DAY 54	DAY 55	DAY 56	DAY 57	DAY 58	DAY 59	DAY 60	DAY 61	DAY 62	DAY 63	DAY 64	DAY 65	DAY 66	DAY 67	DAY 68	DAY 69	DAY 70	DAY 71	DAY 72
TANK 1	12	8	sanitize	empty	empty	empty	empty	empty	12	8	sanitize	empty	empty	empty	empty	empty	12	8	sanitize	empty	empty	empty	empty	empty
TANK 2	soak	6	10	4	sanitize	empty	empty	empty	soak	6	10	4	sanitize	empty	empty	empty	soak	6	10	4	sanitize	empty	empty	empty
TANK 3	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty
TANK 4	empty	empty	load	soak	6	10	4	sanitize	empty	empty	load	soak	6	10	4	sanitize	empty	empty	load	soak	6	10	4	sanitize
TANK 5	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize
TANK 6	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	load	soak	12	8	sanitize	empty	empty	empty	empty	load	soak	12
Daily Briv Reduc for 6-tanks combined	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33	2.00	2.33	1.67	2.67	2.33	1.67	4.00	1.33
GALLONS - Active Fermentation	44,800	89,600	44,800	89,600	89,600	89,600	134,400	44,800	44,800	89,600	44,800	89,600	89,600	89,600	134,400	44,800	44,800	89,600	89,600	89,600	89,600	89,600	134,400	44,800
GALLONS - Cumulative Fermented	1,657,600	1,732,400	1,732,400	1,747,200	1,792,000	1,836,800	1,881,600	1,881,600	1,926,400	1,971,200	1,971,200	2,016,000	2,060,800	2,105,600	2,105,600	2,150,400	2,150,400	2,195,200	2,195,200	2,240,000	2,240,000	2,284,800	2,329,600	2,374,400
EtOH Emited per day - POUNDS	167	194	139	222	194	139	313	111	167	194	139	222	194	139	313	111	167	194	139	222	194	139	313	111
Cumulative EtOH Emited - TONS	3.08	3.18	3.25	3.38	3.46	3.61	3.78	3.83	3.92	4.01	4.08	4.19	4.29	4.44	4.61	4.67	4.75	4.85	4.92	5.03	5.12	5.21	5.44	5.50

PAS Bay 1 of 4

	DAY 73	DAY 74	DAY 75	DAY 76	DAY 77	DAY 78	DAY 79
TANK 1	12	8	sanitize	empty	empty	empty	empty
TANK 2	soak	6	10	4	sanitize	empty	empty
TANK 3	empty	load	soak	12	8	sanitize	empty
TANK 4	empty	empty	load	soak	6	10	4
TANK 5	empty	empty	empty	load	soak	12	8
TANK 6	sanitize	empty	empty	empty	load	soak	12
Daily Briv Reduc for 6-tanks combined	2.00	2.33	1.67	2.67	2.33	1.67	0.67
GALLONS - Active Fermentation	44,800	89,600	44,800	89,600	89,600	44,800	44,800
GALLONS - Cumulative Fermented	2,444,000	2,538,200	2,538,200	2,573,600	2,598,400	2,598,400	2,598,400
EtOH Emited per day - POUNDS	167	194	139	222	194	139	34
Cumulative EtOH Emited - TONS	7.59	7.63	7.75	7.66	7.96	8.08	8.24

Each PAS unit has a capacity adequate to control the vapor flow from the six dedicated fermentation tanks at a 90 percent capture efficiency as long as the fermentations are appropriately staged to prevent all the tanks from operating at peak fermentation simultaneously. Typically the actively fermenting tanks in each bay of six tanks and the PAS unit are connected with quick-disconnect hoses to a central stainless steel header.

Due to the high concentration ethanol collected by the PAS unit (80-100 proof), the unit is self-sterilizing and CIP is not normally required throughout the season. However, if required, the PAS unit and central header may be flushed with sterilizing chemicals through the hose connections. EcoPAS indicates a CIP system is not required.

An 80-100 proof liquor is produced from the unit and delivered to stainless steel drums. When filled, the drums are transferred and pumped into a holding tank for purposes of sale or internal use.

### E & J Gallo Winery Analysis

E & J Gallo Winery has provided operating data for an existing group of twenty-four 56,000 gallon fermentation tanks for purposes of characterizing the proposed operation and the potential requirements for control devices. Per E & J Gallo Winery, the data demonstrates that all six fermenters in a grouping could be active at the same time and one control device per six fermenters would be insufficient to handle the vapor flow. The facility also contends greater than 4 PAS units would be required to handle the vapor flow under worst case scenarios.

The operating data provided by E & J Gallo Winery is an excerpt from the facility's 2012 production for similar fermenters (see table in document received by email on June 21, 2013 in Project N-1131615). The above data was for newly constructed tanks that had not been operated during a harvest season.

E & J Gallo Winery has indicated the tanks in this project are being designed for commercial premium wines so fermentation cycles are 5-8 days which should be reflected in the modeling. However, depending on the wine type the fermentation period could be very aggressive and completed in 2-3 days.

Per the facility, there are two possible configurations for this control option. One, is installing one control device dedicated to each tank. Two, is installing one control device sized to serve all fermentation vessels with appropriate duct work, valving, and CIP. If the option of installing one control device dedicated to each tank is implemented, the fire code requires everything within a 25 foot radius from the control device to meet Class I, Division II Fire Code standards for explosivity. Per E & J Gallo Winery, while this cost has not been estimated as a clear system design has not been established; it can be assumed this cost would be substantial.

The facility has also stated the control devices themselves will need to be cleaned in the event of a foam over. These events occur multiple times per year and a system to protect and properly clean and sanitize the control devices must be factored into the analysis.

The facility has indicated the condensers cannot be simply tied into the existing ammonia or glycol system. The current systems at the facility are fully utilized and therefore the cost for an added cooling system needs to be factored into the capital costs. The facility would need to perform an appropriate system design to accurately cost the cooling system.

E & J Gallo Winery has indicated additional evaluation is required pertaining to the EcoPAS fermentation cycle model to determine if this scenario could be likely encountered in the field. As well, the facility states evaluation of safety issues associated with managing and moving high-proof alcohol collected in drums is required. Mobility of the condensers requires examination in a large industrial setting.

Finally, E & J Gallo Winery has stated grapes may not arrive in the quantities planned and tanks may be filled in groups at one time causing them to reach peak fermentation at the same time with variations in the fill quantity and stacking of the fermenter. In addition, sometimes there are desires to ferment certain lots at different temperatures. These considerations are driven by conditions in the field including weather, availability of labor, and transportation equipment and by wine style and market demands.

In summary, E & J Gallo Winery has indicated the following items will need to be analyzed in greater detail regarding the EcoPAS condenser system.

- Number of units to control the fermentation tanks based on vapor flow rate
- EcoPAS fermentation cycle model to determine if feasible in the field
- Safety issues pertaining to movement of high-proof alcohol drums
- CIP requirement for this technology
- Duct sizing for red fermentation (12 inch diameter piping may be insufficient)
- Cost for cooling system installation
- Mobility issues for the EcoPAS system in a large industrial setting
- Instrumentation, grounding, and electrical dampers allowance
- Control device retrofit to comply with fire protection standards
- Collection and control efficiency of the EcoPAS technology

### District Analysis

Taking into consideration the information and comments provided by EcoPAS and E & J Gallo Winery, the District will analyze the EcoPAS system for cost effectiveness on the following basis.

District analysis of the operating data supplied by Gallo indicates:

- Based on the operating data for twenty-four 56,000 gallon fermenters provided by E & J Gallo Winery, from 9/18/12 through 9/24/12, 18 of the set of 24 tanks were in operation simultaneously (75% utilization).
- Assuming that 4 PAS units would be specified for controlling 24 tanks (per Project N-1131615) consistent with EcoPAS's preliminary design, it can be shown that not more than 5 of the 6 tanks assigned to any single device would be required to be active at any time



and that the timing of initiation of all fermentations within any particular control grouping would be at least one day apart.

- All fermentations were 4 days duration or longer with an average of 5.3 days, more than twice the 46 hour fermentation basis of the maximum flow rate value, indicating that peak flow from each the fermentations listed was significantly below the peak fermentation flow rate of 288 scfm given by the E & J Gallo Winery kinetic model for tanks in Project N-1131615 and it can be assumed that for the tanks in this project it will be below the peak fermentation flow rate given by the E & J Gallo Winery kinetic model.
- The fermentation fill ranged from 28% to 59% with an average of 49%, significantly below the 80% basis used to establish the peak flow. This results in a further significant reduction in the expected peak flow from each tank.
- The operating data represent operations which were conducted for production considerations and not to levelize the flow to common control devices. Peak combined vapor flow could be reduced with effective planning of fermentation operations based on type of fermentation with minimal impact on production.

Given that E & J Gallo Winery has indicated 5-8 day fermentations are being designed (yet depending on the wine type the fermentation period could be 2-3 days), it is reasonable to conclude that the four condenser units proposed by EcoPAS would be adequate to control the 24 new tanks in Project N-1131615 and every condenser unit will be adequate to control 6 tanks proposed in the project. Therefore, for purposes of this analysis, the District will base the capital investment analysis on 1 condenser unit (4 tanks ÷ 6 tanks/unit) for tanks in Model B and 3 condenser units (16 tanks ÷ 6 tanks/unit) for each group of tanks in Models C, D, E and F.

Consistent with EcoPAS technology, CIP is assumed to not be required (based on comments provided by EcoPAS). This is the most conservative assumption for the cost analysis. However, further research will need to be performed to analyze the validity of this assumption.

A charge for the glycol system capital cost will be included in the analysis.

### Design Basis

- The EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001) is used for this analysis with modifications to account for project-specific conditions.
- Equipment pricing: budgetary estimate provided by EcoPAS for Project N-1131615 for the installation of twenty-four 56,000 gallon red and white wine fermentation tanks.
- Instrumentation allowance of \$2,000 per PAS unit has been included for a pressure transmitter and a temperature transmitter for monitoring pressure of the collection header and vent stream and temperature from the PAS unit.
- Sales tax = 8.225% based on California location
- Foundations and supports: not required – unit is supported from either a tank or the piperack structure. Equipment price includes required attachments and clips.
- Handling and Erection is taken to be 8% of Purchased Equipment Cost based on common conditions; however, site modification costs may vary.
- The PAS unit does not require any pumps, fans, or motors.
- Insulation and painting are not required.

- Operating labor is estimated based on 1 operator hour per day and 3 shifts per day per operating unit over a 90 day crush season and an hourly cost of \$18.50 per hour.
- An allowance for annual maintenance cost was included as 1% of Total Capital Investment.
- The condenser utilizes chilled glycol water from the winery existing chiller system. The cost has been annualized and the annualized cost is estimated at \$270 per ton of recovered ethanol based on approximately \$85 per ton energy charge at \$0.13/kWh and \$100 per ton capital charge for the central chilled water facility (based on a District analysis of annualized costs for a 100 ton mechanical chiller).
- Recovered ethanol (assume 80 proof liquor for worst case scenario) is estimated at approximately 35,025 gallons per year (103,050 lb/year (uncontrolled fermentation emissions) x 0.90 x gal/6.62 lb ÷ 0.40). EcoPAS has indicated the value of the recovered ethanol is \$25 per gallon as a 60 proof alcohol spirit. However, E & J Gallo Winery has indicated the highest value for this product would be \$2.71 per gallon assuming the alcohol can be used for internal brandy production (which has not been demonstrated in practice to be true). This represents the facilities internal cost for distilling material alcohol and does not include additional processing. If the alcohol cannot be used internally, E & J Gallo Winery has indicated the product has no value outside the organization and would in fact incur a disposal cost resulting in a value less than \$0 per gallon. E & J Gallo Winery has proposed to value the recovered alcohol at a conservative value of \$2.71 per gallon until it can be proven in practice to have a greater value.

#### Capital Cost Refrigerated Condenser

Pricing for the PAS condenser unit was provided by EcoPAS for Project N-1131615. Based on supply of 4 PAS units each sized to control six (6) 56,000-gallon tanks, the price per condenser is estimated by EcoPAS at \$475,318 each. The estimated price includes shipping and California sales tax.

$$\begin{aligned} \text{Uncontrolled emissions from Project N-1131615} &= 6.2 \text{ lb-VOC/1000 gal} \times 436,800 \text{ gal/year} \times 6 \\ &\quad \text{tanks} \\ &= 16,249 \text{ lbs-VOC/year} \end{aligned}$$

Tank Model B (N-1237-498 through -501)

$$\begin{aligned} \text{Capital Cost} &= \$475,318 \times [(105,000 \text{ gal/year} \times 2.5 \text{ lbs-VOC/1000 gal} \times 4 \text{ tanks}) / (6.2 \text{ lb-} \\ &\quad \text{VOC/1000 gal} \times 436,800 \text{ gal/year} \times 6 \text{ tanks})]^{0.6} \times 1 \text{ units} \\ &= \$91,876 \times 1 \text{ units} \\ &= \$91,876 \end{aligned}$$

Tank Model C (N-1237-502- through -517)

$$\begin{aligned} \text{Capital Cost} &= \$475,318 \times [(140,000 \text{ gal/year} \times 2.5 \text{ lbs-VOC/1000 gal} \times 6 \text{ tanks}) / (6.2 \text{ lb-} \\ &\quad \text{VOC/1000 gal} \times 436,800 \text{ gal/year} \times 6 \text{ tanks})]^{0.6} \times 3 \text{ units} \\ &= \$139,258 \times 3 \text{ units} \\ &= \$417,774 \end{aligned}$$

Tank Model D (N-1237-518 through -533)

$$\begin{aligned}\text{Capital Cost} &= \$475,318 \times [(420,000 \text{ gal/year} * 2.5 \text{ lbs-VOC/1000 gal} \times 6 \text{ tanks}) / (6.2 \text{ lb-VOC/1000 gal} \times 436,800 \text{ gal/year} \times 6 \text{ tanks})]^{0.6} \times 3 \text{ units} \\ &= \$269,211 \times 3 \text{ units} \\ &= \$807,633\end{aligned}$$

Tank Model E (N-1237-534 through -549)

$$\begin{aligned}\text{Capital Cost} &= \$475,318 \times [(1,290,000 \text{ gal/year} * 2.5 \text{ lbs-VOC/1000 gal} \times 6 \text{ tanks}) / (6.2 \text{ lb-VOC/1000 gal} \times 436,800 \text{ gal/year} \times 6 \text{ tanks})]^{0.6} \times 3 \text{ units} \\ &= \$527,834 \times 3 \text{ units} \\ &= \$1,583,502\end{aligned}$$

Tank Model F (N-1237-550 through -565)

$$\begin{aligned}\text{Capital Cost} &= \$475,318 \times [(700,000 \text{ gal/year} * 2.5 \text{ lbs-VOC/1000 gal} \times 6 \text{ tanks}) / (6.2 \text{ lb-VOC/1000 gal} \times 436,800 \text{ gal/year} \times 6 \text{ tanks})]^{0.6} \times 3 \text{ units} \\ &= \$365,765 \times 3 \text{ units} \\ &= \$1,097,295\end{aligned}$$

$$\text{Total} = \$91,876 + 417,774 + 807,633 + 1,583,502 + 1,097,295 = \$3,998,080$$

<b>Condensation</b>	
Cost Description	Cost (\$)
Cost of Refrigerated Condenser system (24 PAS Units)	\$3,998,080
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
<b>Direct Costs (DC)</b>	
Base Equipment Costs (Condenser) See Above	\$3,998,080
Instrumentation (\$2,000 per unit)	\$26,000
Sales Tax 8.225% (included)	-
Freight (included)	-
<b>Purchased equipment cost</b>	<b>\$4,024,080</b>
Foundations & supports (not required)	-
Handling & erection 8%	\$321,926
Electrical (not required)	-
Piping 2%	\$80,482
Painting (not required)	-
Insulation (not required)	-
<b>Direct installation costs</b>	<b>\$402,408</b>
<b>Total Direct Costs</b>	<b>\$4,426,488</b>
<b>Indirect Costs (IC)</b>	
Engineering 10%	\$402,408
Construction and field expenses 5%	\$201,204
Contractor fees 10%	\$402,408
Start-up 2%	\$80,482
Performance test 1%	\$40,241
Contingencies 3%	\$120,722
<b>Total Indirect Costs</b>	<b>\$1,247,465</b>
<b>Total Capital Investment (TCI) (DC + IC)</b>	<b>\$5,673,953</b>

### Annualized Capital Costs

Annualized Capital Investment = Initial Capital Investment x Amortization Factor

$$\text{Amortization Factor} = \left[ \frac{0.1(1.1)^{10}}{(1.1)^{10} - 1} \right] = 0.1627, \text{ amortizing over 10 years at 10\%}$$

Therefore,

$$\text{Annualized Capital Investment} = \$5,673,953 \times 0.1627 = \$923,152$$

## Annual Costs

Annual Costs			
<b>Direct Annual Cost (DC)</b>			
<b>Operating Labor</b>			
Operator	1 hr/day x 3 shifts/day x 13 units x 90 days= 3,510	\$18.50/h	\$64,935
Supervisor	15% of operator		\$9,740
<b>Maintenance</b>			
Labor	1% of TCI		\$19,727
<b>Chiller (Glycol)</b>			
	103,050 lb/year (uncontrolled fermentation emissions) x 0.90 ÷ 2000	\$270/ton EtOH	\$12,521
<b>Utility</b>			
Electricity		\$0.102/kWh <sup>6</sup>	\$0
<b>Total DC</b>			<b>\$106,923</b>
<b>Indirect Annual Cost (IC)</b>			
Overhead	60% of Labor Cost	0.6 x (\$64,935 + \$9,740 + \$19,727)	\$56,641
Administrative	2% TCI		\$39,454
Property Taxes	1% TCI		\$19,727
Insurance	1% TCI		\$19,727
<b>Total IC</b>			<b>\$135,549</b>
<b>Recovery Credits (RC)</b>			
80 Proof Recovered	103,050 lb/year (uncontrolled fermentation emissions) x 0.90 x gal/6.62 lb ÷ 0.40	\$2.71/gal 80 Proof EtOH	\$94,917
<b>Annual Cost (DC + IC – RC)</b>			<b>\$147,555</b>

Total Annual Cost = Condenser System + Annual Cost  
 = \$923,152 + \$147,555  
 = \$1,070,707 (with Recovery Credits)

### Emission Reductions

EcoPAS has indicated the PAS unit is capable of achieving a capture and control efficiency of 90%. However, the District's current BACT Guideline identifies a combined capture and control efficiency of 81% for condensation technology. The capture and control efficiency of 81% will be used in this analysis as the value of 90% has yet to be shown to be feasible.

Annual Emission Reduction = Fermentation Emissions x 0.81  
 = 103,050 lb-VOC/year x 0.81  
 = 83,471 lb-VOC/year  
 = 41.7 tons-VOC/year

<sup>6</sup>Average cost of electricity to commercial users in California = \$0.102/kWh, where 2012 cost = \$0.1023/kWh and 2011 cost = \$0.1012 taken from Energy Information Administration/Electric Power; Average Retail Price of Electricity to Ultimate Customers by End-Use Sector, by State, 2011 – 2012.

## Cost Effectiveness

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

Cost Effectiveness = \$1,070,707/year ÷ 41.7 tons-VOC/year  
= \$25,676/ton-VOC (with Recovery Credits)

The analysis demonstrates that the annualized purchase cost of the required refrigerated condenser system and annual costs alone results in a cost effectiveness which exceeds the District's Guideline of \$17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

## **Collection of VOCs and control by absorption (> 81% collection & control)**

### **NohBell Corporation Analysis**

Equipment pricing for the water scrubber control option was obtained from NohBell Corporation for Project N-1131615. NohBell Corporation has submitted an analysis to control the 24 fermentation tanks in Project N-1131615 using 13 proprietary mobile NoMoVo control units. One mobile NoMoVo unit is placed next to each actively fermenting tank. Each NoMoVo unit consists of a scrubber unit and a pump/refrigeration skid which serves to cool and circulate the scrubber solution. The units operate based on a small backpressure on the tanks and do not require induced draft fans.

Each unit has a capacity rating sufficient to accommodate the project stated maximum carbon dioxide vapor flow based on red wine fermentation. The proposed system is sized to allow simultaneous utilization of up to 50 percent of the tanks (12 NoMoVo units) under the worst case scenario that the maximum rate fermentation operates in two days. An additional 13<sup>th</sup> "swing" unit is provided to facilitate the operation. For managed lower vapor flow rate fermentations, the units may be coupled to multiple tanks for control of fermentation emission and tank utilization up to 100 percent is possible. A fermentation sequence was analyzed for six of the tanks which assumes all fermentations are short cycle durations of 2-3 days. The fermentations are staged in a manner to levelize the combined flow and demonstrates that the full permitted annual capacity of the tanks would be achieved in 79 days.

Each NoVoMo unit is connected to the fermentation tank with a quick-disconnect hose. The scrubber liquid is transferred batch-wise to a holding tank when the concentration reaches ten percent and the scrubber holding tank is recharged with fresh water. Each batch is 35-50 gallons and is transferred to a mobile pony tank which is in turn pumped to a fixed storage tank for further use or truck shipment. The ten percent ethanol produced from each scrubber is suitable for delivery to an ethanol distillery for recovery as high-proof alcohol.

NohBell Corporation indicates that based on operating experience, CIP is not normally required throughout the season due to the concentration of ethanol collected in the NoVoMo unit (10%) and the acidity of the solution. However, if required, the NoMoVo unit may be flushed with sterilizing chemicals through the hose connections. The cost analysis will assume a CIP system is not required.

### **E & J Gallo Winery Analysis**

As previously mentioned, E & J Gallo Winery has provided operating data for an existing group of twenty-four 56,000 gallon fermentation tanks for purposes of characterizing the proposed operation and the potential requirements for control devices (see table in document received by email on June 21, 2013 in Project N-1131615).

The facility has indicated the fermentation length and number of units required requires further evaluation as all fermentations could be in operation simultaneously based on grape availability, type of wine being produced, etc. as explained in the condenser control option

Per the facility, based on the operating data provided, there are two possible configurations for this control option. One, is installing one control device dedicated to each tank. Two, is installing one control device sized to serve all fermentation vessels with appropriate duct work, valving, and CIP.

The facility has also stated the control devices themselves will need to be cleaned in the event of a foam over. These events occur multiple times per year and a system to protect and properly clean and sanitize the control devices must be factored into the analysis.

In summary, E & J Gallo Winery has indicated the following items will need to be analyzed in greater detail regarding the NoMoVo scrubber system.

- Number of units to control the fermentation tanks based on vapor flow rate
- CIP requirement for this technology
- Duct sizing for red fermentation (12 inch diameter piping may be insufficient)
- Mobility issues for the NoMoVo system in a large industrial setting
- Instrumentation allowance
- Wastewater disposal costs

### District Analysis

District analysis of the operating data supplied by E & J Gallo Winery indicates that based on the operating data for twenty-four 56,000 gallon fermenters provided by E & J Gallo Winery, 20 of the set of 24 tanks were in operation simultaneously. Therefore the proposed system in Project N-1131615 included sufficient NoMoVo units for operation of 20 tanks.

Given that E & J Gallo Winery has indicated 5-8 day fermentations are the most realistic scenario for the proposed new tanks, consistent with the operating data supplied, the District's opinion is that it is reasonable to conclude that 4 NoMoVo units for tanks in Model B and 13 NoMoVo units for each group of tanks in Models C, D, E and F will be adequate to control the 68 new tanks. Therefore, for purposes of this analysis, the District will base the capital investment analysis on 56 NoMoVo units with 56 pump/refrigeration skids.

Consistent with NoMoVo technology, the duct work, valving, and CIP are assumed to not be required (based on comments provided by NohBell). This is the most conservative assumption for the cost analysis. However, further research will need to be performed to analyze the validity of this assumption.

### Design Basis

- The EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001) is used for this analysis with modifications to account for project-specific conditions.



- Equipment pricing: budgetary estimate provided by NohBell Corporation.
- Instrumentation allowance of \$2,000 per NoMoVo unit has been included for a pressure transmitter and a temperature transmitter for monitoring pressure of the collection header and vent stream and temperature from the NoMoVo unit.
- Sales tax = 8.225% based on California location
- Foundations and supports: not required – unit is supported from either a tank or the piperack structure. Equipment price includes required attachments and clips.
- Since the units are mobile which are ready for operation upon delivery, Handling and Erection is taken to be 2% of Purchased Equipment Cost as an allowance for pre-commissioning.
- Piping is taken to be 1% of Purchased Equipment Cost based on the only requirements being Tee fittings for the tank discharge.
- Insulation and painting are not required.
- Recovered ethanol storage tank = \$40,000 (installed)
- Operating labor is estimated based on 2 operator hours per day per operating unit over a 90 day crush season and an hourly cost of \$18.50 per hour.
- An allowance for annual maintenance cost was included as 1% of Total Capital Investment.
- Connected electrical load for each unit is 2.5 horsepower which is assumed to operate continuously for 90 days.
- Electric power cost = \$0.102/kWh (see EcoPAS Top Down BACT Analysis above)
- Captured ethanol is recovered as a 10% solution suitable for disposal to an ethanol distillery at a cost of \$0.08 per gallon.

### Capital Cost Scrubber

Pricing for the NoMoVo unit was provided by NohBell for Project N-1131615. Based on supply of 20 NoMoVo units sized to control twenty-four (24) 56,000-gallon tanks, the price is estimated by NoMoVo at \$67,500 each.

Uncontrolled emissions from Project N-1131615 = 6.2 lb-VOC/1000 gal x 436,800 gal/year x 1 tank  
= 2,708 lbs-VOC/year

Tank Model B (N-1237-498 through -501)

Capital Cost = \$67,500 x [(105,000 gal/year \* 2.5 lbs-VOC/1000 gal x 1 tank)/(6.2 lb-VOC/1000 gal x 436,800 gal/year x 1 tank)]<sup>0.6</sup> x 4 units  
= \$16,641 x 4 units  
= \$66,564

Tank Model C (N-1237-502- through -517)

Capital Cost = \$67,500 x [(140,000 gal/year \* 2.5 lbs-VOC/1000 gal x 1 tank)/(6.2 lb-VOC/1000 gal x 436,800 gal/year x 1 tank)]<sup>0.6</sup> x 14 units  
= \$19,777 x 14 units  
= \$296,878

Tank Model D (N-1237-518 through -533)

$$\begin{aligned} \text{Capital Cost} &= \$67,500 \times [(420,000 \text{ gal/year} \times 2.5 \text{ lbs-VOC/1000 gal} \times 1 \text{ tank}) / (6.2 \text{ lb-VOC/1000} \\ &\text{ gal} \times 436,800 \text{ gal/year} \times 1 \text{ tank})]^{0.6} \times 14 \text{ units} \\ &= \$38,232 \times 14 \text{ units} \\ &= \$535,248 \end{aligned}$$

Tank Model E (N-1237-534 through -549)

$$\begin{aligned} \text{Capital Cost} &= \$67,500 \times [(1,290,000 \text{ gal/year} \times 2.5 \text{ lbs-VOC/1000 gal} \times 1 \text{ tank}) / (6.2 \text{ lb-} \\ &\text{ VOC/1000 gal} \times 436,800 \text{ gal/year} \times 1 \text{ tank})]^{0.6} \times 14 \text{ units} \\ &= \$74,960 \times 14 \text{ units} \\ &= \$1,049,440 \end{aligned}$$

Tank Model F (N-1237-550 through -565)

$$\begin{aligned} \text{Capital Cost} &= \$67,500 \times [(700,000 \text{ gal/year} \times 2.5 \text{ lbs-VOC/1000 gal} \times 1 \text{ tank}) / (6.2 \text{ lb-VOC/1000} \\ &\text{ gal} \times 436,800 \text{ gal/year} \times 1 \text{ tank})]^{0.6} \times 14 \text{ units} \\ &= \$51,944 \times 14 \text{ units} \\ &= \$727,216 \end{aligned}$$

$$\text{Total} = \$66,564 + 296,878 + 535,248 + 1,049,440 + 727,216 = \$2,675,346$$

<b>Scrubber</b>	
Cost Description	Cost (\$)
Refrigerated Scrubber System (24 NoVoMo Units)	\$2,675,346
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
<b>Direct Costs (DC)</b>	
Base Equipment Costs (Scrubber System) See Above	\$2,675,346
Instrumentation (\$2,000 per unit)	\$120,000
Sales Tax 8.225%	\$220,047
Freight (included)	-
<b>Purchased equipment cost</b>	<b>\$3,015,393</b>
Foundations & supports (not required)	-
Handling & erection 2%	\$60,308
Electrical 1%	\$30,154
Piping 1%	\$30,154
Painting (not required)	-
Insulation (not required)	-
Recovered Ethanol Storage Tank (installed)	\$40,000
<b>Direct installation costs</b>	<b>\$160,616</b>
<b>Total Direct Costs</b>	<b>\$3,176,009</b>
<b>Indirect Costs (IC)</b>	
Engineering 5%	\$150,770
Construction and field expenses 2%	\$60,308

Contractor fees 2%	\$60,308
Start-up 1%	\$30,154
Performance test 1%	\$30,154
Contingencies 3%	\$90,462
<b>Total Indirect Costs</b>	<b>\$422,156</b>
<b>Total Capital Investment (TCI) (DC + IC)</b>	<b>\$3,598,165</b>

### Annualized Capital Costs

Annualized Capital Investment = Initial Capital Investment x Amortization Factor

$$\text{Amortization Factor} = \left[ \frac{0.1(1.1)^{10}}{(1.1)^{10} - 1} \right] = 0.1627, \text{ amortizing over 10 years at 10\%}$$

Therefore,

$$\text{Annualized Capital Investment} = \$3,598,165 \times 0.1627 = \$585,421$$

### Wastewater Disposal Costs

Additionally, the water scrubber will generate ethanol-laden wastewater containing 46.4 tons-ethanol annually (103,050 lb/year (uncontrolled fermentation emissions) x 0.90 ÷ 2000). Assuming a 10% solution, approximately 140,181 gallons of waste water (46.4 ton-ethanol x 2000 lb/ton x gal/6.62 lb ÷ 0.10) will be generated annually. Per NohBell Corporation, an allowance of \$0.08 per gallon is applied for disposal costs.

$$\text{Annual disposal costs} = 140,181 \text{ gallons} \times \$0.08/\text{gallon} = \$11,215$$

### Annual Costs

<b>Annual Costs</b>			
<b>Direct Annual Cost (DC)</b>			
<b>Operating Labor</b>			
Operator	2 hr/day x 51 units x 90 days = 9,180 hr/year	\$18.50/h	\$169,830
Supervisor	15% of operator		\$25,475
<b>Maintenance</b>			
Labor	1% of TCI		\$35,982
<b>Wastewater Disposal</b>			
	10% Solution = 140,181 gal	\$0.08/gal	\$11,215
<b>Utility</b>			
Electricity	60 units x 2.5 hp x 0.746 kW/hp x 2,160 hr/yr = 241,704 kWh/yr	\$0.102/kWh	\$24,654
<b>Total DC</b>			<b>\$267,156</b>

<b>Indirect Annual Cost (IC)</b>			
Overhead	60% of Labor Cost	$0.6 \times (\$169,830 + \$25,475 + \$35,982)$	\$138,772
Administrative	2% TCI		\$71,963
Property Taxes	1% TCI		\$35,982
Insurance	1% TCI		\$35,982
<b>Total IC</b>			<b>\$282,699</b>
<b>Annual Cost (DC + IC)</b>			<b>\$549,855</b>

$$\begin{aligned}
 \text{Total Annual Cost} &= \text{Scrubber System} + \text{Annual Cost} \\
 &= \$585,421 + \$549,855 \\
 &= \$1,135,276
 \end{aligned}$$

### Emission Reductions

The District's BACT Guideline identifies an overall collection and control efficiency of 81% for absorption systems.

$$\begin{aligned}
 \text{Annual Emission Reduction} &= \text{Fermentation Emissions} \times 0.81 \\
 &= 103,050 \text{ lb-VOC/year} \times 0.81 \\
 &= 83,471 \text{ lb-VOC/year} \\
 &= 41.7 \text{ tons-VOC/year}
 \end{aligned}$$

### Cost Effectiveness

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

$$\begin{aligned}
 \text{Cost Effectiveness} &= \$1,135,276/\text{year} \div 41.7 \text{ tons-VOC/year} \\
 &= \$27,225/\text{ton-VOC}
 \end{aligned}$$

The analysis demonstrates that the annualized purchase cost of the required water scrubber and operating and maintenance costs alone results in a cost effectiveness which exceeds the District's Guideline of \$17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

**Collection of VOCs and control by carbon adsorption (> 86% collection and control)**

Water scrubber (750 cfm) capital cost = \$108,500 (per 2003 budgetary pricing obtained by Sonoma Technologies)

The Carbon Containment hardware is about equal to the scrubber hardware. A tank is needed for the steam regenerated carbon bed. It is likely two beds will be needed to be able to be on line with one bed while the other is being regenerated.

The carbon bed operated with steam to regenerate the bed produces a water alcohol mixture. The waste stream or disposal costs have not been analyzed in this project.

**Carbon Capital Cost**

$$\begin{aligned} \text{Annual Emission Reduction} &= \text{Fermentation Emissions} \times 0.86 \\ &= 103,050 \text{ lb-VOC/year} \times 0.86 \\ &= 88,623 \text{ lb-VOC/year} \\ &= 44.3 \text{ tons-VOC/year} \end{aligned}$$

Assume a working bed capacity of 20% for carbon (weight of vapor per weight of carbon)

$$\begin{aligned} \text{Carbon required} &= 44.3 \text{ tons-VOC/year} \times 2000 \text{ lb/ton} \times 1/0.20 \\ &= 443,000 \text{ lb carbon} \end{aligned}$$

$$\text{Carbon capital cost} = \$1.00/\text{lb} = \$1.00/\text{lb} \times 443,000 \text{ lb carbon} = \$443,000$$

<b>Carbon Adsorption</b>	
Cost Description	Cost (\$)
Carbon Adsorption cost (taken from Scrubber cost above 2003 dollars)	\$108,500
Adjusting factor from 2003 dollars to 2013 dollars (2.75% inflation/year)	1.275
Inflation adjusted Regenerative Thermal Oxidizer cost	\$138,338
Gas flow rate scfm	61,746
Size adjusted Carbon Adsorption cost [ $138,338 \times (61,746 \div 750)^{0.6}$ ]	\$1,951,057
Water alcohol tank cost	\$40,000
Size adjusted Carbon Adsorption + water alcohol tank cost	\$1,991,057
Carbon Capital Cost (see above) <sup>10</sup>	\$443,000
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
<b>Direct Costs (DC)</b>	
Base Equipment Costs (Carbon Adsorption System + Carbon) See Above	\$1,991,057
Instrumentation 10%	\$199,106

Sales Tax 3%	\$59,732
Freight 5%	\$99,553
<b>Purchased equipment cost</b>	<b>\$2,349,448</b>
Foundations & supports 8%	\$187,956
Handling & erection 14%	\$328,923
Electrical 4%	\$93,978
Piping 2%	\$46,989
Painting 1%	\$23,494
Insulation 1%	\$23,494
<b>Direct installation costs</b>	<b>\$704,834</b>
<b>Total Direct Costs</b>	<b>\$3,054,282</b>
<b>Indirect Costs (IC)</b>	
Engineering 10%	\$234,945
Construction and field expenses 5%	\$117,472
Contractor fees 10%	\$234,945
Start-up 2%	\$46,989
Performance test 1%	\$23,494
Contingencies 3%	\$70,483
<b>Total Indirect Costs</b>	<b>\$728,328</b>
<b>Total Capital Investment (TCI) (DC + IC)</b>	<b>\$3,782,610</b>

### Annualized Capital Costs

Annualized Capital Investment = Initial Capital Investment x Amortization Factor

$$\text{Amortization Factor} = \left[ \frac{0.1(1.1)^{10}}{(1.1)^{10} - 1} \right] = 0.163 \text{ per District policy, amortizing over 10 years at 10\%}$$

Therefore,

$$\text{Annualized Capital Investment} = \$3,782,610 \times 0.163 = \$616,565$$

### Total Annual Cost

$$\begin{aligned} \text{Total Annual Cost} &= \text{Carbon Adsorption System} + \text{Ductwork} + \text{CIP System} \\ &= \$616,565 + \$1,062,215 \\ &= \$1,678,780 \end{aligned}$$

### Emission Reductions

$$\begin{aligned}\text{Annual Emission Reduction} &= \text{Fermentation Emissions} \times 0.86 \\ &= 103,050 \text{ lb-VOC/year} \times 0.86 \\ &= 88,623 \text{ lb-VOC/year} \\ &= 44.3 \text{ tons-VOC/year}\end{aligned}$$

### Cost Effectiveness

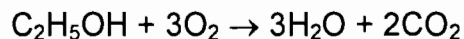
$$\text{Cost Effectiveness} = \text{Total Annual Cost} \div \text{Annual Emission Reductions}$$

$$\begin{aligned}\text{Cost Effectiveness} &= \$1,678,780/\text{year} \div 44.3 \text{ tons-VOC/year} \\ &= \$37,896/\text{ton-VOC}\end{aligned}$$

The analysis demonstrates that the annualized purchase cost of the required carbon adsorption system and collection system ductwork equipment alone results in a cost effectiveness which exceeds the District's Guideline of \$17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

**Collection of VOCs and control by thermal or catalytic oxidation**  
**(> 88% collection & control)**

The balanced chemical equation for combustion of ethanol is shown below.



The RTO would be connected by ducts to the tanks themselves. If the tanks were to overflow and send liquid down the duct, damage to the RTO could occur. The presence of significant liquid in the knock out drum would cause a shut down of the RTO until the issue could be corrected. The ducting costs include a knock out drum allowance.

<b>Thermal or Catalytic Oxidation</b>	
Cost Description	Cost (\$)
5,700 cfm Regenerative Thermal Oxidizer cost (2005 dollars)	\$279,000
Adjusting factor from 2005 dollars to 2013 dollars (2.75% inflation/year)	1.22
Inflation adjusted Regenerative Thermal Oxidizer cost	\$340,380
Gas flow rate scfm	61,746
Size adjusted Regenerative Thermal Oxidizer cost [340,380 x (61,746 ÷ 5,700) <sup>0.6</sup> ]	\$1,421,688
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
<b>Direct Costs (DC)</b>	
Base Equipment Costs (Regenerative Thermal Oxidizer System) See Above	\$1,421,688
Instrumentation 10%	\$142,169
Sales Tax 3%	\$42,651
Freight 5%	\$71,084
<b>Purchased equipment cost</b>	<b>\$1,677,592</b>
Foundations & supports 8%	\$134,207
Handling & erection 14%	\$234,863
Electrical 4%	\$67,104
Piping 2%	\$33,552
Painting 1%	\$16,776
Insulation 1%	\$16,776
<b>Direct installation costs</b>	<b>\$503,278</b>
<b>Total Direct Costs</b>	<b>\$2,180,870</b>
<b>Indirect Costs (IC)</b>	
Engineering 10%	\$167,759
Construction and field expenses 5%	\$83,880
Contractor fees 10%	\$167,759



Start-up 2%	\$33,552
Performance test 1%	\$16,776
Contingencies 3%	\$50,328
<b>Total Indirect Costs</b>	<b>\$520,054</b>
<b>Total Capital Investment (TCI) (DC + IC)</b>	<b>\$2,700,924</b>

### Annualized Capital Costs

Annualized Capital Investment = Initial Capital Investment x Amortization Factor

$$\text{Amortization Factor} = \left[ \frac{0.1(1.1)^{10}}{(1.1)^{10} - 1} \right] = 0.163 \text{ per District policy, amortizing over 10 years at 10\%}$$

Therefore,

$$\text{Annualized Capital Investment} = \$2,700,924 \times 0.163 = \$440,251$$

### Total Annual Cost

Fuel and Electricity costs have not been calculated.

$$\begin{aligned} \text{Total Annual Cost} &= \text{Regenerative Thermal Oxidizer System} + \text{Ductwork} + \text{CIP System} \\ &= \$440,251 + \$1,062,215 \\ &= \$1,502,466 \end{aligned}$$

### Emission Reductions

$$\begin{aligned} \text{Annual Emission Reduction} &= \text{Fermentation Emissions} \times 0.88 \\ &= 103,050 \text{ lb-VOC/year} \times 0.88 \\ &= 90,684 \text{ lb-VOC/year} \\ &= 45.3 \text{ tons-VOC/year} \end{aligned}$$

### Cost Effectiveness

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

$$\begin{aligned} \text{Cost Effectiveness} &= \$1,502,466/\text{year} \div 45.3 \text{ tons-VOC/year} \\ &= \$33,167/\text{ton-VOC} \end{aligned}$$

The analysis demonstrates that the annualized purchase cost of the required regenerative thermal oxidizer system and collection system ductwork equipment alone results in a cost effectiveness which exceeds the District's Guideline of \$17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

## **Step 5 – Select BACT**

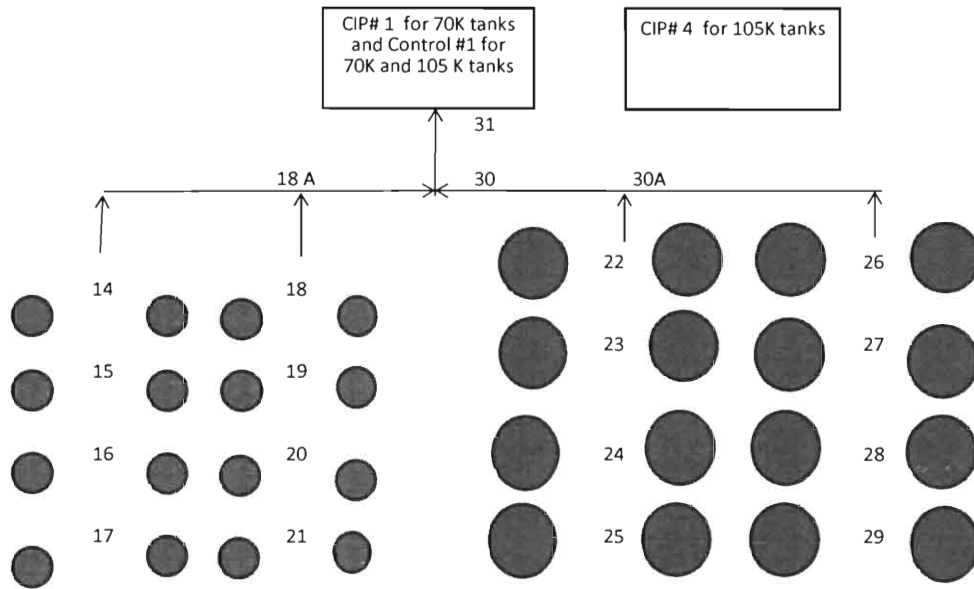
All identified feasible options with control efficiencies higher than the option proposed by the facility have been shown to not be cost effective. The facility has proposed Option 1, temperature-controlled open top tank with maximum average fermentation temperature of 95 deg F. These BACT requirements will be placed on the permits as enforceable conditions.

# **Attachment A**

## **Duct Sizing Analysis**

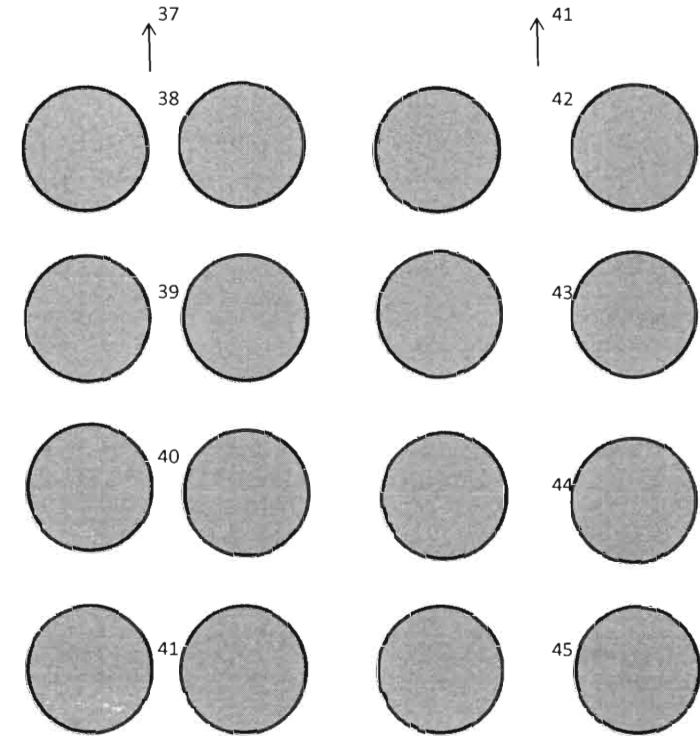


Redundant Main Ducts for Fermenters

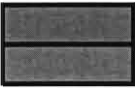


CIP #2 and Control #2

CIP #3 and Control #3



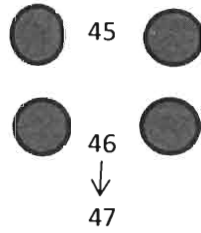




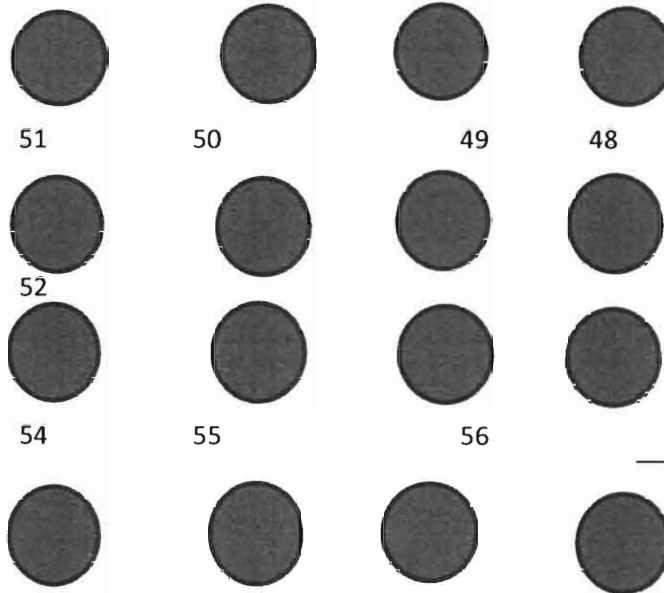
215 K Tanks

35 K Tanks

Redundant Main Ducts for Fermenters



CIP #5 and Control #4



640 K tanks shown in 2011 will not be built. They have been removed from the analysis

CIP #6 and Control #5. Space will be allowed for equipment in future tank farm if needed.



## **Appendix G**

### **BACT Guideline 5.4.13 and Top Down BACT Analysis**



San Joaquin Valley  
Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 5.4.13\***

Last Update 10/6/2009

**Wine Storage Tank**

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	1. Insulation or Equivalent**, Pressure Vacuum Relief Valve (PVRV) set within 10% of the maximum allowable working pressure of the tank; "gas-tight" tank operation; and continuous storage temperature not exceeding 75 degrees F, achieved within 60 days of completion of fermentation.	1. Capture of VOCs and thermal or catalytic oxidation or equivalent (98% control)  2. Capture of VOCs and carbon adsorption or equivalent (95% control)  3. Capture of VOCs and absorption or equivalent (90% control)  4. Capture of VOCs and condensation or equivalent (70% control)	

\*\*Tanks made of heat-conducting materials such as stainless steel may be insulated or stored indoors (in a completely enclosed building, except for vents, doors and other essential openings) to limit exposure of diurnal temperature variations. Tanks made entirely of non-conducting materials such as concrete and wood (except for fittings) are considered self-insulating.

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**

## Top Down BACT Analysis for Wine Storage VOC Emissions

### Step 1 - Identify All Possible Control Technologies

The SJVUAPCD BACT Clearinghouse guideline 5.4.13, 3<sup>rd</sup> quarter 2013, identifies achieved in practice BACT for wine storage tanks as follows:

- 1) Insulation or Equivalent\*\*, Pressure Vacuum Relief Valve (PVRV) set within 10% of the maximum allowable working pressure of the tank; "gas-tight" tank operation; and continuous storage temperature not exceeding 75 degrees F, achieved within 60 days of completion of fermentation.

*\*\*Tanks made of heat-conducting materials such as stainless steel may be insulated or stored indoors (in a completely enclosed building, except for vents, doors and other essential openings) to limit exposure to diurnal temperature variations. Tanks made entirely of non-conducting materials such as concrete and wood (except for fittings) are considered self-insulating.*

The SJVUAPCD BACT Clearinghouse guideline 5.4.13, 3<sup>rd</sup> quarter 2013, identifies technologically feasible BACT for wine storage tanks as follows:

- 2) Capture of VOCs and thermal or catalytic oxidation or equivalent (98% control)
- 3) Capture of VOCs and carbon adsorption or equivalent (95% control)
- 4) Capture of VOCs and absorption or equivalent (90% control)
- 5) Capture of VOCs and condensation or equivalent (70% control)

### Step 2 - Eliminate Technologically Infeasible Options

None of the above listed technologies are technologically infeasible.

### Step 3 - Rank Remaining Control Technologies by Control Effectiveness

Rank by Control Effectiveness		
Rank	Control	Overall Capture and Control Efficiency
1	Capture of VOCs and thermal or catalytic oxidation or equivalent	98%
2	Capture of VOCs and carbon adsorption or equivalent	95%
3	Capture of VOCs and absorption or equivalent	90%
4	Capture of VOCs and condensation or equivalent	70%
5	Insulation or Equivalent, Pressure Vacuum Relief Valve (PVRV) set within 10% of the maximum allowable working pressure of the tank; "gas-tight" tank operation; and continuous storage temperature not exceeding 75 degrees F, achieved within 60 days of completion of fermentation	Baseline (Achieved-in-Practice)

#### Step 4 - Cost Effectiveness Analysis

A cost-effective analysis is performed for each control technology which is more effective than meeting the requirements of District Rule 4694 plus tank insulation (achieved-in-practice BACT), as proposed by the facility.

#### Collection System Capital Investment (based on ductwork)

A common feature of all thermal or catalytic oxidation/carbon adsorption/absorption or condensation options is that they require installation of a collection system for delivering the VOCs from the tanks to the common control device.

Collection system to consist of:

- The collection system consists of stainless steel place ductwork (stainless steel is required due to food grade product status) with isolation valving, connecting 68 tanks to a common manifold system which ducts the combined vent to the common control device. The cost of dampers and isolation valving, installed in the ductwork, will be included in the cost estimate.
- A minimum duct size is established at six inches diameter at each tank to provide adequate strength for spanning between supports. The main header is twelve inches diameter to handle the potential for simultaneous venting.

#### Capital Cost Ductwork

Connection from tank to main duct = 68 tanks x 25 feet x \$61.30/foot = \$104,210

Unit installed cost for 6 inch butterfly valve = \$2,125/valve x 68 valves x 2 systems = \$289,000

Unit installed cost one foot removable spool = \$500/tank x 68 tanks x 2 systems = \$68,000

Knockout drums = \$92,600 x 2 = \$185,200

Duct support allowance = \$5,000/tank x 68 tanks = \$340,000

Total = \$104,210 + \$289,000 + \$68,000 + \$185,200 + \$340,000 = \$986,410

<b>Ductwork</b>	
Cost Description	Cost (\$)
Duct Estimate from Eichleay Study 2005 Data	\$986,410
Adjusting factor from 2005 dollars to 2013 dollars (2.75% inflation/year)	1.22
Inflation adjusted duct cost	\$1,203,420
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
<b>Direct Costs (DC)</b>	
Base Equipment Costs (Ductwork) See Above	\$1,203,420
Instrumentation 10%	\$120,342
Sales Tax 3%	\$36,103
Freight 5%	\$60,171

<b>Purchased equipment cost</b>	<b>\$1,420,036</b>
Foundations & supports 8%	\$113,603
Handling & erection 14%	\$198,805
Electrical 4%	\$56,801
Piping 2%	\$28,401
Painting 1%	\$14,200
Insulation 1%	\$14,200
<b>Direct installation costs</b>	<b>\$426,010</b>
<b>Total Direct Costs</b>	<b>\$1,846,046</b>
<b>Indirect Costs (IC)</b>	
Engineering 10%	\$142,004
Construction and field expenses 5%	\$71,002
Contractor fees 10%	\$142,004
Start-up 2%	\$28,401
Performance test 1%	\$14,200
Contingencies 3%	\$42,601
<b>Total Indirect Costs</b>	<b>\$440,212</b>
<b>Total Capital Investment (TCI) (DC + IC)</b>	<b>\$2,286,258</b>

#### Capital Cost Clean-In-Place (CIP) System

A ducting system on a tank farm must have this system to maintain sanitation and quality of the product. The cost of operation of the CIP system has not been estimated. Operation of a CIP system, using typical cleaning agents, will raise disposal and wastewater treatment costs. Most likely, these costs will be significant.

<b>Clean-In-Place (CIP) System</b>	
Cost Description	Cost (\$)
Current cost of CIP system	\$200,000
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
<b>Direct Costs (DC)</b>	
Base Equipment Costs (CIP System) See Above	\$200,000
Instrumentation 10%	\$20,000
Sales Tax 3%	\$6,000
Freight 5%	\$10,000
<b>Purchased equipment cost</b>	<b>\$236,000</b>
Foundations & supports 8%	\$18,880
Handling & erection 14%	\$33,040
Electrical 4%	\$9,440
Piping 2%	\$4,720
Painting 1%	\$2,360
Insulation 1%	\$2,360

<b>Direct installation costs</b>	<b>\$70,800</b>
<b>Total Direct Costs</b>	<b>\$306,800</b>
<b>Indirect Costs (IC)</b>	
Engineering 10%	\$23,600
Construction and field expenses 5%	\$11,800
Contractor fees 10%	\$23,600
Start-up 2%	\$4,720
Performance test 1%	\$2,360
Contingencies 3%	\$7,080
<b>Total Indirect Costs</b>	<b>\$73,160</b>
<b>Total Capital Investment (TCI) (DC + IC)</b>	<b>\$379,960</b>

### Annualized Capital Costs

$$\begin{aligned}
 \text{Total capital costs} &= \text{Ductwork} + \text{CIP System} \\
 &= \$2,286,258 + \$379,960 \\
 &= \$2,666,218
 \end{aligned}$$

Annualized Capital Investment = Initial Capital Investment x Amortization Factor

$$\text{Amortization Factor} = \left[ \frac{0.1(1.1)^{10}}{(1.1)^{10} - 1} \right] = 0.163 \text{ per District policy, amortizing over 10 years at 10\%}$$

Therefore,

$$\text{Annualized Capital Investment} = \$2,666,218 \times 0.163 = \$434,594$$

## **Capture of VOCs and condensation (> 70% collection & control)**

### **Total Annual Cost**

Total Annual Cost = Ductwork + CIP System  
= \$434,594

### **Emission Reductions**

Annual Emission Reduction = Uncontrolled Emissions x 0.70  
= 26,516 lb-VOC/year x 0.70  
= 18,561 lb-VOC/year  
= 9.3 tons-VOC/year

### **Cost Effectiveness**

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

Cost Effectiveness = \$434,594/year ÷ 9.3 tons-VOC/year  
= \$46,731/ton-VOC

The analysis demonstrates that the annualized purchase cost of the required collection system ductwork equipment alone results in a cost effectiveness which exceeds the District's Guideline of \$17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

## Collection of VOCs and control by absorption (> 90% collection & control)

### Total Annual Cost

$$\begin{aligned}\text{Total Annual Cost} &= \text{Ductwork} + \text{CIP System} \\ &= \$434,594\end{aligned}$$

### Emission Reductions

$$\begin{aligned}\text{Annual Emission Reduction} &= \text{Uncontrolled Emissions} \times 0.90 \\ &= 26,516 \text{ lb-VOC/year} \times 0.90 \\ &= 23,864 \text{ lb-VOC/year} \\ &= 11.9 \text{ tons-VOC/year}\end{aligned}$$

### Cost Effectiveness

$$\text{Cost Effectiveness} = \text{Total Annual Cost} \div \text{Annual Emission Reductions}$$

$$\begin{aligned}\text{Cost Effectiveness} &= \$434,594/\text{year} \div 11.9 \text{ tons-VOC/year} \\ &= \$36,521/\text{ton-VOC}\end{aligned}$$

The analysis demonstrates that the annualized purchase cost of the required collection system ductwork equipment alone results in a cost effectiveness which exceeds the District's Guideline of \$17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

## Collection of VOCs and control by carbon adsorption (> 95% collection and control)

### Total Annual Cost

$$\begin{aligned}\text{Total Annual Cost} &= \text{Ductwork} + \text{CIP System} \\ &= \$434,594\end{aligned}$$

### Emission Reductions

$$\begin{aligned}\text{Annual Emission Reduction} &= \text{Uncontrolled Emissions} \times 0.95 \\ &= 26,516 \text{ lb-VOC/year} \times 0.95 \\ &= 25,190 \text{ lb-VOC/year} \\ &= 12.6 \text{ tons-VOC/year}\end{aligned}$$

### Cost Effectiveness

$$\text{Cost Effectiveness} = \text{Total Annual Cost} \div \text{Annual Emission Reductions}$$

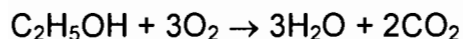
$$\begin{aligned}\text{Cost Effectiveness} &= \$434,594/\text{year} \div 12.6 \text{ tons-VOC/year} \\ &= \$34,492/\text{ton-VOC}\end{aligned}$$

The analysis demonstrates that the annualized purchase cost of the required collection system ductwork equipment alone results in a cost effectiveness which exceeds the District's Guideline of \$17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.



## Collection of VOCs and control by thermal or catalytic oxidation (> 98% collection & control)

The balanced chemical equation for combustion of ethanol is shown below.



The RTO would be connected by ducts to the tanks themselves. If the tanks were to overflow and send liquid down the duct, damage to the RTO could occur. The presence of significant liquid in the knock out drum would cause a shut down of the RTO until the issue could be corrected. The ducting costs include a knock out drum allowance.

### Total Annual Cost

$$\begin{aligned}\text{Total Annual Cost} &= \text{Ductwork} + \text{CIP System} \\ &= \$434,594\end{aligned}$$

### Emission Reductions

$$\begin{aligned}\text{Annual Emission Reduction} &= \text{Uncontrolled Emissions} \times 0.98 \\ &= 26,516 \text{ lb-VOC/year} \times 0.98 \\ &= 25,986 \text{ lb-VOC/year} \\ &= 13.0 \text{ tons-VOC/year}\end{aligned}$$

### Cost Effectiveness

$$\text{Cost Effectiveness} = \text{Total Annual Cost} \div \text{Annual Emission Reductions}$$

$$\begin{aligned}\text{Cost Effectiveness} &= \$434,594/\text{year} \div 13.0 \text{ tons-VOC/year} \\ &= \$33,430/\text{ton-VOC}\end{aligned}$$

The analysis demonstrates that the annualized purchase cost of the required collection system ductwork equipment alone results in a cost effectiveness which exceeds the District's Guideline of \$17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

## **Step 5 - Select BACT**

All identified feasible options with control efficiencies higher than the option proposed by the facility have been shown to not be cost effective. The facility has proposed Option 1, insulated tank, pressure/vacuum valve set within 10% of the maximum allowable working pressure of the tank, "gas tight" tank operation and achieve and maintain a continuous storage temperature not exceeding 75 °F within 60 days of completion of fermentation. These BACT requirements will be listed on the permits as enforceable conditions.

# **Appendix H**

## **Compliance Certification**

N-1237  
E&J Gallo Winery-Livingston  
Compliance Certification Statement  
For Federal Major Permit Modifications  
Compliance with District Rule 2201, Section 4.15.2

"I certify under penalty of law that all major stationary sources (Title V facilities) operated under my control in California are compliant with all applicable air emissions limitations and standards. The facilities included in this certification statement include the E&J Gallo Winery-Fresno, the E&J Gallo Winery-Livingston, and the E&J Gallo Winery-Modesto."



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Mr. Steve Kidd  
Vice President of Operations

05/07/13  
Date

# **Appendix I**

## **Certificate of Conformity**

San Joaquin Valley  
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

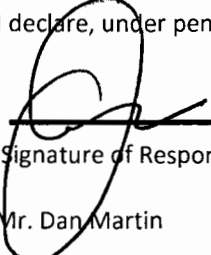
- Federal Major Permit MODIFICATION                       ADMINISTRATIVE  
 MINOR PERMIT MODIFICATION                                       AMENDMENT

COMPANY NAME: E&J Gallo Winery - Livingston	FACILITY ID      N-1237
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: E&J Gallo Winery-Livingston	
3. Agent to the Owner: Mr. Dan Martin	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

  
\_\_\_\_\_  
Signature of Responsible Official

04/25/13  
\_\_\_\_\_  
Date

Mr. Dan Martin  
\_\_\_\_\_  
Name of Responsible Official (please print)

Plant Manager- Livingston Winery  
\_\_\_\_\_  
Title of Responsible Official (please print)