



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9  
75 Hawthorne Street  
San Francisco, CA 94105

9-30-16

Arnaud Marjolle  
Director of Permit Services  
San Joaquin Valley Air Pollution Control District  
1990 East Gettysburg Avenue  
Fresno, CA 93726

Dear Mr. Marjolle,

Thank you for the opportunity to provide comments on proposed permit actions for the following four winery facilities:

1. Bear Creek Winery, located in Lodi, CA (Project No. N-1153192): The proposed permits are for the installation of four 160,000 gallon and four 51,000 gallon stainless steel, insulated wine tanks to be used to ferment and store white and red wines.
2. CBUS Ops Inc. (dba Woodbridge Winery), located in Woodbridge, CA (Project No. N-1143210): The proposed permits are for the installation of twenty-four 108,000 gallon stainless steel, enclosed top, insulated wine fermentation and storage tanks.
3. Delicato Vineyards, located in Manteca, CA (Project No. N-1152244): The proposed permits are for the installation of 128 new insulated, stainless steel wine fermentation and storage tanks, ranging in size from 50,000 to 154,000 gallons.
4. E&J Gallo Winery, located in Livingston, CA (Project No. N-1142303): The proposed ATC is to modify the permits by establishing a combined specific limiting condition for VOC emissions as well as incorporate some permit units with existing ATCs into the existing Title V permit.

For each of these projects, the District has determined that the project will result in a federal major modification, and therefore triggers the requirement to use Best Available Control Technology under the District's regulations (SJV BACT), as defined in Rule 2201, which is equivalent to the federal requirement for Lowest Achievable Emission Rate (LAER). SJV BACT requires "the most stringent emission limitation which is achieved in practice by such class or category of source." The District has provided its BACT analysis in the Appendices of each evaluation and concludes that maintaining the average fermentation temperature below 95°F satisfies the SJV BACT requirement for wine fermentation tanks. Each evaluation also references the District's Achieved in Practice Analysis Memo, revised on May 9, 2016, which evaluates wine fermentation operations at other wineries to determine if any are using an achieved in practice (AIP) technology to reduce emission reductions from wine fermentation operations.

The District's LAER (SVJ BACT) determinations for these proposed permits are essentially the same as the District's determinations for winery permits EPA has previously reviewed. Specifically, EPA provided detailed comments to the District regarding the availability of add-on controls for wine fermentation tanks in four letters dated October 21, 2013, May 5, 2014, June 16, 2014 and May 8, 2015. For the reasons discussed in our previous comment letters, EPA believes the District's analyses for the four proposed permits identified above do not satisfactorily demonstrate LAER. Please see Enclosures 1 and 2 for more details. Consequently, EPA believes the District's proposed permits do not implement LAER as required by Rule 2201.

Because we are concerned that the proposed permits may not ensure compliance with LAER, we are evaluating whether it is necessary to issue a formal objection to the permits. The comment period for the Bear Creek Winery permit closes on October 9, 2016, by which time EPA will decide whether to object. Therefore, EPA requests that the District confer with EPA, regarding LAER for the wine fermentation, to discuss options that could resolve this issue without a formal objection by EPA. Please contact me at your earliest convenience but no later than October 6, 2016 to discuss this matter. I can be reached at 415 972-3974 or at [rios.gerardo@epa.gov](mailto:rios.gerardo@epa.gov).

Sincerely,



Gerardo C. Rios  
Chief, Permits Office  
Air Division

Enclosures

cc: Tung Le, CARB

## Enclosure 1 EPA Comments

Bear Creek Winery, Project No. N-1153192; CBUS Ops Inc. (dba Woodbridge Winery), Project No. N-1143210; Delicato Vineyards, Project No. N-1152244; E&J Gallo Winery, Project No. N-1142303

While the District evaluates the use of add-on controls at several winery facilities throughout the state, our comments are focused on the use of controls at two specific wineries, Central Coast Winery Services (CCWS) and Terravant Winery, both located in Santa Barbara, California.

The Central Coast Winery Service (CCWS) was issued a permit to construct and operate a (will insert name of control device from SB permit, rather than name vendor) in 2013 to control emissions from a portion of their wine fermentation operations. This equipment has been leased by the facility and has been in use during each crush season since 2103 (three seasons). The facility proposed use of this control equipment, not to meet any applicable BACT/LAER requirements, but instead to ensure their daily emissions remained below 55 lbs/day, which is the emission threshold for triggering BACT and offset requirements in the Santa Barbara County Air Pollution Control District (APCD). The fact that the source was not required to achieve emission reductions to satisfy a new source review (NSR) requirement and instead used the controls to avoid an applicable requirement, does not factor into the evaluation of whether a specific emission reduction rate has been achieved in practice. Similarly, the fact that the source only used the equipment as needed to comply with their 55 lb/day emission limit, does not affect whether a certain control rate has been AIP. EPA has reviewed the records from CCWS regarding their wine fermentation operations and using mass balance calculations have determined that the use of add-on controls during portions of the fermentation process have resulted in emission reductions of 76.6%. The demonstrated use of add-on controls to reduce emissions by 76.6% represents the lowest achievable emission rate for wine fermentation operations. The District has raised a concern that an ATC issued by the Santa Barbara County APCD to require the use of add-on controls to satisfy a BACT requirement was cancelled by the source, and thus cannot be relied on when considering whether the use of add-on controls at this facility have been AIP. While it is correct that an ATC allowing emissions at the facility to exceed 55lbs/day (thus triggering BACT) was cancelled, this did not affect the use of otherwise permitted control devices to reduce emissions from their wine fermentation operations. Lastly, EPA wants to address the District's concern that the control equipment at this facility has not been formally source tested. First we note that this control equipment was previously source tested by the Bay Area Air Quality Management District while in use at another facility and was able to achieve a control efficiency of greater than 99% using a direct measurement inlet and outlet source test. Second, due to the batch nature of the operation and the non-steady state of the wine fermentation process, source testing may not be the best way to accurately measure achieved emission reductions. Instead, emission calculations using mass-balance may be a better way to measure the actual emissions reductions achieved by the control device. Mass-balance calculations were used to determine the overall control efficiency of 76.6% for the batch wine fermentation process at this facility. Therefore, this same approach should be used to apply LAER to each of the proposed permits for wine fermentation operations.

The Terravant Winery was issued a permit to construct and operate a packed bed water scrubber in 2008 to control emissions from their wine fermentation operations. This custom designed control equipment is owned by the facility and has been in use during every crush season since 2008 (7 seasons). Similar to the Terravant facility, the control equipment was not installed to meet any applicable BACT/LAER requirements, but to comply with a daily emission limit of 55 lbs/day. As stated above in our summary of the Terravant operation, the fact that these controls were not required to meet BACT/LAER, or

required to be used at all times does not affect a determination of whether the use of such controls has been achieved in practice. While the installed control equipment was expected to achieve a 95% control efficiency, the source has only been able to maintain a 49% control efficiency on a consistent basis according to source test reports. The Santa Barbara County APCD has indicated that most issues related to the achieved control efficiency are likely due to operator error, given that water scrubbers are a well-established, high-efficiency control device for controlling ethanol emissions. For the purposes of evaluating whether the use of this control equipment can be considered AIP, the evaluation criteria is whether a source was able to achieve a certain level of control over a reasonable operating period. The District and EPA have already agreed that the reasonable operating period is a complete crush season. The facility has been able to achieve a minimum control efficiency of at least 47.6% over the seven seasons it has been in use. Therefore, for wine fermentation tanks, EPA believes that the lowest achievable emission rate which has been AIP, based on the demonstrated emission reductions achieved at the Terravant facility, is a 47.6% control efficiency, as measured by Santa Barbara County APCD source testing.

## **Enclosure 2 EPA Comment Letters**

1. EPA comment letter for E&J Gallo, Project No. N-1131615, dated October 21, 2013.
2. EPA comment letter for E&J Gallo, Project No. N-1133659, dated May 5, 2014.
3. EPA comment letter for Bear Creek Winery, Project No. N-1133555, dated June 16, 2014.
4. EPA comment letter for E&J Gallo, Project No. N-1133347, dated May 8, 2015.

