DEC 09 2014

Dan Martin
E & J Gallo Winery
18000 W River Road
Livingston, CA 95334

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: N-1237
Project Number: N-1143437

Dear Mr. Martin:

Enclosed for your review and comment is the District’s analysis of E & J Gallo Winery’s application for an Authority to Construct for the installation of 12 wine storage tanks, at 18000 W River Road, Livingston, CA.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Jesse A. Garcia of Permit Services at (559) 230-5900.

Sincerely,

Aurhand Marjollet
Director of Permit Services

AM:jag

Enclosures

cc: Mike Tollstrup, CARB (w/ enclosure) via email
    cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer
San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
12 New Wine Storage Tanks

Facility Name: E & J Gallo Winery
Mailing Address: 18100 W. River Road
Livingston, CA 95334
Contact Person: Kim Burns
Telephone: (559) 458-2457
Email: kim.burns@ejgallo.com
Application #: N-1237-764-0 through -775-0
Project #: N-1143437
Deemed Complete: November 3, 2014

Date: November 21, 2014
Engineer: Jesse A. Garcia
Lead Engineer: Joven Refuerzo

I. Proposal

E & J Gallo Winery has requested Authority to Construct (ATC) permits for the installation of four new 215,000 gallon (or equivalent) wine storage tanks and eight new 350,000 gallon (or equivalent) wine storage tanks. These tanks will be used strictly for wine storage.

E & J Gallo Winery received their Title V Permit. This modification can be classified as a Title V significant modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). But the facility has not requested that this project be processed in that manner; therefore, E & J Gallo Winery will be required to submit a Title V significant modification application prior to operating under the revised provisions of the ATCs issued with this project.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410 Prevention of Significant Deterioration (6/16/11)
Rule 2520 Federally Mandated Operating Permits (6/21/01)
Rule 4001 New Source Performance Standards (4/14/99)
Rule 4002 National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4102 Nuisance (12/17/92)
Rule 4623 Storage of Organic Liquids (5/19/05)
Rule 4694 Wine Fermentation and Storage Tanks (12/15/05)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines
III. Project Location

The facility is located at 18100 W River Road in Livingston, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

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

After transfer of the must (for red or white wine) to the fermentation tank, the must is inoculated with yeast which initiates the fermentation reactions. During fermentation, the yeast metabolizes the sugar in the grape juice, converting it to ethanol and carbon dioxide (CO$_2$) 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.
V. Equipment Listing

N-1237-764-0: 215,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 2133) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-765-0: 215,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 2134) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-766-0: 215,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 2137) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-767-0: 215,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 2138) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-768-0: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3225) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-769-0: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3226) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-770-0: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3227) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-771-0: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3228) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-772-0: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3229) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-773-0: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3230) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-774-0: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3231) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

N-1237-775-0: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3232) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

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 refrigeration and/or 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 (per FYI-295)
- Maximum annual liquid storage temperature = 63.3 °F (per FYI-295)
- Storage tank daily maximum ethanol content of stored wine is 23.9%
- Storage tank annual average ethanol content of stored wine is 15%
- Maximum storage throughput as proposed by applicant:

<table>
<thead>
<tr>
<th>Tanks</th>
<th>Daily Storage (gal/day)</th>
<th>Annual Storage (gal/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1237-764-0 through -767-0</td>
<td>215,000</td>
<td>4,300,000</td>
</tr>
<tr>
<td>N-1237-768-0 through -775-0</td>
<td>350,000</td>
<td>3,500,000</td>
</tr>
</tbody>
</table>

B. Emission Factors

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

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Since these are new emissions units (storage), PE1 = 0 (all pollutants) for the fermentation and storage operation in these tanks.

2. Post Project Potential to Emit (PE2)

The new wine tanks will be used for storage only. Two Tanks 4.0 runs have been performed; one run was performed using the daily throughput to calculate the daily post-project potential to emit by dividing the month of February emissions by the number of days in the month and one using the annual throughput to calculate the annual post-project potential to emit. See Appendix A for the Tanks 4.0 runs for each tank. See Appendix B for a summary of emissions from wine storage.

The daily and annual emissions are summarized in the table below:

<table>
<thead>
<tr>
<th>Tanks</th>
<th>Daily PE2 (lb-VOC/day), each</th>
<th>Annual PE2 (lb-VOC/yr), each</th>
<th>Total (lb-VOC/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1237-764-0 through -767-0</td>
<td>23.6</td>
<td>622</td>
<td>2,488</td>
</tr>
<tr>
<td>N-1237-768-0 through -775-0</td>
<td>39.8</td>
<td>506</td>
<td>4,048</td>
</tr>
<tr>
<td>Total (12 tanks)</td>
<td></td>
<td></td>
<td>6,536</td>
</tr>
</tbody>
</table>
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:

As determined in Section VII.D.4 of this document, this facility is an existing Rule 2201 major source for VOC emissions. The following table summarizes the potential VOC emissions from one previous permitting action for this stationary source before the proposed project.
As indicated above, the SSPE for VOC emissions before the proposed project is calculated to be 692,671 pounds per year, equivalent to 346.3 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.

<table>
<thead>
<tr>
<th>PSD Major Source Determination (tons/year)</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility PE before Project Increase</td>
<td>346.3</td>
</tr>
<tr>
<td>PSD Major Source Thresholds</td>
<td>250</td>
</tr>
<tr>
<td>PSD Major Source?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

6. Baseline Emissions (BE)

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

Pursuant to Section 3.7 of District Rule 2201, BE = Pre-project Potential to Emit for:
- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

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

Since these are new emissions unit, 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, the facility is an existing Major Source for VOC; however, the project by itself would need to be a significant increase in order to trigger a Major Modification. The emissions units within this project do not have a total potential to emit which is greater than Major Modification thresholds (see table below). Therefore, the project cannot be a significant increase and the project does not constitute a Major Modification.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Project PE (lb/year)</th>
<th>Threshold (lb/year)</th>
<th>Major Modification?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>6,536</td>
<td>50,000</td>
<td>No</td>
</tr>
</tbody>
</table>

8. Federal Major Modification

District Rule 2201, Section 3.17 states that Federal Major Modifications are the same as "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA. SB 288 Major Modifications are not federal major modifications if they meet the criteria of the "Less-Than-Significant Emissions Increase" exclusion.

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

- To determine the post-project projected actual emissions from existing units, the provisions of 40 CFR 51.165 (a)(1)(xxviii) shall be used.
- To determine the pre-project baseline actual emissions, the provisions of 40 CFR 51.165 (a)(1)(xxxv)(A) through (D) shall be used.
- If the project is determined not to be a federal major modification pursuant to the provisions of 40 CFR 51.165 (a)(2)(ii)(B), but there is a reasonable possibility that the project may result in a significant emissions increase, the owner or operator shall comply with all of the provisions of 40 CFR 51.165 (a)(6) and (a)(7).
- Emissions increases calculated pursuant to this section are significant if they exceed the significance thresholds specified in the table below.
<table>
<thead>
<tr>
<th>Significant Threshold (lb/year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollutant</td>
</tr>
<tr>
<td>VOC</td>
</tr>
</tbody>
</table>

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

Net Emission Increase for New Units (NEI

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

\[ \text{NEI}_N = \text{PE}_2N - \text{BAE} \]

Since these are new units, BAE for these units is zero and,

\[ \text{NEI}_N = \text{PE}_2N \]

where \( \text{PE}_2N \) is the Post Project Potential to Emit for the new emissions units.

\[ \text{NEI}_N = \text{PE}_2N = 6,536 \text{ lb-VOC/year} \]

The NEI for this project is thus calculated as follows:

\[ \text{NEI} = \text{NEI}_N \]

\[ \text{NEI} = 6,536 \text{ lb-VOC/year} \]

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

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

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

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).
In the case the facility is an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project results in a PSD significant increase.

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

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

I. Project Location Relative to Class 1 Area

As demonstrated in the “PSD Major Source Determination” Section above, the facility was determined to be an existing major source for PSD. Because the project is not located within 10 km of a Class 1 area – modeling of the emission increase is not required to determine if the project is subject to the requirements of Rule 2410.

II. Significance of Project Emission Increase Determination

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

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

<table>
<thead>
<tr>
<th>PSD Significant Emission Increase Determination: Potential to Emit (tons/year)</th>
<th>NO2</th>
<th>SO2</th>
<th>CO</th>
<th>PM</th>
<th>PM10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PE from New and Modified Units</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PSD Significant Emission Increase Thresholds</td>
<td>40</td>
<td>40</td>
<td>100</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>PSD Significant Emission Increase?</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

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

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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

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following*:

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

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

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

The applicant is proposing to install 12 new wine storage tanks with a PE greater than 2 lb/day for VOC. Thus BACT is triggered for VOC for these emissions units.

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

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

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

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 VII.C.8 above, this project constitutes 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 the wine storage tanks. [Wine Storage Tanks] (Appendix C)

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (Appendix C), since the technologically feasible options are not cost effective and BACT has been 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 achieve and maintain a continuous storage temperature not exceeding 75 °F within 60 days of completion of fermentation.

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post Project Stationary Source Potential to Emit (SSPE2) equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201. Facility emissions are already above the Offset and Major Source Thresholds for VOC emissions; therefore, offsets are triggered.

2. Quantity of Offsets Required

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

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

Offsets Required (lb/year) = (∑[PE2 - BE] + ICCE) x DOR, for all new or modified emissions units in the project,
Where,
PE2 = Post Project Potential to Emit, (lb/year)
BE = Baseline Emissions, (lb/year)
ICCE = Increase in Cargo Carrier Emissions, (lb/year)
DOR = Distance Offset Ratio, determined pursuant to Section 4.8

BE = Pre-project Potential to Emit for:
- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, Located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE)

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

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

The project is a Federal Major Modification; therefore, the offset ratio for VOC is 1.5:1.

<table>
<thead>
<tr>
<th>Tank Model (ATCs)</th>
<th>PE2, each (lb-VOC/yr)</th>
<th>Annual BE, each (lb-VOC/yr)</th>
<th>Offsets Required, each (lb-VOC/yr)</th>
<th>Offsets Required @ 1.5:1 DOR, each (lb-VOC/yr)</th>
<th>Total Offsets Required (lb-VOC/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1237-764-0 through -767-0</td>
<td>622</td>
<td>0</td>
<td>622</td>
<td>933</td>
<td>3,732</td>
</tr>
<tr>
<td>N-1237-768-0 through -775-0</td>
<td>506</td>
<td>0</td>
<td>506</td>
<td>759</td>
<td>6,072</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ATCs</th>
<th>Offsets, each (lb-VOC/yr)</th>
<th>1st Qtr (lb/qtr)</th>
<th>2nd Qtr (lb/qtr)</th>
<th>3rd Qtr (lb/qtr)</th>
<th>4th Qtr (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1237-764-0 through -767-0</td>
<td>622</td>
<td>155</td>
<td>155</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>N-1237-768-0 through -775-0</td>
<td>506</td>
<td>126</td>
<td>126</td>
<td>127</td>
<td>127</td>
</tr>
</tbody>
</table>
Summary of Offsets Required for Each Tank @ 1.5:1 DOR

<table>
<thead>
<tr>
<th>ATCs</th>
<th>Offsets, each (lb-VOC/yr)</th>
<th>Quarterly Offsets Required, each</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st Qtr (lb/qtr)</td>
</tr>
<tr>
<td>N-1237-764-0 through -767-0</td>
<td>933</td>
<td>233</td>
</tr>
<tr>
<td>N-1237-768-0 through -775-0</td>
<td>759</td>
<td>189</td>
</tr>
<tr>
<td>Total (12 Tanks)</td>
<td>9,804</td>
<td>2,444</td>
</tr>
</tbody>
</table>

The applicant has stated that the facility plans to use ERC certificates S-4260-1\(^1\), C-1229-1, S-4354-1\(^2\), S-4126-1\(^3\), S-4381-1 and/or S-4306-1\(^4\), or their successors, to offset the increases in VOC emissions associated with this project.

The above certificates have available quarterly VOC credits as follows:

<table>
<thead>
<tr>
<th></th>
<th>1st Quarter</th>
<th>2nd Quarter</th>
<th>3rd Quarter</th>
<th>4th Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERC #S-4260-1</td>
<td>2,125</td>
<td>2,123</td>
<td>2,085</td>
<td>1,965</td>
</tr>
<tr>
<td>ERC #C-1229-1</td>
<td>8,075</td>
<td>8,072</td>
<td>8,041</td>
<td>8,040</td>
</tr>
<tr>
<td>ERC #S-4354-1</td>
<td>16,065</td>
<td>16,064</td>
<td>16,065</td>
<td>16,065</td>
</tr>
<tr>
<td>ERC #S-4126-1</td>
<td>9,931</td>
<td>9,924</td>
<td>9,917</td>
<td>9,917</td>
</tr>
<tr>
<td>ERC #S-4381-1</td>
<td>827</td>
<td>771</td>
<td>816</td>
<td>805</td>
</tr>
<tr>
<td>ERC #S-4306-1</td>
<td>39,272</td>
<td>39,254</td>
<td>39,237</td>
<td>39,221</td>
</tr>
</tbody>
</table>

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:**

N-1237-764-0 through -767-0

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 155 lb, 2nd quarter - 155 lb, 3rd quarter - 156 lb, and fourth quarter - 156 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]
- ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

\(^1\) This certificate is the successor of S-4160-1.
\(^2\) This certificate is the successor of S-3805-1.
\(^3\) This certificate is the successor of S-3807-1.
\(^4\) This certificate is the successor of S-4230-1.
E&J Gallo Winery
N1237, 1143437

N-1237-768-0 through -775-0

- Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]
- ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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 SB288 Major Modifications,
b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
c. Any project which results in the offset thresholds being surpassed, and/or
d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.
e. Any project which results in a Title V significant permit modification

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

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

As demonstrated in VII.C.8, this project is a Federal Major Modification for VOC; therefore, public noticing for Federal Major Modification purposes is required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant; therefore public noticing for PE > 100 lb/day purposes is not required.
c. Offset Threshold

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

<table>
<thead>
<tr>
<th>Offset Threshold</th>
<th>Pollutant</th>
<th>SSPE1 (lb/year)</th>
<th>SSPE2 (lb/year)</th>
<th>Offset Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>&gt; 20,000</td>
<td>&gt; 20,000</td>
<td>20,000 lb/year</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d.SSIPE > 20,000 lb/year

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

<table>
<thead>
<tr>
<th>Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice</th>
<th>Pollutant</th>
<th>SPE2 (lb/year)</th>
<th>SPE1 (lb/year)</th>
<th>SSIPE (lb/year)</th>
<th>SSIPE Public Notice Threshold</th>
<th>Public Notice Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>6,536</td>
<td>0</td>
<td>6,536</td>
<td>20,000 lb/year</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

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 Federal Major Modification. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and US Environmental Protection Agency (US EPA) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATCs for this equipment.
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 wine storage tank emissions units affected by 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 twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]
- The temperature of the wine stored in this tank shall be maintained at or below 75 degrees Fahrenheit. The temperature of the stored wine shall be determined and recorded at least once per week. For each batch of wine, the operator shall achieve the storage temperature of 75 degrees Fahrenheit or less within 60 days after completing fermentation, and shall maintain records to show when the required storage temperature of 75 degrees Fahrenheit or less was achieved. [District Rules 2201 and 4694]
- The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201]
- The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201]
- The maximum wine storage throughput in this tank shall not exceed 350,000 gallons per day. [District Rule 2201]
- The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons 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 offsets, public notification and daily emission limit requirements of Rule 2201. Recordkeeping is also required for winery tanks pursuant to District Rule 4694, Wine Fermentation and Storage Tanks. For the proposed wine storage tanks, the following conditions will be placed on the permits:

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

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis

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 involves only VOC 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 source is undergoing an SB288 Major Modification and a Federal Major Modification, therefore this requirement is applicable. Included in Appendix E is E & J Gallo's compliance certification.
H. Alternative Siting Analysis

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

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

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

Rule 2410 Prevention of Significant Deterioration

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

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

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. Section 3.29 defines a significant permit modification as a "permit amendment that does not qualify as a minor permit modification or administrative amendment."

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

As discussed above, the facility has not applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with a significant modification, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility shall not implement the changes requested until the final permit is issued.
Rule 4001  New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60. However, no subparts of 40 CFR Part 60 apply to wine storage tank operations.

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

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

Rule 4102  Nuisance

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

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

California Health & Safety Code 41700  (Health Risk Assessment)

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

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

District Rule 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 storage tanks used to store wine.

Therefore, the requirements of this rule are not applicable to this project.
District Rule 4694 Wine Fermentation and Storage Tanks

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

Section 5.1 requires the winery operator achieve Required Annual Emissions Reductions (RAER) equal to at least 35% of the winery's Baseline Fermentation Emissions (BFE). 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, and
- The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings.
- The pressure-vacuum relief valve and storage tank shall remain in a gas-tight condition except when the operating pressure of the tank exceeds the valve set pressure. A gas-tight condition shall be determined by measuring the gas leak in accordance with the procedures in EPA Method 21.

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

- This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]
- 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 6.4.1 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.

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

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

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

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

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

**IX. Recommendation**

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue Authorities to Construct N-1237-764-0 through -775-0 subject to the permit conditions on the attached draft Authorities to Construct in Appendix G.
X. Billing Information

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>Fee Schedule</th>
<th>Fee Description</th>
<th>Annual Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-1237-764-0 through -767-0</td>
<td>3020-05-E</td>
<td>215,000 gallons</td>
<td>$246.00</td>
</tr>
<tr>
<td>N-1237-768-0 through -775-0</td>
<td>3020-05-E</td>
<td>215,000 gallons</td>
<td>$246.00</td>
</tr>
</tbody>
</table>

XI. Appendices

A: Tanks 4.0 Calculations
B: Alcohol Emissions and Summary of PE2 for Storage Tank Emissions Units
C: BACT Guideline 5.4.13 and Top Down BACT Analyses
D: Quarterly Net Emissions Change (QNEC)
E: Compliance Certification
F: Draft ATCs
Appendix A

Tanks 4.0 Calculations
# TANKS 4.0.9d
## Emissions Report - Detail Format
### Tank Identification and Physical Characteristics

<table>
<thead>
<tr>
<th>Identification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>User Identification</td>
<td>N-1237-764</td>
</tr>
<tr>
<td>City</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td></td>
</tr>
<tr>
<td>Type of Tank</td>
<td>Vertical Fixed Roof Tank</td>
</tr>
<tr>
<td>Description</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tank Dimensions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Height (ft)</td>
<td>40.00</td>
</tr>
<tr>
<td>Diameter (ft)</td>
<td>30.08</td>
</tr>
<tr>
<td>Liquid Height (ft)</td>
<td>40.00</td>
</tr>
<tr>
<td>Avg. Liquid Height (ft)</td>
<td>40.00</td>
</tr>
<tr>
<td>Volume (gallons)</td>
<td>212,636.95</td>
</tr>
<tr>
<td>Turnovers</td>
<td>365.00</td>
</tr>
<tr>
<td>Net Throughput(gal/yr)</td>
<td>77,612,486.49</td>
</tr>
<tr>
<td>Is Tank Heated (y/n)</td>
<td>Y</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paint Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Color/Shade</td>
<td>White/White</td>
</tr>
<tr>
<td>Shell Condition</td>
<td>Good</td>
</tr>
<tr>
<td>Roof Color/Shade</td>
<td>White/White</td>
</tr>
<tr>
<td>Roof Condition</td>
<td>Good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Roof Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Cone</td>
</tr>
<tr>
<td>Height (ft)</td>
<td>3.00</td>
</tr>
<tr>
<td>Slope (ft/ft) (Cone Roof)</td>
<td>0.20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breather Vent Settings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum Settings (psig)</td>
<td>0.00</td>
</tr>
<tr>
<td>Pressure Settings (psig)</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Metrological Data used in Emissions Calculations:** Fresno, California (Avg Atmospheric Pressure = 14.56 psia)
## TANKS 4.0.9d

### Emissions Report - Detail Format

#### Liquid Contents of Storage Tank

**N-1237-764 - Vertical Fixed Roof Tank**

<table>
<thead>
<tr>
<th>Mixture/Component</th>
<th>Month</th>
<th>Daily Liquid Surt Temperature (deg F)</th>
<th>Liquid Bath Temp</th>
<th>Vapor Pressure (psia)</th>
<th>Vapor Mix.</th>
<th>Liquid Mass</th>
<th>Vapor Mix.</th>
<th>Mod. Mass</th>
<th>Basis for Vapor Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Jan</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Feb</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Mar</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Apr</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>May</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Jun</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Jul</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Aug</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Sep</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Oct</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Nov</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
<tr>
<td>Whv 23.0 % Vol Alcohol</td>
<td>Dec</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>81.00</td>
<td>0.8500</td>
<td>0.8500</td>
<td>0.8500</td>
<td>30.3355</td>
</tr>
</tbody>
</table>
### Emissions Report - Detail Format

#### Detail Calculations (AP-42)

**N-1237-764 - Vertical Fixed Roof Tank**

<table>
<thead>
<tr>
<th>Month</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing Losses (%)</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Vapor Density (lb/mole)</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
<td>0.0064</td>
</tr>
<tr>
<td>Vapor Space Expansion Factor</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Ventil Vapor Saturation Factor</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
<td>0.0558</td>
</tr>
</tbody>
</table>

#### Tank Vapor Space Volume

- **Vapor Space Volume (cu ft):** 710,633
- **Tank Diameter (ft):** 0.6000
- **Tank Shell Height (ft):** 40.0000
- **Average Liquid Height (ft):** 40.0000
- **Roof Outlet:** 1.0000

#### Roof Outlet (Curv Roof)

- **Roof Outlet (%):** 1.0000
- **Roof Height (ft):** 3.0000
- **Roof Slope (%):** 20.0000
- **Shelf Radius (ft):** 15.0400

#### Vapor Density

- **Vapor Density (lb/mole):** 0.0064
- **Vapor Molecular Weight (lb/mol):** 30.3555
- **Vapor Pressure at Daily Average Liquid Surface Temperature (psia):** 0.8500
- **Daily Avg. Liquid Surface Temp. (deg F):** 540.6700
- **Daily Avg. Sump Temp. (deg F):** 45.7500
- **Max Ideal Gas Constant (R):** 3.6800
- **Avg. Sump Temp. (deg F):** 540.6700
- **Tank Vapor Saturation Factor:** 0.0558

#### Emissions Report - Detail Format

- **Emissions Report - Detail Format**
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932
- **Total Losses (lb):** 988,1932

---

**TANKS 4.0 Report**  
Page 3 of 6

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(file://C:/Program%20Files%20(x86)/Tanks409d/summarydisplay.htm)  
11/10/2014
Emissions Report for January, February, March, April, May, June, July, August, September, October, November, December

N-1237-764 - Vertical Fixed Roof Tank

<table>
<thead>
<tr>
<th>Components</th>
<th>Working Loss</th>
<th>Breathing Loss</th>
<th>Total Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine 23.9% Vol Alcohol</td>
<td>11,858.32</td>
<td>0.00</td>
<td>11,858.32</td>
</tr>
</tbody>
</table>
## TANKS 4.0.9d

### Emissions Report - Detail Format

#### Tank Identification and Physical Characteristics

<table>
<thead>
<tr>
<th>Identification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Identification:</td>
<td>N-1237-768</td>
</tr>
<tr>
<td>City:</td>
<td></td>
</tr>
<tr>
<td>State:</td>
<td></td>
</tr>
<tr>
<td>Company:</td>
<td></td>
</tr>
<tr>
<td>Type of Tank:</td>
<td>Vertical Fixed Roof Tank</td>
</tr>
<tr>
<td>Description:</td>
<td></td>
</tr>
</tbody>
</table>

#### Tank Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Height (ft):</td>
<td>40.00</td>
</tr>
<tr>
<td>Diameter (ft):</td>
<td>39.00</td>
</tr>
<tr>
<td>Liquid Height (ft):</td>
<td>39.00</td>
</tr>
<tr>
<td>Avg. Liquid Height (ft):</td>
<td>39.00</td>
</tr>
<tr>
<td>Volume (gallons):</td>
<td>358,915.47</td>
</tr>
<tr>
<td>Turnovers:</td>
<td>131,004.146.95</td>
</tr>
<tr>
<td>Is Tank Heated (y/n):</td>
<td>Y</td>
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</tbody>
</table>

#### Paint Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell Color/Shade:</td>
<td>White/White</td>
</tr>
<tr>
<td>Shell Condition:</td>
<td>Good</td>
</tr>
<tr>
<td>Roof Color/Shade:</td>
<td>White/White</td>
</tr>
<tr>
<td>Roof Condition:</td>
<td>Good</td>
</tr>
</tbody>
</table>

#### Roof Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type:</td>
<td>Cone</td>
</tr>
<tr>
<td>Height (ft):</td>
<td>3.00</td>
</tr>
<tr>
<td>Slope (ft/ft) (Cone Roof):</td>
<td>0.15</td>
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</table>

#### Breather Vent Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum Settings (psig):</td>
<td>0.00</td>
</tr>
<tr>
<td>Pressure Settings (psig):</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)
### Liquid Contents of Storage Tank

**N-1237-768 - Vertical Fixed Roof Tank**

<table>
<thead>
<tr>
<th>Mixture/Component</th>
<th>Daily Liquid Temp (deg F)</th>
<th>Liquid Bath Temp</th>
<th>Vapor Pressure (psia)</th>
<th>Vapor Weight</th>
<th>Liquid Mass</th>
<th>Vapor Mass</th>
<th>Mol. Weight (psia)</th>
<th>Basis for Vapor Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Jan 81.00, 80.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Feb 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Mar 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Apr 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>May 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Jun 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Jul 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Aug 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Sep 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Oct 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Nov 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Winz 23% Vol Alcohol</td>
<td>Dec 81.00, 81.00, 81.00, 81.00</td>
<td>69.00, 69.00, 69.00, 69.00</td>
<td>0.6500, 0.6500, 0.6500, 0.6500</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
<td>30.3303</td>
</tr>
<tr>
<td>Month</td>
<td>January</td>
<td>February</td>
<td>March</td>
<td>April</td>
<td>May</td>
<td>June</td>
<td>July</td>
<td>August</td>
</tr>
<tr>
<td>---------------</td>
<td>---------</td>
<td>----------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-----</td>
<td>-----</td>
<td>--------</td>
</tr>
<tr>
<td>Standing Loss (gal)</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Vapor Space Volume (gal)</td>
<td>2,398,920</td>
<td>2,398,920</td>
<td>2,398,920</td>
<td>2,398,920</td>
<td>2,398,920</td>
<td>2,398,920</td>
<td>2,398,920</td>
<td>2,398,920</td>
</tr>
<tr>
<td>Vapor Density (lbs/gal)</td>
<td>0.0044</td>
<td>0.0044</td>
<td>0.0044</td>
<td>0.0044</td>
<td>0.0044</td>
<td>0.0044</td>
<td>0.0044</td>
<td>0.0044</td>
</tr>
<tr>
<td>Vapor Space Expansion Factor</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Static Vapor Saturation Factor</td>
<td>0.0173</td>
<td>0.0173</td>
<td>0.0173</td>
<td>0.0173</td>
<td>0.0173</td>
<td>0.0173</td>
<td>0.0173</td>
<td>0.0173</td>
</tr>
</tbody>
</table>

Tank Vapor Space Volume
- Vapor Space Volume (gal)
- Tank Diameter (ft)
- Tank Height (ft)
- Average Liquid Height (ft)
- Roof Outage (gal)
- Roof Outage (gal) per ft
- Roof Height (ft)
- Roof Area (ft²)
- Shelf Radius (ft)
- Vapor Density

Vapor Space Expansion Factor:
- Static Vapor Saturation Factor

Summary Display

TANKS 4.0 Report
Emissions Report - Detail Format
Detail Calculations (AP-42)

N-1237-786 - Vertical Fixed Roof Tank

- Vapor Space Volume
- Vapor Density
- Static Vapor Saturation Factor

File:///C:/Program Files%20(x86)/Tanks409d/summarydisplay.htm

11/10/2014
**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

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

**N-1237-768 - Vertical Fixed Roof Tank**

<table>
<thead>
<tr>
<th>Components</th>
<th>Working Loss</th>
<th>Breathing Loss</th>
<th>Total Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine 23.9% Vol Alcohol</td>
<td>20,015.97</td>
<td>0.00</td>
<td>20,015.97</td>
</tr>
</tbody>
</table>
Annual Emission 10-14-2014 4 215K Tanks
Livingston California
E and J Gallo Winery
Vertical Fixed Roof Tank
Stainless steel insulated wine tank painted white. 4 tanks to be built. This emission report is for one tank. Tank numbers 2133, 2134, 2137, and 2138.

Tank Dimensions
Shell Height (ft): 40.00
Diameter (ft): 30.16
Liquid Height (ft): 40.00
Avg. Liquid Height (ft): 40.00
Volume (gallons): 213,769.00
Turnovers: 20.12
Net Throughput (gal/yr): 4,300,000.00
Is Tank Heated (y/n): Y

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

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

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

Metrological 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

**Annual Emission 10-14-2014 4 215K Tanks - Vertical Fixed Roof Tank**

**Livingston, California**

<table>
<thead>
<tr>
<th>Mixture/Component</th>
<th>Month</th>
<th>Surface Temperature (deg F)</th>
<th>Bulk Temp (deg F)</th>
<th>Vapor Pressure (psia)</th>
<th>Mol. Weight</th>
<th>Liquid Mass Fraction</th>
<th>Vapor Mass Fraction</th>
<th>Mol. Weight</th>
<th>Basis for Vapor Pressure Calculations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine 15.0 % Vol Alcohol</td>
<td>Jan</td>
<td>63.30</td>
<td>63.30</td>
<td>0.4058</td>
<td>0.4586</td>
<td>0.4586</td>
<td>27.1255</td>
<td>19.46</td>
<td>Option 1: VP60 = .35513 VP70 = .50865</td>
</tr>
<tr>
<td>Wine 15.0 % Vol Alcohol</td>
<td>Feb</td>
<td>63.30</td>
<td>63.30</td>
<td>0.4058</td>
<td>0.4586</td>
<td>0.4586</td>
<td>27.1255</td>
<td>19.46</td>
<td>Option 1: VP60 = .35513 VP70 = .50865</td>
</tr>
<tr>
<td>Wine 15.0 % Vol Alcohol</td>
<td>Mar</td>
<td>63.30</td>
<td>63.30</td>
<td>0.4058</td>
<td>0.4586</td>
<td>0.4586</td>
<td>27.1255</td>
<td>19.46</td>
<td>Option 1: VP60 = .35513 VP70 = .50865</td>
</tr>
<tr>
<td>Wine 15.0 % Vol Alcohol</td>
<td>Apr</td>
<td>63.30</td>
<td>63.30</td>
<td>0.4058</td>
<td>0.4586</td>
<td>0.4586</td>
<td>27.1255</td>
<td>19.46</td>
<td>Option 1: VP60 = .35513 VP70 = .50865</td>
</tr>
<tr>
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<td>May</td>
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<td>63.30</td>
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</table>
TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

Annual Emission 10-14-2014 4 215K Tanks - Vertical Fixed Roof Tank
Livingston, California

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<thead>
<tr>
<th>Month</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
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10/14/2014
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<th>Vapor Molecular Weight (lb/mole)</th>
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<th>Net Throughput (gal/mo.)</th>
<th>Annual Turnovers</th>
<th>Turnover Factor</th>
<th>Maximum Liquid Volume (gal)</th>
<th>Maximum Liquid Height (ft)</th>
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### 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 Emission 10-14-2014 4 215K Tanks - Vertical Fixed Roof Tank

Livingston, California

<table>
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<th>Components</th>
<th>Working Loss</th>
<th>Breathing Loss</th>
<th>Total Emissions</th>
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<tr>
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</table>
## Identification

- **User Identification:** Annual Emissions 10-14-2014 8 360K Tanks
- **City:** Livingston
- **State:** California
- **Company:** E and J Gallo Winery
- **Type of Tank:** Vertical Fixed Roof Tank
- **Description:** Stainless steel insulated wine tank painted white. 8 tanks to be built. This emission report is for one tank. Tank numbers 3225 through 3232.

## Tank Dimensions

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>Diameter (ft)</td>
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<td>Liquid Height (ft)</td>
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<td>Avg. Liquid Height (ft)</td>
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<tr>
<td>Volume (gallons)</td>
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<tr>
<td>Turnovers</td>
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<td>Net Throughput (gal/yr)</td>
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<td>Is Tank Heated (y/n)</td>
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## Paint Characteristics

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

## Roof Characteristics

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

## Breather Vent Settings

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<td>Pressure Settings</td>
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Meteorological Data used in Emissions Calculations: Fresno, California (Avg Atmospheric Pressure = 14.56 psia)
### Annual Emissions 10-14-2014 8 350K Tanks - Vertical Fixed Roof Tank

Livingston, California

<table>
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<tr>
<th>Mixture/Component</th>
<th>Month</th>
<th>Avg Temp (deg F)</th>
<th>Min Temp (deg F)</th>
<th>Max Temp (deg F)</th>
<th>Vapor Pressure (psia)</th>
<th>Mol. Fract</th>
<th>Mass Weight</th>
<th>Basis for Vapor Pressure</th>
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<tbody>
<tr>
<td>Wine 15.0 % Vol Alcohol</td>
<td>Jan</td>
<td>63.30</td>
<td>63.30</td>
<td>63.30</td>
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## TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

### Annual Emissions 10-14-2014 8 350K Tanks - Vertical Fixed Roof Tank
Livingston, California

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<th>October</th>
<th>November</th>
<th>December</th>
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<tr>
<td>Vented Vapor Saturation Factor:</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
<td>0.9798</td>
</tr>
</tbody>
</table>

### Tank Vapor Space Volume:
- **Vapor Space Volume (cu ft):** 1,199.6807
- **Vapor Space Expansion Factor:** 0.0020
- **Vented Vapor Saturation Factor:** 0.9798

### Tank Vapor Space Volume (cu ft):
- **Tank Diameter (ft):** 60
- **Vapor Space Outage (ft):** 1.0000
- **Tank Shell Height (ft):** 40.0000
- **Average Liquid Height (ft):** 40.0000
- **Roof Outage (ft):** 1.0000

### Roof Outage (Core Roof)
- **Roof Outage (ft):** 1.0000
- **Roof Height (ft):** 3.0000
- **Roof Slope (ft/ft):** 0.1500
- **Shell Radius (ft):** 19.5415

### Vapor Density
- **Vapor Density (bbl/mile):** 0.0020
- **Vapor Pressure at Daily Average Liquid Surface Temperature (psi):** 522.9700
- **Daily Liquid Vapour Temp. (deg R):** 522.9700
- **Daily Average Ambient Temp. (deg F):** 45.7500
- **Ideal Gas Constant R (psia*ft / lb-mol- deg R):** 10.731
- **Liquid Bulk Temperature (deg R):** 522.9700
- **Tank Paint Solar Absorptance (Shell):** 0.1700
- **Tank Paint Solar Absorptance (Roof):** 0.1700
- **Daily Total Solar Insulation Factor (Btu/hr-ft²-day):** 566.1706

### Vapor Space Expansion Factor
- **Vapor Space Expansion Factor:** 0.0000
- **Vapor Pressure at Daily Temperature Range (deg R):** 522.9700
- **Daily Vapor Pressure Range (psi):** 0.0000
- **Breather Vent Pressure-Setting Range (psi):** 0.0000
- **Vapor Pressure at Daily Minimum Liquid Surface Temperature (psi):** 0.4058
- **Vapor Pressure at Daily Maximum Liquid Surface Temperature (psi):** 0.4058
- **Daily Avg. Liquid Surface Temp. (deg R):** 522.9700
- **Daily Min. Liquid Surface Temp. (deg R):** 522.9700
- **Daily Distilled Ambient Temp. Range (deg R):** 16.7000

### Vented Vapor Saturation Factor
- **Vented Vapor Saturation Factor:** 0.9798
- **Vapor Pressure at Daily Average Liquid Surface Temperature (psi):** 0.0020
- **Vapor Space Outage (ft):** 1.0000

10/14/2014
<table>
<thead>
<tr>
<th>Description</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
<th>76.4395</th>
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</thead>
<tbody>
<tr>
<td>Working Losses (lb)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Molecular Weight (lb/mole)</td>
<td>27.1255</td>
<td>27.1255</td>
<td>27.1255</td>
<td>27.1255</td>
<td>27.1255</td>
<td>27.1255</td>
<td>27.1255</td>
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<td>27.1255</td>
<td>27.1255</td>
<td>27.1255</td>
<td>27.1255</td>
</tr>
<tr>
<td>Vapor Pressure at Daily Average Liquid</td>
<td>0.4058</td>
<td>0.4058</td>
<td>0.4058</td>
<td>0.4058</td>
<td>0.4058</td>
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<td>0.4058</td>
<td>0.4058</td>
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<tr>
<td>Net Throughput (gall/min)</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
<td>10.0000</td>
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<tr>
<td>Annual Turnovers</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
<td>350,000.0000</td>
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<tr>
<td>Tank Diameter (ft)</td>
<td>1.0000</td>
<td>1.0000</td>
<td>1.0000</td>
<td>1.0000</td>
<td>1.0000</td>
<td>1.0000</td>
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<td>1.0000</td>
<td>1.0000</td>
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<td>Working Loss Product Factor</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Losses (lb)</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
<td>76.4395</td>
</tr>
</tbody>
</table>
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 Emissions 10-14-2014 8 350K Tanks - Vertical Fixed Roof Tank
Livingston, California

<table>
<thead>
<tr>
<th>Components</th>
<th>Working Loss</th>
<th>Breathing Loss</th>
<th>Total Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wine 15.0 % Vol Alcohol</td>
<td>917.27</td>
<td>0.00</td>
<td>917.27</td>
</tr>
</tbody>
</table>

10/14/2014
## Emissions Report - Detail Format

### Total Emissions Summaries - All Tanks in Report

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

<table>
<thead>
<tr>
<th>Tank Identification</th>
<th>Losses (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Emission 10-14-2014 4 215K E and J Gallo Winery</td>
<td>Vertical Fixed Roof Tank Livingston, California 1,126.94</td>
</tr>
<tr>
<td>Annual Emissions 10-14-2014 8 350K E and J Gallo Winery</td>
<td>Vertical Fixed Roof Tank Livingston, California 917.27</td>
</tr>
</tbody>
</table>

**Total Emissions for all Tanks:** 2,044.21
Appendix B

Alcohol Emissions and PE2 for Storage Tank Emissions Units
## 8 Livingston Tanks 350K

<table>
<thead>
<tr>
<th>Tank ID</th>
<th>% by Volume</th>
<th>Alcohol</th>
<th>Average Ya</th>
<th>AMW Average</th>
<th>Total Pound of Emissions</th>
<th>Alcohol Emissions in pounds</th>
<th>Annual Gallons Through Put</th>
</tr>
</thead>
<tbody>
<tr>
<td>3225</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>917.27</td>
<td></td>
<td>506.07</td>
<td>3,500,000</td>
</tr>
<tr>
<td>3226</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>917.27</td>
<td></td>
<td>506.07</td>
<td>3,500,000</td>
</tr>
<tr>
<td>3227</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>917.27</td>
<td></td>
<td>506.07</td>
<td>3,500,000</td>
</tr>
<tr>
<td>3228</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>917.27</td>
<td></td>
<td>506.07</td>
<td>3,500,000</td>
</tr>
<tr>
<td>3229</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>917.27</td>
<td></td>
<td>506.07</td>
<td>3,500,000</td>
</tr>
<tr>
<td>3230</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>917.27</td>
<td></td>
<td>506.07</td>
<td>3,500,000</td>
</tr>
<tr>
<td>3231</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>917.27</td>
<td></td>
<td>506.07</td>
<td>3,500,000</td>
</tr>
<tr>
<td>3232</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>917.27</td>
<td></td>
<td>506.07</td>
<td>3,500,000</td>
</tr>
</tbody>
</table>

**Total Pounds:** 4,049  
**Total Tons:** 2.024

## 4 Livingston Tanks 215K

<table>
<thead>
<tr>
<th>Tank ID</th>
<th>% by Volume</th>
<th>Alcohol</th>
<th>Average Ya</th>
<th>AMW Average</th>
<th>Total Pound of Emissions</th>
<th>Alcohol Emissions in pounds</th>
<th>Annual Gallons Through Put</th>
</tr>
</thead>
<tbody>
<tr>
<td>2133</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>1126.94</td>
<td></td>
<td>621.75</td>
<td>4,300,000</td>
</tr>
<tr>
<td>2134</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>1126.94</td>
<td></td>
<td>621.75</td>
<td>4,300,000</td>
</tr>
<tr>
<td>2137</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>1126.94</td>
<td></td>
<td>621.75</td>
<td>4,300,000</td>
</tr>
<tr>
<td>2138</td>
<td>15.0%</td>
<td>0.3252</td>
<td>27.13</td>
<td>1126.94</td>
<td></td>
<td>621.75</td>
<td>4,300,000</td>
</tr>
</tbody>
</table>

**Total Pounds:** 2,487  
**Total Tons:** 1.243

**Total Pounds All Tanks:** 6,536  
**Total Tons All Tanks:** 3.27
Appendix C

BACT Guideline 5.4.13 and Top Down BACT Analysis
**San Joaquin Valley**
**Unified Air Pollution Control District**

**Best Available Control Technology (BACT) Guideline 5.4.13***
*Last Update 10/8/2009*

**Wine Storage Tank**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Achieved in Practice or contained in the SIP</th>
<th>Technologically Feasible</th>
<th>Alternate Basic Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>1. Insulation or Equivalent**, Pressure Vacuum Relief Valve (PVRV) set within 10% of the maximum allowable working pressure of the tank; &quot;gas-tight&quot; tank operation; and continuous storage temperature not exceeding 75 degrees F, achieved within 60 days of completion of fermentation.</td>
<td>1. Capture of VOCs and thermal or catalytic oxidation or equivalent (98% control)</td>
<td>2. Capture of VOCs and carbon adsorption or equivalent (95% control)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Capture of VOCs and carbon adsorption or equivalent (95% control)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Capture of VOCs and absorption or equivalent (90% control)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Capture of VOCs and condensation or equivalent (70% control)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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.**

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

*This is a Summary Page for this Class of Source*
Top Down BACT Analysis for Wine Storage VOC Emissions

Step 1 - Identify All Possible Control Technologies

The SJVUAPCD BACT Clearinghouse guideline 5.4.13, 3rd quarter 2013, identifies achieved in practice BACT for wine storage tanks as follows:

1) Insulation or Equivalent**, Pressure Vacuum Relief Valve (PVRV) set within 10% of the maximum allowable working pressure of the tank; "gas-tight" tank operation; and continuous storage temperature not exceeding 75 degrees F, achieved within 60 days of completion of fermentation.

**Tanks made of heat-conducting materials such as stainless steel may be insulated or stored indoors (in a completely enclosed building, except for vents, doors and other essential openings) to limit exposure to diurnal temperature variations. Tanks made entirely of non-conducting materials such as concrete and wood (except for fittings) are considered self-insulating.

The SJVUAPCD BACT Clearinghouse guideline 5.4.13, 3rd quarter 2013, identifies technologically feasible BACT for wine storage tanks as follows:

2) Capture of VOCs and thermal or catalytic oxidation or equivalent (98% control)
3) Capture of VOCs and carbon adsorption or equivalent (95% control)
4) Capture of VOCs and absorption or equivalent (90% control)
5) Capture of VOCs and condensation or equivalent (70% control)

Step 2 - Eliminate Technologically Infeasible Options

None of the above listed technologies are technologically infeasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

<table>
<thead>
<tr>
<th>Rank</th>
<th>Control</th>
<th>Overall Capture and Control Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capture of VOCs and thermal or catalytic oxidation or equivalent</td>
<td>98%</td>
</tr>
<tr>
<td>2</td>
<td>Capture of VOCs and carbon adsorption or equivalent</td>
<td>95%</td>
</tr>
<tr>
<td>3</td>
<td>Capture of VOCs and absorption or equivalent</td>
<td>90%</td>
</tr>
<tr>
<td>4</td>
<td>Capture of VOCs and condensation or equivalent</td>
<td>70%</td>
</tr>
<tr>
<td>5</td>
<td>Insulation or Equivalent, Pressure Vacuum Relief Valve (PVRV) set within 10% of the maximum allowable working pressure of the tank; &quot;gas-tight&quot; tank operation; and continuous storage temperature not exceeding 75 degrees F, achieved within 60 days of completion of fermentation</td>
<td>Baseline (Achieved-in-Practice)</td>
</tr>
</tbody>
</table>
Step 4 - Cost Effectiveness Analysis

A cost-effective analysis is performed for each control technology which is more effective than meeting the requirements of District Rule 4694 plus tank insulation (achieved-in-practice BACT), as proposed by the facility.

Collection System Capital Investment (based on ductwork)

A common feature of all thermal or catalytic oxidation/carbon adsorption/absorption or condensation options is that they require installation of a collection system for delivering the VOCs from the tanks to the common control device.

Collection system to consist of:
- The collection system consists of stainless steel place ductwork (stainless steel is required due to food grade product status) with isolation valving, connecting 68 tanks to a common manifold system which ducts the combined vent to the common control device. The cost of dampers and isolation valving, installed in the ductwork, will be included in the cost estimate.
- A minimum duct size is established at six inches diameter at each tank to provide adequate strength for spanning between supports. The main header is eight inches diameter to handle the potential for simultaneous venting.

Capital Cost Ductwork

For the 215,000 gallon tanks:

Connection from tank to main duct = [4 tanks x (50 feet from tank to main duct)] x $61.00/foot  
= $12,200

Connection from last tank to control device = (30.16 feet diameter + 2 + 50 feet) x $61.00/foot  
= $3,970

Main duct = (30.16 feet diameter + 9 feet between tanks + 30.16 feet diameter) x $61.00/foot  
= $2,389

Unit installed cost for 6 inch butterfly valve = $2,125/valve x 4 valves  
= $8,500

Unit installed cost one foot removable spool = $500/tank x 4 tanks  
= $2,000

Knockout drum = $46,300

Duct support allowance = $5,000/tank x 4 tanks = $20,000

Total = $12,200 + 3,970 + 2,389 + 8,500 + 2,000 + 46,300 + 20,000 = $95,359

For the 350,000 gallon tanks:

Connection from tank to main duct = [8 tanks x (60 feet from tank to main duct)] x $61.00/foot  
= $29,280
Connection from last tank to control device: 
\[(39.08 \text{ feet diameter} + 2) + 50 \text{ feet}] \times 61.00/\text{foot} = \$4,242\]

Main duct: 
\[(39.08 \text{ feet diameter} \times 3) + (9 \text{ feet between tanks} \times 3)] \times 61.00/\text{foot} = \$8,799\]

Unit installed cost for 6 inch butterfly valve: 
\[2,125/\text{valve} \times 4 \text{ valves} = \$17,000\]

Unit installed cost one foot removable spool: 
\[500/\text{tank} \times 8 \text{ tanks} = \$4,000\]

Knockout drum = \$46,300

Duct support allowance = \$5,000/\text{tank} \times 8 \text{ tanks} = \$32,000

Total = \$29,280 + 4,242 + 8,799 + 17,000 + 4,000 + 46,300 + 32,000 = \$141,261

Total Ductwork Capital Cost = \$95,359 + 141,261 = \$236,620

### Ductwork

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duct Estimate from Eichleay Study 2005 Data</td>
<td>$236,620</td>
</tr>
<tr>
<td>Adjusting factor from 2005 dollars to 2013 dollars</td>
<td>1.24</td>
</tr>
<tr>
<td>Inflation adjusted duct cost</td>
<td>$293,972</td>
</tr>
</tbody>
</table>

The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).

#### Direct Costs (DC)

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Equipment Costs (Ductwork) See Above</td>
<td>$293,972</td>
</tr>
<tr>
<td>Instrumentation 10%</td>
<td>$29,397</td>
</tr>
<tr>
<td>Sales Tax 3%</td>
<td>$8,819</td>
</tr>
<tr>
<td>Freight 5%</td>
<td>$14,699</td>
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<td>Purchased equipment cost</td>
<td>$346,887</td>
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<td>Foundations &amp; supports 8%</td>
<td>$27,751</td>
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<tr>
<td>Handling &amp; erection 14%</td>
<td>$48,564</td>
</tr>
<tr>
<td>Electrical 4%</td>
<td>$13,875</td>
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<tr>
<td>Piping 2%</td>
<td>$6,938</td>
</tr>
<tr>
<td>Painting 1%</td>
<td>$3,469</td>
</tr>
<tr>
<td>Insulation 1%</td>
<td>$3,469</td>
</tr>
<tr>
<td>Direct Installation costs</td>
<td>$104,066</td>
</tr>
<tr>
<td>Total Direct Costs</td>
<td>$450,953</td>
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</tbody>
</table>

#### Indirect Costs (IC)

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering 10%</td>
<td>$34,689</td>
</tr>
<tr>
<td>Construction and field expenses 5%</td>
<td>$17,344</td>
</tr>
<tr>
<td>Contractor fees 10%</td>
<td>$34,689</td>
</tr>
<tr>
<td>Start-up 2%</td>
<td>$6,938</td>
</tr>
<tr>
<td>Performance test 1%</td>
<td>$3,469</td>
</tr>
</tbody>
</table>
Contingencies 3% $10,407
Total Indirect Costs $107,536
Total Capital Investment (TCI) (DC + IC) $558,489

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.

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Cost ($)</th>
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<tbody>
<tr>
<td>Current cost of CIP system</td>
<td>$200,000</td>
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<tr>
<td>The following cost data is taken from EPA Control Cost Manual, Sixth Edition (EPA/452/B-02-001).</td>
<td></td>
</tr>
<tr>
<td>Direct Costs (DC)</td>
<td></td>
</tr>
<tr>
<td>Base Equipment Costs (CIP System) See Above</td>
<td>$200,000</td>
</tr>
<tr>
<td>Instrumentation 10%</td>
<td>$20,000</td>
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<tr>
<td>Sales Tax 3%</td>
<td>$6,000</td>
</tr>
<tr>
<td>Freight 5%</td>
<td>$10,000</td>
</tr>
<tr>
<td>Purchased equipment cost</td>
<td>$236,000</td>
</tr>
<tr>
<td>Foundations &amp; supports 8%</td>
<td>$18,880</td>
</tr>
<tr>
<td>Handling &amp; erection 14%</td>
<td>$33,040</td>
</tr>
<tr>
<td>Electrical 4%</td>
<td>$9,440</td>
</tr>
<tr>
<td>Piping 2%</td>
<td>$4,720</td>
</tr>
<tr>
<td>Painting 1%</td>
<td>$2,360</td>
</tr>
<tr>
<td>Insulation 1%</td>
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<tr>
<td>Direct installation costs</td>
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</tr>
<tr>
<td>Total Direct Costs</td>
<td>$306,800</td>
</tr>
<tr>
<td>Indirect Costs (IC)</td>
<td></td>
</tr>
<tr>
<td>Engineering 10%</td>
<td>$23,600</td>
</tr>
<tr>
<td>Construction and field expenses 5%</td>
<td>$11,800</td>
</tr>
<tr>
<td>Contractor fees 10%</td>
<td>$23,600</td>
</tr>
<tr>
<td>Start-up 2%</td>
<td>$4,720</td>
</tr>
<tr>
<td>Performance test 1%</td>
<td>$2,360</td>
</tr>
<tr>
<td>Contingencies 3%</td>
<td>$7,080</td>
</tr>
<tr>
<td>Total Indirect Costs</td>
<td>$73,160</td>
</tr>
<tr>
<td>Total Capital Investment (TCI) (DC + IC)</td>
<td>$379,960</td>
</tr>
</tbody>
</table>

Annualized Capital Costs

Total capital costs = Ductwork + CIP System
= $558,489 + $379,960
Annualized Capital Investment = Initial Capital Investment x Amortization Factor

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

Therefore,

Annualized Capital Investment = $938,449 x 0.163 = $152,967

**Capture of VOCs and condensation (>70% collection & control)**

**Total Annual Cost**

Total Annual Cost = Ductwork + CIP System

= $152,967

**Emission Reductions**

Annual Emission Reduction = Uncontrolled Emissions x 0.70

= 6,536 lb-VOC/year x 0.70

= 4,575 lb-VOC/year

= 2.3 tons-VOC/year

**Cost Effectiveness**

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

Cost Effectiveness = $152,967/year ÷ 2.3 tons-VOC/year

= $66,507/ton-VOC

The analysis demonstrates that the annualized purchase cost of the required collection system ductwork equipment alone results in a cost effectiveness which exceeds the District's Guideline of $17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

**Collection of VOCs and control by absorption (>90% collection & control)**

**Total Annual Cost**

Total Annual Cost = Ductwork + CIP System

= $152,967

**Emission Reductions**

Annual Emission Reduction = Uncontrolled Emissions x 0.90
= 6,536 lb-VOC/year x 0.90
= 5,882 lb-VOC/year
= 2.9 tons-VOC/year

Cost Effectiveness

Cost Effectiveness = Total Annual Cost + Annual Emission Reductions

Cost Effectiveness = $152,967/year ÷ 2.9 tons-VOC/year
= $52,747/ton-VOC

The analysis demonstrates that the annualized purchase cost of the required collection system ductwork equipment alone results in a cost effectiveness which exceeds the District's Guideline of $17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

Collection of VOCs and control by carbon adsorption (> 95% collection and control)

The control device is assumed to consist of 2000 lb non-regenerable fixed-bed absorbers (canisters) which represent a reoccurring annual cost rather than a capital investment cost.

Total Capital Investment (TCI)

Total Capital Investment is calculated based only on the capital investment for collection system ductwork, ignoring all other costs.

TCI = capital investment for ductwork

TCI = $938,449

Annualized Capital Costs

Annualized Capital Investment = Initial Capital Investment x Amortization Factor

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

Therefore,

Annualized Capital Investment = $938,449 x 0.163 = $152,967

Total Annual Cost

Since this facility is not equipped with a boiler for regeneration of activated carbon, the Total Annual Cost will be based on the annual cost of using 2000 lb non-regenerable fixed-bed absorbers (canisters).plus the Annualized Capital Investment.

Fixed-bed absorbers cost:

VOC adsorbed annually = 90% x 6,536 = 5,882 lb-VOC/year
Annual carbon requirement at 20% carbon utilization = 5,882/20% = 29,412 lb-Carbon/year

Number of carbon beds per year = 29,412/2,000 = 15 carbon absorbers/year

Annual purchase cost for absorbers = 15 x $11,700 = $175,500
Delivery and installation cost for absorbers = 15 x $6,900 = $103,500

Annual absorber cost ($/year):

- Absorber Purchase: $175,500
- Sales Tax on Absorbers (4.3125%): $7,568
- Delivery and Installation: $103,500
- Total: $286,568

Total Annual Cost = Fixed bed absorber cost + Annualized capital investment

Total Annual Cost = $286,568 + $152,967 = $439,535

Emission Reductions

Annual Emission Reduction = Uncontrolled Emissions x 0.95
= 6,536 lb-VOC/year x 0.95
= 6,209 lb-VOC/year
= 3.1 tons-VOC/year

Cost Effectiveness

Cost Effectiveness = Total Annual Cost ÷ Annual Emission Reductions

Cost Effectiveness = $439,535/year ÷ 3.1 tons-VOC/year
= $141,786/ton-VOC

The analysis demonstrates that the annualized purchase cost of the required collection system ductwork and the annual carbon absorber cost 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.

Capture of VOCs and thermal or catalytic oxidation or equivalent (98%)

Capital Investment for Control Device

The control device is assumed to be a thermal oxidizer (TO) with a 50% recuperative heat recovery. Purchase price for the TO is taken from a quote provided by Adwest Technologies (see Attachment). The capital cost including freight and installation for a 1,000 cfm system is $184,670.

---

5 Including partial tax exemption of 4.1875% for Qualified Tangible Personal Property including "tangible personal property used in pollution control that meets standards established by this state or any local or regional government agency within this state" per http://www.boe.ca.gov/sutax/manufacturing_exemptions.html#Overview.

8.5% - 4.1875% = 4.3125%
• For a storage operation, the maximum vent rate from a tank is equal to the maximum liquid fill rate. A typical winery general purpose pump is assumed to be equipped with a 20 hp electric motor. Based on an electric motor efficiency of 90%, a centrifugal pump efficiency of 65% and a differential head of 22 psi (40' hydrostatic head plus 5 psi dynamic loss), maximum vent rate from each tank is determined to be 122 cfm. Total simultaneous rate from all twelve tanks is 8 x 122 = 976 scfm.
• Rated design capacity is established at 110% of the maximum flow rate or 976 x 110% = 1,074 cfm (typical overdesign margin for process equipment)
• Since the cost for a 1,000 cfm TO system was provided, it will be conservatively assumed that it will be sufficient to control the emissions generated from the proposed tanks in this project.

**Total Capital Investment (TCI)**

TCI is calculated based only on the capital investment for collection system ductwork and the purchase price of the TO, ignoring all other costs.

\[
TCI = \text{capital investment for ductwork} + \text{purchase price of control device}
\]

\[
TCI = $938,449 + $184,670 = $1,123,119
\]

**Annualized Capital Costs**

\[
\text{Annualized Capital Investment} = \text{Initial Capital Investment} \times \text{Amortization Factor}
\]

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

Therefore,

\[
\text{Annualized Capital Investment} = $1,123,119 \times 0.163 = $183,068
\]

**Total Annual Cost**

Total Annual Cost is evaluated based only on the Annualized Capital Investment:

\[
\text{Total Annual Cost} = \text{Annualized capital investment} = $183,068
\]

**Emission Reductions**

\[
\text{Annual Emission Reduction} = \text{Uncontrolled Emissions} \times 0.98
\]

\[
= 6,536 \text{ lb-VOC/year} \times 0.98
\]

\[
= 6,405 \text{ lb-VOC/year}
\]

\[
= 3.2 \text{ tons-VOC/year}
\]

**Cost Effectiveness**

\[
\text{Cost Effectiveness} = \frac{\text{Total Annual Cost} + \text{Annual Emission Reductions}}{\text{Annual Emission Reductions}}
\]

\[
= \frac{$183,068/\text{year}}{3.2 \text{ tons-VOC/year}}
\]

\[
= $57,209/\text{ton-VOC}
\]
The analysis demonstrates that the annualized purchase cost of the required collection system ductwork and the control device purchase price alone results in a cost effectiveness which exceeds the District's Guideline of $17,500/ton-VOC. Therefore this option is not cost-effective and will not be considered for this project.

Step 5 - Select BACT

All identified feasible options with control efficiencies higher than the option proposed by the facility have been shown to not be cost effective. The facility has proposed Option 1, insulated tank, pressure/vacuum valve set within 10% of the maximum allowable working pressure of the tank, "gas tight" tank operation and achieve and maintain a continuous storage temperature not exceeding 75 °F within 60 days of completion of fermentation. These BACT requirements will be listed on the permits as enforceable conditions.
Appendix D

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

\[
\text{QNEC} = \text{PE2} - \text{PE1}, \text{ where:}
\]

\[
\begin{align*}
\text{QNEC} & = \text{Quarterly Net Emissions Change for each emissions unit, lb/qtr.} \\
\text{PE2} & = \text{Post Project Potential to Emit for each emissions unit, lb/qtr.} \\
\text{PE1} & = \text{Pre-Project Potential to Emit for each emissions unit, lb/qtr.}
\end{align*}
\]

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:

\[
\text{PE2}_{\text{quarterly}} = \frac{\text{PE2}_{\text{annual}}}{4 \text{ quarters/year}} = \frac{1,518 \text{ lb/year}}{4 \text{ qtr/year}} = 379.5 \text{ lb VOC/qtr}
\]

\[
\text{PE1}_{\text{quarterly}} = \frac{\text{PE1}_{\text{annual}}}{4 \text{ quarters/year}} = \frac{0 \text{ lb/year}}{4 \text{ qtr/year}} = 0 \text{ lb VOC/qtr}
\]

<table>
<thead>
<tr>
<th>Quarterly NEC [QNEC] for Units -764-0 through -768-0</th>
<th>PE2 (lb/qtr)</th>
<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOX</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SOX</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PM_{10}</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CO</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VOC</td>
<td>155.5</td>
<td>0</td>
<td>155.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quarterly NEC [QNEC] for Units -769-0 through -775-0</th>
<th>PE2 (lb/qtr)</th>
<th>PE1 (lb/qtr)</th>
<th>QNEC (lb/qtr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOX</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SOX</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>PM_{10}</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CO</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VOC</td>
<td>126.5</td>
<td>0</td>
<td>126.5</td>
</tr>
</tbody>
</table>
Appendix E

Compliance Certification
San Joaquin Valley
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

[X] Federal Major Permit MODIFICATION  [] ADMINISTRATIVE AMENDMENT
[] MINOR PERMIT MODIFICATION

<table>
<thead>
<tr>
<th>COMPANY NAME: E&amp;J Gallo Winery - Livingston</th>
<th>FACILITY ID N-1237</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Type of Organization: [x] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [ ] Utility</td>
<td></td>
</tr>
<tr>
<td>2. Owner's Name: E&amp;J Gallo Winery-Livingston</td>
<td></td>
</tr>
<tr>
<td>3. Agent to the Owner: Mr. Dan Martin</td>
<td></td>
</tr>
</tbody>
</table>

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

__________________________ 10/20/14
Signature of Responsible Official

Mr. Dan Martin

Name of Responsible Official (please print)

Plant Manager- Livingston Winery

Title of Responsible Official (please print)

Mailing Address: Central Regional Office * 1990 E. Gettysburg Avenue * Fresno, California 93726-0244 * (559) 230-5900
* FAX (559) 230-6061

TVFORM-009
Appendix F

Draft ATCs
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-764-0

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:
215,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 2133) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 155 lb, 2nd quarter - 155 lb, 3rd quarter - 156 lb, and fourth quarter - 156 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 30.08 feet in diameter and 40 feet in height with a proposed volume of 215,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director of Permit Services

Arnaud Marjollet, Director of Permit Services
Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

10. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201]

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-765-0

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:
215,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 2134) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. {1829) The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 155 lb, 2nd quarter - 155 lb, 3rd quarter - 156 lb, and fourth quarter - 156 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 30.08 feet in diameter and 40 feet in height with a proposed volume of 215,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

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

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjolletreire - Director of Permit Services
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

10. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201]

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-766-0

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:
215,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 2137) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 155 lb, 2nd quarter - 155 lb, 3rd quarter - 156 lb, and fourth quarter - 156 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 30.08 feet in diameter and 40 feet in height with a proposed volume of 215,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjolle, Director of Permit Services

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

10. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201]

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-767-0

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:
215,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 2138) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. (1829) The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 155 lb, 2nd quarter - 155 lb, 3rd quarter - 156 lb, and fourth quarter - 156 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 30.08 feet in diameter and 40 feet in height with a proposed volume of 215,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. (98) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services
N-1237-767-0 Nov 21 2014 1:30PM — GARCIAJ: Joint Inspection NOT Required

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

10. The maximum wine storage throughput in this tank shall not exceed 215,000 gallons per day. [District Rule 2201]

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 4,300,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-768-0

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 INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3225) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 39.08 feet in diameter and 40 feet in height with a proposed volume of 350,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTITUTE. 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 1 APCO

Arnaud Mariolle, Director of Permit Services
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

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

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-769-0

LEGAL OWNER OR OPERATOR: E & J GALLO WINERY
ATTN: EHS MANAGER
18000 W RIVER RD
LIVINGSTON, CA 95334

MAILING ADDRESS:

LOCATION:

18000 W RIVER RD
LIVINGSTON, CA 95334

EQUIPMENT DESCRIPTION:
350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3226) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. \( (1829) \) The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 39.08 feet in diameter and 40 feet in height with a proposed volume of 350,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. \( (98) \) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

You must notify the District Compliance Division at (209) 557-6400 when construction is completed and prior to operating the equipment or modifications authorized by this Authority to Construct. This is not a permit to operate. Approval or denial of a Permit to Operate will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services

N-1237-769-0 Nov 21 2014 1:30PM - GARCIA Joint Inspection NOT Required

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

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

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-770-0

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 INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3227) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. (1829) The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 39.08 feet in diameter and 40 feet in height with a proposed volume of 350,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director [APCO]

Arnaud Marjolla, Director of Permit Services

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

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

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-771-0

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 INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3228) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 39.08 feet in diameter and 40 feet in height with a proposed volume of 350,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjolle - Director of Permit Services
N-1237-771A; Nov 21 2014 1:39PM - GARC/ARJ - Joint Inspection NOT Required

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer’s instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

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

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-772-0
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 INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3229) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. (1829) The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 39.08 feet in diameter and 40 feet in height with a proposed volume of 350,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. (98) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE.

Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Amara Marjollet, Director of Permit Services

N-1237-772-0 - Nov 21 2014 1:30PM - GarciA - Joint Inspection NOT Required
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

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

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-773-0
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 INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3230) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 39.08 feet in diameter and 40 feet in height with a proposed volume of 350,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services
N-1237-773-0: Nov 21 2014 1:30PM – GARCIAJ : Joint Inspection NOT Required
Northern Regional Office ● 4800 Enterprise Way ● Modesto, CA 95356-8718 ● (209) 557-6400 ● Fax (209) 557-6475
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

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

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
San Joaquin Valley  
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-774-0

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

LOCATION: E & J GALLO WINERY  
18000 W RIVER RD 
LIVINGSTON, CA 95334

EQUIPMENT DESCRIPTION: 350,000 GALLON INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3231) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. {1829} The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 39.08 feet in diameter and 40 feet in height with a proposed volume of 350,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredin, Executive Director/ APCO

Arnaud Marjollet, Director of Permit Services
N-1237-774-0 • Nov 21 2014 1:30PM – GARCIAJ : Joint Inspection NOT Required

Northern Regional Office • 4800 Enterprise Way • Modesto, CA 95356-8718 • (209) 557-6400 • Fax (209) 557-6475
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

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

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]
San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-1237-775-0
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 INSULATED STAINLESS STEEL RED AND WHITE WINE STORAGE TANK (TANK 3232) WITH PRESSURE/VACUUM VALVE, OR EQUIVALENT

CONDITIONS

1. (1829) The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit

2. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 126 lb, 2nd quarter - 126 lb, 3rd quarter - 127 lb, and fourth quarter - 127 lb. Offsets shall be provided at the applicable offset ratio specified in Table 4-2 of Rule 2201 (as amended 4/21/11). [District Rule 2201]

3. ERC Certificate Numbers S-4260-1, C-1229-1, S-4354-1, S-4126-1, S-4381-1 and/or S-4306-1 (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]

4. The nominal tank dimensions are 39.08 feet in diameter and 40 feet in height with a proposed volume of 350,000 gallons. The permittee shall submit to the District the gauge volume of the tank within 30 days of the actual tank capacity measurement. [District Rule 2201]

5. (98) No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

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

Seyed Sadredln, Executive Director | APCO

Arnaud Marjollet, Director of Permit Services
6. This tank shall be equipped with and operated with a pressure-vacuum relief valve, which shall operate within 10% of the maximum allowable working pressure of the tank, operate in accordance with the manufacturer's instructions, and be permanently labeled with the operating pressure settings. [District Rules 2201 and 4694]

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]

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]

9. The weighted annual average ethanol content of wine stored in this tank, calculated on a twelve month rolling basis, shall not exceed 15 percent by volume. [District Rule 2201]

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

11. The maximum wine storage throughput in this tank, calculated on a twelve month rolling basis, shall not exceed 3,500,000 gallons per year. [District Rule 2201]

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

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]

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

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]

16. Records shall be maintained that demonstrate the date of each year's start of crush season. [District Rule 2201]

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]