San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JUN 2 9 2017

Mr. Adam Wenz
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-1172193

Dear Mr. Wenz:

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. This project authorizes the installation of eight new wine storage 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. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Thank you for your cooperation in this matter.

Sincerely,

for Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email
cc: Kim Burns, E & J Gallo Winery (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Installation of Eight New Wine Storage Tanks

Facility Name:	E & J Gallo Winery	Date:	June 28, 2017
Mailing Address:	18000 W. River Road Livingston, CA 95334	Engineer:	Dustin Brown
		Lead Engineer:	Jerry Sandhu
Contact Person:	Adam Wenz		
Telephone:	(209) 394-2611		
E-Mail:	Adam.Wenz@ejgallo.com		
Application #s:	N-1237-883-0 through '-890-0		
Project #:	N-1172193		
Deemed Complete:	June 13, 2017		

I. Proposal

E & J Gallo Winery has requested Authority to Construct (ATC) permits for the installation of eight new wine storage tanks. These tanks are currently constructed and operated as permit exempt juice storage tanks at this facility. However, they would now like the ability to store wine in these tanks. Since these tanks were previously permit exempt, they will be treated as new emission units for the purposes of this project.

E & J Gallo Winery received their Title V Permit for this stationary source on June 27, 2000. This modification can be classified as a Title V significant modification pursuant to Rule 2520, Sections 3.20 and 3.29, 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 Authorities to Construct. E & J Gallo Winery must apply to administratively amend their Title V Operating Permit to include the requirements of the ATCs issued with this project.

II. Applicable Rules

District Rule 2201	New and Modified Stationary Source Review Rule (2/18/16)
District Rule 2410	Prevention of Significant Deterioration (6/16/11)
District Rule 2520	Federally Mandated Operating Permits (6/21/01)
District Rule 4001	New Source Performance Standards (4/14/99)
District Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
District Rule 4101	Visible Emissions (2/17/05)
District Rule 4102	Nuisance (12/17/92)
District Rule 4623	Storage of Organic Liquids (5/19/05)
District 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

This facility is located at 18000 W. River Road in Livingston, CA.

The District has verified that 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_2) 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_2. 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. Tanks can potentially operate in either: (1) a fermentation operation during which the tank is vented directly to the atmosphere to release the evolved CO_2 byproduct from the fermentation reaction; (2) a storage operation during which the tank is closed to minimize contact with air and refrigerated to preserve the wine; (3) or both fermentation and storage operations. 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.

E & J Gallo Winery is proposing to install eight wine storage tanks with this project. The tanks will only be used for wine storage and will not be used for fermentation operations. The tanks will only store wine once the fermentation process is completed in previously permitted tanks operated at this facility.

V. Equipment Listing

E & J Gallo Winery is proposing to install eight new wine storage tanks with this project. All eight tanks are identical in nominal size. The gauge volumes for all eight tanks as well as the tank identifier numbers were provided by the facility for this project. The proposed equipment descriptions for these new tanks are shown below:

N-1237-883-0: 350,000 GALLON NOMINAL (334,991 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3007) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

N-1237-884-0: 350,000 GALLON NOMINAL (335,068 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3008) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

N-1237-885-0: 350,000 GALLON NOMINAL (335,440 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3009) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

N-1237-886-0: 350,000 GALLON NOMINAL (335,214 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3010) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

N-1237-887-0: 350,000 GALLON NOMINAL (335,295 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3011) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

N-1237-888-0: 350,000 GALLON NOMINAL (334,830 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3012) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

N-1237-889-0: 350,000 GALLON NOMINAL (335,391 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3013) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

N-1237-890-0: 350,000 GALLON NOMINAL (335,340 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3014) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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.

VII. General Calculations

A. Assumptions

- The proposed tanks will only be used for red and white wine storage.
- Typically, for enclosed tanks with insulation (or equivalent) and P/V valves, breathing losses from storage of wine are assumed to be negligible.
- Maximum daily liquid storage temperature = 81.0 °F (proposed by the applicant)[1]
- Maximum annual liquid storage temperature = 63.3 °F (proposed by the applicant)[1]
- Storage tank daily maximum ethanol content of stored wine is 23.9% (proposed by the applicant and worst case District practice)
- Storage tank annual average ethanol content of stored wine is 15% (proposed by the applicant)
- The storage tank throughput rates listed in the following table were proposed by E & J Gallo Winery for this project:

Permits	Nominal Tank Size (gallons)	Daily Throughput (gal/day)	Annual Throughput (gal/year)
N-1237-883-0 through '-890-0	350,000	350,000	3,500,000

[1] Per District practice, for facilities located in the District's northern region, the maximum daily and annual liquid storage temperatures used for emission calculation purposes should be 77.3 °F and 61.6 °F, respectively. This facility is located in Livingston, CA, which is in the District's northern region. However, as a conservative estimate, the facility has indicated that the ambient conditions in Livingston, CA are more similar to the ambient conditions of Fresno, CA, located in the District's central region. Per District practice, for facilities located in the central region, the maximum daily and annual liquid storage temperatures used for emission calculation purposes should be 81.0 °F and 63.3 °F respectively. Higher ambient temperatures result in the worst case VOC emission rates from wine storage tanks. Therefore, as a conservative estimate, the storage temperatures for Fresno, CA will be used for the purposes of this project.

B. Emission Factors

TANKS 4.0d will be used to calculate the storage emissions from the new tanks. Daily emissions for each tank will be determined using the daily throughput rate listed, the worst-case emission rate for the month of July (per District practice) and the number of days in July, 31. The annual PE for each tank will be determined using the annual throughput rate listed above and the sum of the emissions from all 12 months.

Per District practice, the emission estimates provided by the TANKS 4.0 model represents the combined loss of ethanol (VOC) and water from each tank. To calculate the ethanol (VOC) portion of the emissions, it is first necessary to determine the molar fraction of ethanol (y_a) in the vapor emissions from the tank. This can be calculated from the average molecular weight (AMW) of the vapor as listed on page 2 of the TANKS 4.0 runs in Appendix A. Per the definition of AMW for a binary mixture:

$$AMW = y_a \times MW_a + (1-y_a) \times MW_w$$

Solving for the molar fraction of ethanol,

$$y_a = \frac{AMW - MW_w}{MW_a - MW_w}$$

Where,

$AMW_{23.9\% \text{ volume ethanol content}}$ = 30.34 lb/mole (daily basis)
$AMW_{15\% \text{ volume ethanol content}}$ = 27.13 lb/mole (annual basis
MW_a = Molecular weight of ethanol = 46.02 lb/mole
MW_w = Molecular weight of water = 18.02 lb/mole

Therefore,

y_a = (30.34 – 18.02)/(46.02 – 18.02) = 0.4400 for 23.9% ethanol mixture (daily basis)

y_a = (27.13 – 18.02)/(46.02 – 18.02) = 0.3254 for 15% ethanol mixture (annual basis)

And the daily and annual emission rates can be determined using the following equations:

$$PE_{daily} = \frac{E_d}{AMW} * y_a * 46.02$$

$$PE_{annual} = \frac{E_a}{AMW} * y_a * 46.02$$

Where,

E_d = Daily Emission Rate from TANKS 4.0 Program
E_a = Annual Emission Rate from TANKS 4.0 Program

Therefore, the daily and annual VOC PE values will be determined using the following equations:

Daily PE = [(TANKS 4.0 Emission Rate for July / 31 days) / 30.34] * 0.4400 * 46.02

Daily PE = (TANKS 4.0 Emission Rate for July / 31 days) x 0.6674

Annual PE = (TANKS 4.0 Emission Rate / 27.13) * 0.3254 * 46.02

Annual PE = TANKS 4.0 Emission Rate * 0.5520

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Since these tanks are new emissions units, PE1 = 0 for all pollutants.

2. Post-Project Potential to Emit (PE2)

Two TANKS 4.0 runs have been performed, one for daily emissions and one for annual emissions, and are included in Appendix A.

Daily PE2:

Daily PE (lb/day) = (TANKS 4.0 PE for July / 31 days) * Daily Water Vapor Adjustment

Daily Post-Project Potential to Emit				
Permits	**Max Daily Throughput per Tank (gal/day)**	**TANKS 4.0 Daily PE2 per Tank (lb/day)**	**Adjustment for Water Vapor Emissions**	**Total Daily PE2 per Tank (lb/day)**
N-1237-883 through '-890 (8 tanks in project)	350,000	214.9	0.6674	143.4

Annual PE2:

Annual PE (lb/year) = TANKS 4.0 PE * Annual Water Vapor Adjustment

Annual Post-Project Potential to Emit					
Permits	**Max Annual Throughput per Tank (gal/year)**	**TANKS 4.0 Annual PE2 per Tank (lb/year)**	**Adjustment for Water Vapor Emissions**	**Total Annual PE2 per Tank (lb/year)**	**Total Annual PE2 for Project (lb/year)**
N-1237-883 through '-890 (8 tanks in project)	3,500,000	917	0.5520	506	4,048
				Total Annual PE2 for Project:	**4,048**

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:

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 projects that authorized winery tank related operations at this facility that resulted in a potential VOC emission increase prior to the proposed project.

Project Number	Proposed Permitting Actions	PE (lb-VOC/year)
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-1113407	Install 2 distilled spirit tanks	188
N-1123583	Install 52 new wine storage tanks	34,264
N-1131615	Install 8 wine storage tanks and 24 wine fermentation tanks	85,064
N-1132991	Install 20 wine storage tanks	9,596
N-1133659	Install 24 wine fermentation and 8 wine storage tanks	85,064
N-1141254	Install 12 wine storage and fermentation tanks	1,164
N-1143437	Install 12 wine storage tanks	6,536
N-1143697	Install 5 wine and spirits storage tanks	328
N-1162285	Install 95 wine storage tanks	27,344
N-1162686	Modification to add fermentation service to 95 wine storage tanks	128,437
Total		**977,685**

As indicated above, the SSPE for VOC emissions solely from their winery tank related operations prior to the proposed project is calculated to be 977,685 pounds per year, equivalent to 488.8 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.

PSD Major Source Determination (tons/year)	
	VOC
Facility PE before Project Increase	488.8
PSD Major Source Thresholds	250
Existing PSD Major Source?	**Yes**

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

6. Baseline Emissions (BE)

The BE calculation (in lb/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 District Rule 2201, BE = PE1 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 District Rule 2201.

Since these are new emissions units, BE = PE1 = 0 for all pollutants for each unit.

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."

As discussed in Section VII.C.5 above, this facility is a major source for VOC emissions; therefore, 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.

SB 288 Major Modification Thresholds			
Pollutant	**Project PE2 (lb/year)**	**Threshold (lb/year)**	**SB 288 Major Modification Calculation Required?**
NO_x	0	50,000	No
SO_x	0	80,000	No
PM_{10}	0	30,000	No
VOC	4,048	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. Emission decreases may not cancel out the increases for this determination.

Step 1

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	**Total Emissions Increases (lb/yr)**	**Thresholds (lb/yr)**	**Federal Major Modification?**
NO_x*	0	0	No
VOC*	4,048	0	Yes
PM_{10}	0	30,000	No
$PM_{2.5}$	0	20,000	No
SO_x	0	80,000	No

*If there is any emission increases in NO_x or VOC, this project is a Federal Major Modification and no further analysis is required.

Since there is an increase in VOC emissions, this project constitutes a Federal Major Modification. Federal Offset quantities are calculated below.

Federal Offset Quantities:

The Federal offset quantity is only calculated only for the pollutants for which the project is a Federal Major Modification. The Federal offset quantity is the sum of the annual emission changes for all new and modified emission units in a project calculated as the potential to emit after the modification (PE2) minus the actual emissions (AE) during the baseline period for each emission unit times the applicable federal offset ratio. As shown above, this project triggers a Federal Major Modification for VOC emissions. Therefore, the federal offsets required for VOC emissions for this project are as follows:

VOC		Federal Offset Ratio	1.5
Permit No.	**Actual Emissions (lb/year)**	**Potential Emissions (lb/year)**	**Emissions Change (lb/yr)**
N-1237-883-0 through N-1237-890-0	**0**	**4,048**	**4,048**
		Net Emission Change (lb/year):	**4,048**
		Federal Offset Quantity: (NEC * 1.5)	**6,072**

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

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

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM_{10}

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 PSD Major Source. Because the project is not located within 10 km (6.2 miles) 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. Project Emission Increase – Significance Determination

a. Evaluation of Calculated Post-project Potential to Emit for New or Modified Emissions Units vs PSD Significant Emission Increase Thresholds

As a screening tool, the post-project potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if the total potentials to emit from all new and modified units are below the applicable thresholds, no futher PSD analysis is needed.

PSD Significant Emission Increase Determination: Potential to Emit (tons/year)					
	NO_2	SO_2	CO	PM	PM_{10}
Total PE from New and Modified Units	0	0	0	0	0
PSD Significant Emission Increase Thresholds	40	40	100	25	15
PSD Significant Emission Increase?	N	N	N	N	N

As demonstrated above, because the post-project total potentials to emit from all new and modified emission units are below the PSD significant emission increase thresholds, this project is not subject to the requirements of Rule 2410 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 D.

VIII. Compliance Determination

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

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

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

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

As seen in Section VII.C.2 above, the applicant is proposing to install eight new wine storage tanks, each with a PE greater than 2 lb/day for VOC emissions. Therefore, BACT is triggered for VOC emissions from each tank since the PEs are greater than 2 lb/day.

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

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

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

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

d. SB 288/Federal Major Modification

As discussed in Section VII.C.8 above, this project does constitute a Federal Major Modification for VOC emissions. Therefore BACT is triggered for VOC for all emissions units in the project for which there is an emission increase.

2. BACT Guideline

BACT Guideline 5.4.13, applies to wine storage tanks. E & J Gallo Winery is proposing to install eight new wine storage tanks. Therefore, BACT Guideline 5.4.13 is applicable to these new wine storage tanks (BACT Guideline 5.4.13 included in Appendix B).

3. Top-Down BACT Analysis

Pursuant to the attached Top-Down BACT Analysis (see Appendix B), BACT is satisfied with the following:

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

Each of the new wine storage tanks being installed within this project is equipped with insulation and a pressure/vacuum valve set to within 10% of the maximum allowable working pressure of the tank; operates in a gas-tight condition and the continuous storage temperature does not exceed 75 degrees F within 60 days of the completion of the fermentation cycle. Therefore, the wine storage tanks meet the BACT requirements for this class and category of operation and no further discussion is required.

The following condition will be included on each ATC to assure compliance with the BACT requirements:

- 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]

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

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

Pollutant	SSPE2 (lb/yr)	Offset Threshold Levels (lb/yr)	Offsets Required?
VOC	> 20,000	20,000	Yes

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) = (Σ[PE2 – BE] + ICCE) x DOR, for all new or modified emissions units in the project,

Where,
PE2 = Post Project Potential to Emit, (lb/yr)
BE = Baseline Emissions, (lb/yr)
ICCE = Increase in Cargo Carrier Emissions, (lb/yr)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

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

Offsets Required (lb/yr) = Σ[PE2 – BE] x DOR

VOC Offsets Required for Wine Storage Tanks without DOR				
Permits	Annual PE2, per tank (lb/yr)	Annual BE, per tank (lb/yr)	Offsets Required, per Tank (lb/yr)	Offsets Required for Project (lb/yr)
N-1237-883 through '-890 (eight tanks in project)	506	0	506	4,048
Total Offsets Required without DOR:				4,048

In accordance with Rule 2201, Section 4.8.1, the DOR for NOx and VOC offsets for projects that trigger federal major modifications shall be 1.5:1. As shown in Section VII.C.8, this project triggers a federal major modification for VOC emissions. Therefore, the DOR will be 1.5:1 and the total amount of VOC ERCs that need to be withdrawn for this project is:

VOC Offsets Required for Wine Storage Tanks with DOR			
Permits	Offsets Required for Project (lb/yr)	DOR	Total Offsets Required for Project with DOR (lb/yr)
N-1237-883 through '-890 (eight tanks in project)	4,048	1.5	6,072

The facility has requested that the amount of offsets required for this project be split among the eight new storage tanks. Since all of the new storage tanks are the same nominal size and have the same throughput and emission rates, the amount of offsets required for each tank can be determined as follows:

Offsets Required Per Tank (lb/yr) = Total Offsets Required for Project (lb/year) / 8 Tanks
Offsets Required Per Tank (lb/yr) = 6,072 lb/yr / 8 Tanks

Offsets Required Per Tank = 759 lb/yr

Calculating the appropriate quarterly emissions to be offset for each storage tank is as follows:

Quarterly Offsets Required (lb/qtr) = Total Offsets Required per Tank lb-VOC/yr ÷ 4 qtr/yr

Quarterly VOC Offsets Required for Each Wine Storage Tank			
Permits	Total Offsets Required, per Tank (lb/yr)	Quarters/year	Total Offsets Required, per Tank (lb/qtr)
N-1237-883 through '-890	759	4	189.75

As shown in the table above, the quarterly amount of offsets required for this project, when evenly distributed to each quarter, results in fractional pounds of offsets being required each quarter. Since offsets are required to be withdrawn as whole pounds, the quarterly amounts of offsets need to be adjusted to ensure the quarterly values sum to the total annual amount of offsets required.

To adjust the quarterly amount of offsets required, the fractional amount of offsets required in each quarter will be summed and redistributed to each quarter based on the number of days in each quarter. The redistribution is based on Quarter 1 having 90 days, Quarter 2 having 91 days, and Quarters 3 and 4 having 92 days. Therefore, the appropriate quarterly emissions to be offset for each tank are as follows:

Quarterly VOC Offsets Required for Each Wine Storage Tank				
Permits	Offsets Required, per Tank (lb/1st qtr)	Offsets Required, per Tank (lb/2nd qtr)	Offsets. Required, per Tank (lb/3rd qtr)	Offsets Required, per Tank (lb/4th qtr)
N-1237-883	189	190	190	190
N-1237-884	189	190	190	190
N-1237-885	189	190	190	190
N-1237-886	189	190	190	190
N-1237-887	189	190	190	190
N-1237-888	189	190	190	190
N-1237-889	189	190	190	190
N-1237-890	189	190	190	190
Total	**1,512**	**1,520**	**1,520**	**1,520**

The applicant has stated that the facility plans to use their primary ERC certificate S-4744-1 to offset the increases in VOC emissions associated with this project. They have also requested to list ERC Certificates C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 as secondary certificates to offset the increases in VOC emissions associated with this project. The above certificates have available quarterly VOC credits as follows[(2)]:

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
ERC #S-4744-1	12,961	62,907	62,896	62,896
ERC #C-1404-1	4,409	4,405	4,252	4,131
ERC #S-4442-1	6,862	6,852	0	0
ERC #S-4727-1	35,269	35,222	35,211	35,184
ERC #S-4751-1	13,522	13,570	7,249	7,260
ERC #S-4769-1	2,761	2,761	1,087	1,083
ERC #S-4773-1	827	771	56	41
ERC #S-4780-1	16,794	16,752	4,054	2,387

[(2)] The available credit values listed below only show the credits available from each certificate that are not currently reserved for other ATC projects in the District's permit database.

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

Proposed Rule 2201 (offset) Conditions:

The following condition will be included on each ATC for these eight new wine storage tanks:

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201]

- ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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]

C. Public Notification

1. Applicability

Public noticing is required for:
a. New Major Sources, Federal Major Modifications, and SB 288 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,
d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant, and/or
e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 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 Sections VII.C.7 above, this project triggers a Federal Major Modification. 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. As seen in Section VII.C.2 above, this project does include new wine storage tank emissions units, which all have daily emissions greater than 100 lb/day for VOC emissions; therefore, public noticing for PE > 100 lb/day purposes is required.

c. Offset Threshold

Public notification is required if the Pre-Project Stationary Source Potential to Emit (SSPE1) is increased from a level below the offset threshold to a level exceeding the emissions offset threshold, for any pollutant.

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

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 offset 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 SSPE1 and SSPE2 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:

Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice					
Pollutant	∑PE2 (lb/year)	∑PE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
VOC	>20,000 + 4,048	>20,000	4,048	20,000 lb/year	No

As demonstrated above, the SSIPE for VOC was less than 20,000 lb/year; therefore, public noticing for SSIPE purposes is not required.

e. Title V Significant Permit Modification

As shown in the Discussion of Rule 2520 below, this project constitutes a Title V significant modification. Therefore, public noticing for Title V significant modifications is required for this project.

2. Public Notice Action

As discussed above, public noticing is required for this project for triggering a Federal Major Modification, a PE of greater than 100 lb/day for each emission unit, and a Title V Significant Permit Modification. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB), EPA, and a public notice will be published in the local newspaper of general circulation prior to the issuance of the ATCs for these winery tank modifications.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 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.

For all eight wine storage tank emissions units in this project, the DEL is stated in the form of a daily limit on tank throughput and a maximum ethanol content for wine stored in the tank.

Proposed Rule 2201 (DEL) Conditions:

For the proposed wine storage tank emissions units in this project, the DEL is enforced with the following conditions:

- The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month 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]

- 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]

- This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201]

The following daily throughput condition will be included on each of the new wine storage tank ATCs:

- The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201]

In addition, in order for the applicant to be able to demonstrate ongoing compliance with the proposed annual throughput limit for each tank, the following condition will be included on each of the new wine storage tank ATCs:

- The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201]

E. Compliance Assurance

1. Source Testing

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

2. Monitoring

No monitoring is required to demonstrate compliance with Rule 2201.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) are listed on the permit to operate:

- The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rule 2201]

- 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]

- Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201]

- 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]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

Section 4.14.1 of this Rule requires that an ambient air quality analysis (AAQA) 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 only involves VOC emissions and no ambient air quality standard exists for VOC, an AAQA is not required for this project.

G. Compliance Certification

Section 4.15.2 of this Rule requires the owner of a new Major Source or a source undergoing a Federal Major 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 Sections VIII-Rule 2201-C.1.a and VIII-Rule 2201-C.1.b, this project does constitute a Federal Major Modification, therefore this requirement is applicable. E & J Gallo Winery's statewide compliance certification is included in Appendix C.

H. Alternate Siting Analysis

District Rule 2201, Section 4.15.1 requires an alternative siting analysis for any project which constitutes a New Major Source or a Federal Major Modification. As shown above, this project triggers a Federal Major Modification. Therefore, an alternative siting analysis must be performed.

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 the installation of eight new wine storage tanks, it represents 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 shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. Therefore, this project is not subject to the requirements of Rule 2410 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 is not a Federal Major Modification, as defined in Rule 2201[3]. As discussed above, this project triggers a Federal Major Modification. 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). 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 may construct/operate under the ATCs upon submittal of the Title V administrative amendment application. The following conditions will be included on each ATC and will assure compliance with the requirements of Rule 2520:

- 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]

[3] District Rule 2520, Section 3.20.5 actually states that a project shall not constitute a Title I modification, as defined in Rule 2201. In a previous version of Rule 2201, the term Title I modification was replaced with Federal Major Modification. However, at that time, the terminology in Rule 2520 was not updated to reflect the new Rule 2201 terms. Therefore, even though Rule 2520 references that a project triggering a Title I modification does not qualify as a Title V minor modification, it will be replaced with the term Federal Major Modification for the purposes of this project.

- 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]

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 storage tanks. Therefore, no further discussion is required.

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 storage tanks. Therefore, no further discussion is required.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). Visible emissions are not expected as a result of these wine storage operations. Therefore, compliance with this rule is expected. Compliance with the requirements of this rule is assured by the following condition, currently included as condition 22 on E & J Gallo Winery's facility wide permit N-1237-0-3:

- No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101]

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants, which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected. Compliance with the requirements of this rule is ensured by the following condition, currently included as condition 41 on E & J Gallo Winery's facility wide permit N-1237-0-3:

- 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.

VOC emissions, as ethanol, is the only pollutant generated by winery fermentation and storage tanks. 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 and a health risk assessment is not necessary. No further risk analysis is required.

Rule 4623 Storage of Organic Liquids

The purpose of this rule is to limit volatile organic compound (VOC) emissions from the storage of organic liquids. This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

However, Section 4.1.4 provides an exemption for tanks used to store fermentation products, byproducts or spirits. The tanks in this project are used solely for the storage of wine.

Therefore, the requirements of this rule are not applicable to any of the winery tanks within this project.

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). Since the proposed tanks will be used for storage only, this section is not applicable; therefore, no further discussion is required.

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,
- The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings, and

- 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 ≥ 5,000 gallons in capacity and used for storage to assure 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]

- 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]

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 ≥ 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]

Every three years, Section 6.1 and 6.2 require facilities with fermentation operations to submit a Three-Year Compliance Plan and a Three-Year Compliance Plan Verification respectively. The proposed tanks in this project are for wine storage only, and since these sections are not applicable to wine storage operations, no further discussion is required.

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]

Section 6.4.1 requires that records be kept for each fermentation batch. These tanks are not fermenters; therefore, this section does not apply.

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 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]

Section 6.4.3 requires that all monitoring be performed for any CERs as identified in the facility's Three-Year Compliance Plan and that the records of all monitoring be maintained. Since this requirement is for operators mitigation fermentation emission and the proposed tanks are only for wine storage operations, this section is not applicable to wine tanks in this project. Therefore, no further discussion is required.

California Health & Safety Code 42301.6 (School Notice)

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

California Environmental Quality Act (CEQA)

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

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

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the project will occur at an existing facility and the project involves negligible or no expansion of the existing use. Furthermore, the District determined that the project will not have a significant effect on the environment. The District finds that the project is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline §15301 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project's potential for litigation risk, which in turn may be based on a project's potential to generate public concern, its potential for significant impacts, and the project proponent's ability to pay for the costs of litigation without a letter of credit, among other factors.

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue Authorities to Construct N-1237-883-0 through '-890-0 subject to the permit conditions on the attached draft Authorities to Construct in Appendix E.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
N-1237-883-0	3020-05-E	350,000 gallons	$270
N-1237-884-0	3020-05-E	350,000 gallons	$270
N-1237-885-0	3020-05-E	350,000 gallons	$270
N-1237-886-0	3020-05-E	350,000 gallons	$270
N-1237-887-0	3020-05-E	350,000 gallons	$270
N-1237-888-0	3020-05-E	350,000 gallons	$270
N-1237-889-0	3020-05-E	350,000 gallons	$270
N-1237-890-0	3020-05-E	350,000 gallons	$270

Appendices:

A: TANKS 4.0 Calculations
B: BACT Guideline 5.4.13 and Top Down VOC BACT Analysis for Wine Storage Tanks
C: E & J Gallo Winery Statewide Compliance Certification
D: Quarterly Net Emissions Change (QNEC) Calculations
E: Draft ATCs N-1237-883-0 through '-890-0

APPENDIX A

TANKS 4.0 Calculations

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

Identification

User Identification:	Daily PE: N-1237, 1172193
City:	
State:	California
Company:	E & J Gallo Winery
Type of Tank:	Vertical Fixed Roof Tank
Description:	

Tank Dimensions

Shell Height (ft):		42.00
Diameter (ft):		38.13
Liquid Height (ft) :		42.00
Avg. Liquid Height (ft):		42.00
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)		2.00
Slope (ft/ft) (Cone Roof)		0.10

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

Daily PE: N-1237, 1172193 - Vertical Fixed Roof Tank

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
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)

Daily PE: N-1237, 1172193 - 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):							761.2586					
Vapor Density (lb/cu ft):							0.0044					
Vapor Space Expansion Factor:							0.0000					
Vented Vapor Saturation Factor:							0.9708					
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):							761.2586					
Tank Diameter (ft):							38.1300					
Vapor Space Outage (ft):							0.6667					
Tank Shell Height (ft):							42.0000					
Average Liquid Height (ft):							42.0000					
Roof Outage (ft):							0.6667					
Roof Outage (Cone Roof)												
Roof Outage (ft):							0.6667					
Roof Height (ft):							2.0000					
Roof Slope (ft/ft):							0.1000					
Shell Radius (ft):							19.0650					
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:							0.9708					
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):							0.8500					
Vapor Space Outage (ft):							0.6667					
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):	42.0000
Tank Diameter (ft):	38.1300
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: July

Daily PE: N-1237, 1172193 - Vertical Fixed Roof Tank

	Losses(lbs)		
Components	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
Tank Indentification and Physical Characteristics

Identification

User Identification:	Annual PE: N-1237, 1172193
City:	
State:	California
Company:	E & J Gallo Winery
Type of Tank:	Vertical Fixed Roof Tank
Description:	

Tank Dimensions

Shell Height (ft):		42.00
Diameter (ft):		38.13
Liquid Height (ft) :		42.00
Avg. Liquid Height (ft):		42.00
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)		2.00
Slope (ft/ft) (Cone Roof)		0.10

Breather Vent Settings

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

Meterological Data used in Emissions Calculations: Stockton, California (Avg Atmospheric Pressure = 14.72 psia)

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

Annual PE: N-1237, 1172193 - Vertical Fixed Roof Tank
, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
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)

Annual PE: N-1237, 1172193 - Vertical Fixed Roof Tank
, 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):	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586
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:	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586	761.2586
Tank Diameter (ft):	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300
Vapor Space Outage (ft):	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667
Tank Shell Height (ft):	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000
Average Liquid Height (ft):	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000
Roof Outage (ft):	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667
Roof Outage (Cone Roof)												
Roof Outage (ft):	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667
Roof Height (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
Roof Slope (ft/ft):	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000	0.1000
Shell Radius (ft):	19.0650	19.0650	19.0650	19.0650	19.0650	19.0650	19.0650	19.0650	19.0650	19.0650	19.0650	19.0650
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):	45.0000	50.5000	54.0500	59.3000	66.7000	73.3000	77.6500	76.8000	72.7000	64.5500	53.0500	44.9500
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 (Btu/sqft day):	597.0000	939.0000	1,458.0000	2,004.0000	2,435.0000	2,684.0000	2,688.0000	2,368.0000	1,907.0000	1,315.0000	782.0000	538.0000
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):	16.0000	20.4000	22.9000	27.2000	29.8000	31.6000	33.5000	32.2000	30.4000	27.5000	20.7000	15.7000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859	0.9859
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):	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667	0.6667

Working Losses (lb):	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395
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.):	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):	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000	42.0000
Tank Diameter (ft):	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300	38.1300
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):	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395	76.4395

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

Annual PE: N-1237, 1172193 - Vertical Fixed Roof Tank
, California

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Wine 15.0 % Vol Alcohol	917.27	0.00	917.27

Appendix B

BACT Guideline 5.4.13 and Top Down VOC BACT Analysis for Wine Storage Tanks

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 5.4.13*

Last Update: 09/26/2011

Wine Storage Tank - Non-Wood Material**

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)	

**This guideline is applicable to a wine storage tank that is not constructed out of wooden materials.
***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 ot diurnal temperature variations. Tanks made entirely of non-conducting materials such as concrete (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 s 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 VOCs from Wine Storage Operations

Step 1 - Identify All Possible Control Technologies

SJVUAPCD BACT Clearinghouse guideline 5.4.13 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.

SJVUAPCD BACT Clearinghouse guideline 5.4.13 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)

***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.*

SJVUAPCD BACT Clearinghouse guideline 5.4.13 does not identify any alternate basic equipment control alternatives.

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 oxidation or equivalent	98%*
2	Capture of VOCs and carbon adsorption or equivalent	95%
3	Capture of VOCs and absorption (scrubber) 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)

* Following recent District practice, thermal and catalytic oxidation will be ranked together.

Step 4 - Cost Effectiveness Analysis

A cost effective analysis must be performed for all control options that have not been determined to be achieved in practice in the list from Step 3 above, in the order of their ranking, to determine the cost effective option with the lowest emissions.

District BACT Policy APR 1305 establishes annual cost thresholds for imposed control based upon the amount of pollutants reduced by the controls. If the cost of control is at or below the threshold, it is considered a cost effective control. If the cost exceeds the threshold, it is not cost effective and the control is not required. Per District BACT Policy, the maximum cost limit for VOC reduction is $17,500 per ton of VOC emissions reduced.

Uncontrolled Storage Emissions

E & J Gallo Winery is proposing to install eight new wine storage tanks within this project. Therefore, for the purposes of this cost effectiveness analysis, uncontrolled storage VOC emissions will be set equal to the total VOC emissions allowed from all of the eight new tanks.

Uncontrolled Storage PE = 4,048 lb-VOC/year

Collection System Capital Investment (based on ductwork and clean-in-place system)

A common feature of all thermal 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(s).

Basis of Cost Information:

- Sales Tax: This facility is located in Livingston, CA, which has a current sales tax rate of 7.25%. However, pollution control equipment qualifies for a partial tax exemption in California. According to the following link, the tax exemption rate is 4.1875%, http://www.boe.ca.gov/sutax/manufacturing_exemptions.htm#Purchasers. Therefore, the sales tax rate used in this analysis will be set equal to 3.06% (7.25% - 4.1875%).
- The costs for the ductwork and the required clean-in-place (CIP) system are based on information from the 2005 Eichleay Study. The 2005 Eichleay study was used in development of District Rule 4694 Wine Fermentation and Storage Tanks and includes substantial information on the costs and details of the potential application of VOC controls to wineries and addresses many of the technical issues of the general site specific factors for wineries.
- The collection system consists of stainless steel place ductwork (stainless steel is required due to food grade product status) with isolation valving, connecting the 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.
- The District performed a cost survey of stainless steel ducting/piping and found that the values stated in the Eichleay report including the cost of inflation (applied as stated below) were cheaper; therefore, as a conservative estimate, the District will use the cost of ducting/piping from the Eichleay report which will include ducting, fittings, bolt up, handle, and install. A summary of the survey is included in Attachment B2.

- Eichleay's cost estimate for ducting included the duct, fittings, bolt up, handle and install. When additional costs, as allowed for in the EPA Control Cost Manual, were added onto the ducting cost estimate, the facility double counted some of the costs that Eichleay already accounted for in their estimate; therefore, the District did not allow the additional costs for foundations & supports, handling & erection, electrical, piping or painting.
- Additionally, the facility included an inflation amount of 2.75% per year from 2005 through 2015 to adjust the Eichleay cost to present value. The District found this inflation value to be unfounded and was replaced with an inflation amount of 25.80% for the period of June 2005 to March 2017 taken from United States Department of Labor Bureau of Labor Statistics' CIP Inflation Calculator: http://www.bls.gov/data/inflation_calculator.htm.
- See Attachment B1 for ducting layout diagrams and ducting cost estimates.
- One of the major concerns of a manifold duct system is microorganisms spoiling the product, and transferring from one tank to another. It is necessary to design into the system a positive disconnect of the ducting system when the tanks are not being filled. There are a number of ways this can be done. In this case, an automatic butterfly valve with a physical spool to disconnect the tank from the duct will be utilized.

Capital Cost of Ductwork

As detailed in the tank layout sketches and the ductwork cost calculations included in Attachment B2, the costs associated with installing ductwork to capture emissions from these eight tanks is summarized below:

Connection from 640k tanks to main duct = 8 tanks x 59.07 feet x $41.45/foot = $19,588
Main duct for storage tanks = $13,274
Unit installed cost for 6 inch butterfly valve = $2,125/valve x 8 valves x 1 system = $17,000
Unit installed cost one foot removable spool = $500/tank x 8 tanks x 1 system = $4,000
1 Knockout drum = $46,000
Duct support allowance = $50,000

Total for Group 1 = $19,588 + $13,274 + $17,000 + $4,000 + $46,000 + $50,000
= $149,862

Capital Cost of Ductwork for Wine Fermentation Tanks	
Cost Description	Cost ($)
Combined Duct Estimate for all Tank Groups (See Duct Sizing in Attachment C1)	$149,862
Adjusting factor for inflation from 2005 dollars to 2017 dollars (25.80% total increase)	1.258
Inflation adjusted duct cost	$188,526
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
Direct Costs	
Base Equipment Costs (Ductwork) See Above	$188,526
Instrumentation (not required)	-
Sales Tax - 3.06% of base equipment	$5,769
Freight - 5% of base equipment	$9,426
Purchased equipment cost (PEC)	**$203,721**
Foundations & supports 8% (allowance already included in cost estimate)	-
Handling & erection 14% (already included in Eichleay cost estimate)	-
Electrical 4% (not required)	-
Piping 2% (not required)	-
Painting 1% (not required)	-
Insulation 1% of PEC	$2,037
Direct Installation Costs (DIC)	**$2,037**
Total Direct Costs (DC) (PEC + DIC)	**$205,758**
Indirect Costs	
Engineering - 10% of PEC	$20,372
Construction and field expenses - 5% of PEC	$10,186
Contractor Fees - 10% of PEC	$20,372
Start-up - 2% of PEC	$4,074
Performance Test - 1% of PEC	$2,037
Total Indirect Costs (IC)	**$57,041**
Subtotal Capital Investment (SCI) (DC + IC)	**$262,799**
Contingencies – 15% of SCI	$39,420
Total Capital Investment (TCI) (SCI + Contingency)	**$302,219**

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.

Capital Cost of Clean-In-Place (CIP) System of Ductwork for Wine Fermentation Tanks	
Cost Description	Cost ($)
Current cost of CIP system (one low flow collection system)	$100,000
The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).	
Direct Costs	
Base Equipment Costs (CIP System) See Above	$100,000
Instrumentation - 10% of base equipment	$10,000
Sales Tax - 3.06% of base equipment	$3,060
Freight - 5% of base equipment	$5,000
Purchased equipment cost (PEC)	**$118,060**
Foundations & supports - 8% of PEC	$9,445
Handling & erection - 14% of PEC	$16,528
Electrical - 4% of PEC	$4,722
Piping – accounted for in ductwork cost	-
Painting - 1% of PEC	$1,181
Insulation - 1% of PEC	$1,181
Direct Installation Costs (DIC)	**$33,057**
Total Direct Costs (DC) (PEC + DIC)	**$151,117**
Indirect Costs	
Engineering - 10% of PEC	$11,806
Construction and field expenses - 5% of PEC	$5,903
Contractor fees - 10% of PEC	$11,806
Start-up - 2% of PEC	$2,361
Performance test - 1% of PEC	$1,181
Total Indirect Costs (IC)	**$33,057**
Subtotal Capital Investment (SCI) (DC + IC)	**$184,174**
Contingencies - 15% of SCI	$27,626
Total Capital Investment (TCI) (SCI + Contingency)	**$211,800**

Annualized Capital Cost

Total capital costs = Ductwork + CIP System
= $302,219 + $211,800
= $514,019

Annualized Capital Investment = Initial Capital Investment x Amortization Factor

Amortization Factor = $\left[\frac{0.1(1.1)^{10}}{(1.1)^{10}-1}\right]$ = 0.163 per District policy, amortizing over 10 years at 10%

Therefore,

Total Collection System Annualized Capital Investment = $514,019 x 0.163

Total Collection System Annualized Capital Investment = $83,785

Option 1 - Collection of VOCs and Control by Thermal or Catalytic Oxidation (98% collection & control):

Total Annual Cost

Total Annual Cost = Ductwork + CIP System
= $83,785

Emission Reductions

Annual Emission Reduction = Uncontrolled Emissions x 0.98
= 4,048 lb-VOC/year x 0.98
= 3,967 lb-VOC/year
= 1.98 tons-VOC/year

Cost Effectiveness

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

Cost Effectiveness = $83,785/year ÷ 1.98 tons-VOC/year
= $42,316/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.

Option 2 - Collection of VOCs and control by carbon adsorption (95% collection and control):

Total Annual Cost

Total Annual Cost = Ductwork + CIP System
= $83,785

Emission Reductions

Annual Emission Reduction = Uncontrolled Emissions x 0.95
= 4,048 lb-VOC/year x 0.95
= 3,846 lb-VOC/year
= 1.92 tons-VOC/year

Cost Effectiveness

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

Cost Effectiveness = $83,785/year ÷ 1.92 tons-VOC/year
= $43,638/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.

Option 3 - Collection of VOCs and Control by Absorption/Scrubber (90% collection & control):

Total Annual Cost

Total Annual Cost = Ductwork + CIP System
= $83,785

Emission Reductions

Annual Emission Reduction = Uncontrolled Emissions x 0.90
= 4,048 lb-VOC/year x 0.90
= 3,643 lb-VOC/year
= 1.82 tons-VOC/year

Cost Effectiveness

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

Cost Effectiveness = $83,785/year ÷ 1.82 tons-VOC/year
= $46,035/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.

Option 4 - Capture of VOCs and Condensation (70% collection & control):

Total Annual Cost

Total Annual Cost = Ductwork + CIP System
= $83,785

Emission Reductions

Annual Emission Reduction = Uncontrolled Emissions x 0.70
= 4,048 lb-VOC/year x 0.70
= 2,834 lb-VOC/year
= 1.42 tons-VOC/year

Cost Effectiveness

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

Cost Effectiveness = $83,785/year ÷ 1.42 tons-VOC/year
= $59,003/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.

Option 5 - Insulation, PVRV, "Gas-Tight" Tank Operation, and Storage Temperature not Exceeding 75 deg F, Achieved within 60 days of Completion of Fermentation):

The only remaining control option in step 3 above has been deemed AIP for this class and category of source and per the District BACT policy is required regardless of the cost. Therefore, a cost effectiveness analysis is not required.

Step 5 – Select BACT

All identified technologically feasible options with control efficiencies higher than the option proposed by the facility have been shown to not be cost effective. Each of the new wine storage tanks will be equipped and/or operated in a manner that complies with Option 5, 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. Therefore, the BACT requirements for VOC emissions will be satisfied for the purposes of this project.

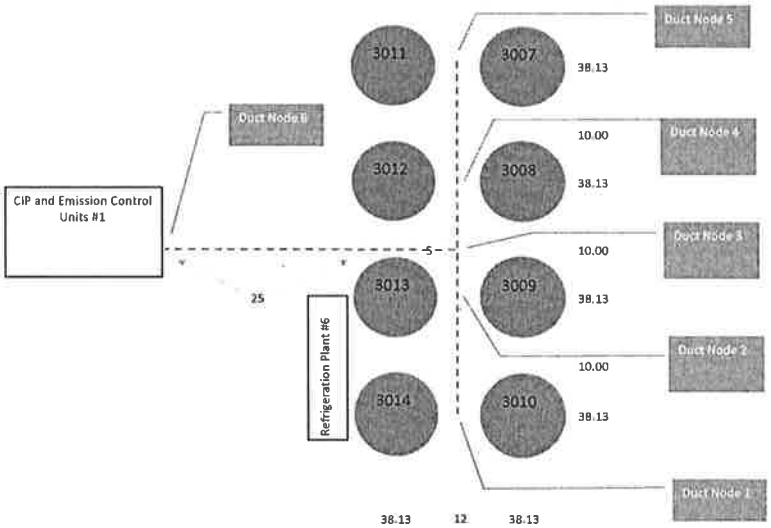
Attachment B1

Ducting Layout Diagram and Ducting Cost Estimate

Tanks are for storage only.

The numbers in the cells around the tank layout reflect spacing and tank dimensions from the data base and layout Auto Cad files. Only the main duct between the tanks are shown. The connections from the tank to the main duct are priced out in the duct cost tabs. Total tanks in this sketch 8

Red dashed line is the most probable duct routing. Blue call out boxes show where a duct intersects with another duct or where a duct begins or ends.



Nominal duct size is the smallest duct size for which we have pricing. The adjusted duct size is the size that was selected for the calculated flow. This size was not set smaller than 4 inches to maintain some structural rigidity in the duct piping system. The adjust price is based on a ratio of the duct sized based on flow to the closest nominal size for which we have pricing. (Circumference Size 1/Circumference Size 2)

Comments	Connection Length from Tanks to Main Ducts (Main is about 10 feet from floor)	Number of Tanks	Total Length of Connection Piping in Feet	Design Duct Velocity from Eichleay Feet/Second	Gas Flow Rate Storage Fill in SCFM for One Tank	Duct size from tank to main diameter inches	Nominal Duct Size diameter in inches (See comments)	Number of Tanks to connect	Valve and Spool Isolation Components Allocation at Each Tank from Previous Work	Adjusted Duct Size Inches	Cost Per Foot from Eichleay (See Comments)	Cost of Ducting for Main Duct
215K Tanks 3007 through 3014	59.07	8.00	472.52	40.00	70.13	2.31	6.00	8.00	$21,000	4.00	$41.45	$40,585

6 inch used on all main ducts for structural rigidity

Main Ducting Sizing	Beginning Node	Ending Node	Number of tanks feeding ending node	Tanks Pumping. This is set at 50%	Gas Flows SCFM	Design Duct Velocity from Eichleay Feet/Second	Duct size main diameter inches	Nominal Duct Size diameter in inches (See comments)	Total Length of Piping in Feet Connecting Nodes	Adjusted duct Size Diameter Inches	Cost Per Foot from Eichleay (See Comments)	Cost of Ducting for Main Duct
	1	2	2.00	1	70.13	40.00	2.31	6	48	6.00	$62.17	$2,992
	2	3	4.00	2	140.25	40.00	3.27	6	24	6.00	$62.17	$1,496
	5	4	2.00	1	70.13	40.00	2.31	6	48	6.00	$62.17	$2,992
	4	3	4.00	2	140.25	40.00	3.27	6	24	6.00	$62.17	$1,496
	3	6	8.00	4	280.51	40.00	4.63	6	69	6.00	$62.17	$4,298

1) One of the major concerns of a manifold duct system is inadvertently transferring fluids from one tank to another.

2) For this reason it is necessary to design into the system a positive disconnect of the ducting system when the tanks is not being filled. There are a number of ways this can be done, but for illustration purposes we took a very brief look at a automatic butterfly valve with a physical spool to disconnect the tank from the duct.

3) It should be pointed out that no design work has been done, and this should be considered a conceptual estimate.

Knock Out Drum Eichleay	$46,000
Structural Support Allowance	$50,000
Total	$149,859

Eichleay used $46,000

Attachment B2

Comparison of Stainless Steel Ducting Costs

Ducting/Piping Cost Comparison

Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	28"
Eichleay - Ducting/Piping Only $/Foot	--	--	--	$23.17	$38.59	$54.00	$62.00	$65.50	$69.00	$86.00	$92.00	$99.00	$106.00	$119.00
Eichleay - Ducting/Piping Only $/Foot Including 21.93% for Inflation	--	--	--	$28.25	$47.05	$65.84	$75.60	$79.86	$84.13	$104.86	$112.18	$120.71	$129.25	$145.10
Average of District Cost Survey in $/Foot	$15.49	$30.85	$27.67	$44.13	$37.50	$33.13	$93.75	$181.70	$216.50	$189.02	$308.40	--	$193.99	--

Ducting/Piping Costs based on Eichleay Report

Note: Minimum of 6" Diameter for Structural Support														
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	28"
Ducting/Piping Only $/Foot	--	--	--	$23.17	$38.59	$54.00	$62.00	$65.50	$69.00	$86.00	$92.00	$99.00	$106.00	$119.00
Ducting + Fittings, Bolt Up, Handling, & Install $/Foot	--	--	--	$62.17	$103.25	$144.33	$143.83	$174.17	$204.52	$251.38	$309.38	$306.44	$397.67	$476.73
Ducting + Fittings, Bolt Up, Handling, & Install $/Foot	--	--	--	$62.17	$103.25	$144.33	$143.83	$174.17	$204.52	$251.38	$309.38	$306.44	$397.67	$476.73

Supplier: Grainger (http://www.grainger.com) **Location: Fresno, CA and Ceres, CA**

Schedule 10													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Price ($)	$229.50	$387.75	$587.50	--	--	--	--		--	--	--	--	--
Length (feet)	10	10	10	--	--	--	--		--	--	--	--	--
Price/Foot ($)	$22.95	$38.78	$58.75	--	--	--	--		--	--	--	--	--

Supplier: Stockton Pipe and & Supply Inc (http://www.stocktonpipe.net) **Location: Stockton, CA**

Note: Sizes over 12" Diameter need to be ordered from Mill													
0.109" thickness tube or Schedule 10 Pipe													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Price ($)	--	--	--	--	--	$700.00	$840.00	--	--	--	--	--	$3,159.60
Length (feet)	--	--	--	--	--	20	20	--	--	--	--	--	20
Price/Foot ($)	--	--	--	--	--	$35.00	$42.00	--	--	--	--	--	$157.98

Supplier: Valley Iron Inc (http://www.stocktonpipe.net) **Location: Fresno, CA**

Note: Sch 10 T-304 20'													
Schedule 10 Pipe													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Length (feet)	--	--	20	20	20	20	--	--	--	--	--	--	--
Price/Foot ($)	--	--	$10.75	$16.90	$26.00	$33.90	--	--	--	--	--	--	--

Supplier: Del Paso Pipe & Steel Inc. (http://www.delpasopipeandsteel.com/) **Location: Sacramento, CA**

Schedule 5/10 Pipe:													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Price Quote: $9/lb												--	
Estimated Price/Foot	--	--	--	--	--	--	$217.00	$250.00	$286.00	$322.00	$432.00	--	--
												--	

Supplier: Hayward Pipe & Supply Co. Inc (http://www.haywardpipe.com/) **Location: Hayward, CA**

Note: large diamter pipe ships from Texas, FREIGHT NOT QUOTED - Additional Shipping Costs apply													
Schedule 10 Pipe													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Price ($)	--	--	--	--	--	--	$1,540.00	$2,268.00	$2,940.00	$3,276.00	$3,696.00	--	--
Length (feet)	--	--	--	--	--	--	20	20	20	20	20	--	--
Price/Foot ($)	--	--	--	--	--	--	$77.00	$113.40	$147.00	$163.80	$184.80	--	--

Supplier: OnlineMetals.com (http://www.onlinemetals.com/) **Location: Nearest Warehouse - Los Angeles, CA**

Schedule 10 Pipe													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Price ($)	$78.28	$108.97	$160.34	$288.00	$520.00	--	--	--	--	--	--	--	--
Length (feet)	8	8	8	8	8	--	--	--	--	--	--	--	--
Price/Foot ($)	$9.79	$13.62	$20.04	$36.00	$65.00	--	--	--	--	--	--	--	--
Weldeds Stainless Tube 304/304L (2" OD, 0.12" Wall; 3" OD, 0.12" Wall; 6", 0.12")													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Price ($)	$109.86	$321.34	--	$628.16	--	--	--	--	--	--	--	--	--
Length (feet)	8	8	--	8	--	--	--	--	--	--	--	--	--
Price/Foot ($)	$13.73	$40.17	--	$78.52	--	--	--	--	--	--	--	--	--

Supplier: Lone Star Supply Co **Location: Dickinson, TX**

Note: Additional shipping costs													
Schedule 10 Welded Pipe													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Price/Foot ($)	--	--	$16.45	$19.60	$21.50	$30.50	$39.00	--	--	$81.25	--	--	$230.00
												--	

Supplier: Global Technology and Engineering **Location: Excelsior Springs, MO**

Note: Additional shipping Costs												–	
11 Gauge Tubing													
Duct Size Diameter (in.)	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"
Price ($)	--	--	$226.58	$487.40	--	--	--	--	--	--	--	--	--
Length (feet)	--	--	7	7	--	--	--	--	--	--	--	--	--
Price/Foot ($)	--	--	$32.37	$69.63	--	--	--	--	--	--	--	--	--

All suppliers	$30.85	$44.13	70%	
Only suppliers that have both 3" and 6"	$30.85	$57.26	54%	33.50034

Appendix C

E & J Gallo Winery Statewide Compliance Certification

N-1237
E&J Gallo Winery-Livingston
Project: Convert Eight Existing Tanks to Wine Storage
District Permitting Engineer: Mr. Dustin Brown

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 following: E&J Gallo Winery-Fresno (includes San Joaquin Valley Concentrates); E&J Gallo Winery-Livingston; E&J Gallo Winery-Modesto (includes Spirits facility) and Gallo Glass."

06/05/17

Mr. Chris Savage
Sr. Director of Global Environmental Affairs

Date

Appendix D

Quarterly Net Emissions Change (QNEC) Calculations

Quarterly Net Emissions Change (QNEC)

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

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

All eight tanks in this project are identical. Therefore, the following calculation will represent the QNEC for each of the eight new wine storage tanks. Using the values in Sections VII.C.2 and VII.C.6 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$PE2_{quarterly}$ = $PE2_{annual}$ ÷ 4 quarters/year
= 506 lb/year ÷ 4 qtr/year
= 126.5 lb VOC/qtr

$PE1_{quarterly}$ = $PE1_{annual}$ ÷ 4 quarters/year
= 0 lb/year ÷ 4 qtr/year
= 0 lb VOC/qtr

Quarterly NEC [QNEC]			
Pollutant	**PE2 (lb/qtr)**	**PE1 (lb/qtr)**	**QNEC (lb/qtr)**
NO_X	0	0	0
SO_X	0	0	0
PM_{10}	0	0	0
CO	0	0	0
VOC	126.5	0	126.5

Appendix E

Draft ATCs N-1237-883-0 through '-890-0

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-883-0

ISSUANCE DATE: DRAFT

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:
350,000 GALLON NOMINAL (334,991 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3007) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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 - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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 ATC. [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

Arnaud Marjollet, Director of Permit Services
N-1237-883-0 Jun 21 2017 4:48PM -- BROWND Joint Inspection NOT Required

5. This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped 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. 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 Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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
13. 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
14. The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
15. 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
16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. 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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-884-0

ISSUANCE DATE: DRAFT

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:
350,000 GALLON NOMINAL (335,068 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3008) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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 - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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 ATC. [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

Arnaud Marjollet, Director of Permit Services
N-1237-884-0 Jun 21 2017 4:48PM -- BROWND Joint Inspection NOT Required

5. This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit

6. This tank shall be equipped 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. 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 Rules 2201 and 4694] Federally Enforceable Through Title V Permit

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit

10. 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

11. The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201] Federally Enforceable Through Title V Permit

12. 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

13. 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

14. The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

15. 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

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

17. 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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-885-0

ISSUANCE DATE: DRAFT

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:
350,000 GALLON NOMINAL (335,440 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3009) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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 - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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 ATC. [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

Arnaud Marjollet, Director of Permit Services

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475

5. This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit

6. This tank shall be equipped 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. 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 Rules 2201 and 4694] Federally Enforceable Through Title V Permit

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit

10. 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

11. The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201] Federally Enforceable Through Title V Permit

12. 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

13. 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

14. The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

15. 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

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

17. 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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-886-0

ISSUANCE DATE: DRAFT

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:
350,000 GALLON NOMINAL (335,214 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3010) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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 - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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 ATC. [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

Arnaud Marjollet, Director of Permit Services
N-1237-886-0 Jun 21 2017 4:48PM -- BROWND Joint Inspection NOT Required

5. This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped 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. 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 Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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
13. 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
14. The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
15. 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
16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. 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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-1237-887-0 **ISSUANCE DATE:** DRAFT

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:
350,000 GALLON NOMINAL (335,295 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3011) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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 - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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 ATC. [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

Arnaud Marjollet, Director of Permit Services
N-1237-887-0 Jun 21 2017 4:48PM -- BROWND Joint Inspection NOT Required

5. This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This tank shall be equipped 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. 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 Rules 2201 and 4694] Federally Enforceable Through Title V Permit
9. The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit
10. 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
11. The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201] Federally Enforceable Through Title V Permit
12. 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
13. 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
14. The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
15. 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
16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit
17. 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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-888-0

ISSUANCE DATE: DRAFT

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:
350,000 GALLON NOMINAL (334,830 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3012) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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 - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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 ATC. [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

Arnaud Marjollet, Director of Permit Services
N-1237-888-0 Jun 21 2017 4:48PM -- BROWND Joint Inspection NOT Required

5. This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit

6. This tank shall be equipped 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. 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 Rules 2201 and 4694] Federally Enforceable Through Title V Permit

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit

10. 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

11. The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201] Federally Enforceable Through Title V Permit

12. 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

13. 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

14. The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

15. 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

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

17. 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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-889-0

ISSUANCE DATE: DRAFT

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:
350,000 GALLON NOMINAL (335,391 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3013) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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 - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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 ATC. [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

Arnaud Marjollet, Director of Permit Services
N-1237-889-0 Jun 21 2017 4:48PM – BROWND Joint Inspection NOT Required

5. This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit

6. This tank shall be equipped 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. 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 Rules 2201 and 4694] Federally Enforceable Through Title V Permit

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit

10. 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

11. The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201] Federally Enforceable Through Title V Permit

12. 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

13. 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

14. The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

15. 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

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

17. 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

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-1237-890-0

ISSUANCE DATE: DRAFT

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:
350,000 GALLON NOMINAL (335,340 GALLON GAUGE) STAINLESS STEEL ENCLOSED TOP WINE STORAGE TANK (TANK 3014) EQUIPPED WITH INSULATION AND PRESSURE/VACUUM RELIEF VALVE

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 - 189 lb, 2nd quarter - 190 lb, 3rd quarter - 190 lb, and fourth quarter - 190 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.8 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
4. ERC Certificate Numbers S-4744-1, C-1404-1, S-4442-1, S-4727-1, S-4751-1, S-4769-1, S-4773-1, or S-4780-1 (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 ATC. [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

Arnaud Marjollet, Director of Permit Services

N-1237-890-0 Jun 21 2017 4:48PM -- BROWND Joint Inspection NOT Required

5. This tank shall be used exclusively for wine storage operations only and not for fermentation. [District Rule 2201] Federally Enforceable Through Title V Permit

6. This tank shall be equipped 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. 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 Rules 2201 and 4694] Federally Enforceable Through Title V Permit

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a rolling 12-month basis, shall not exceed 15 percent by volume. [District Rule 2201] Federally Enforceable Through Title V Permit

10. 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

11. The maximum wine storage emissions in this tank, calculated on a rolling 12-month basis, shall not exceed 506 lb-VOC/year (equivalent to 3,500,000 gallons of wine throughput per year). [District Rule 2201] Federally Enforceable Through Title V Permit

12. 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

13. 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

14. The operator shall maintain records of the calculated rolling 12-month wine ethanol content and storage throughput rate (ethanol percentage by volume and gallons per rolling 12-month period, calculated monthly). [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

15. 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

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rules 1070 and 2201] Federally Enforceable Through Title V Permit

17. 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