UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

May 8, 2015

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

Dear Mr. Marjollet,

Thank you for the opportunity to provide comments on your Preliminary Decision to issue an Authority to Construct (ATC) to modify twelve (12) existing 350,000 gallon wine storage tanks currently installed at the E & J Gallo (Gallo) facility located at 5610 E. Olive Ave, Fresno, CA (Project # N-1133347). The project would add fermentation capability to tanks that are currently used for wine storage.

Because this project will result in emission increases that constitute a federal major modification, as defined in Rule 2201, a valid ATC for this project must comply with a determination of the lowest achievable emission rate (LAER) (defined in Rule 2201 as BACT). LAER requires "the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent." Thus, a key element of a LAER determination is the level of control achieved by a similar class or category of source. As discussed below, other wine fermentation operations have achieved emission reductions through the use of add-on controls. The District's draft ATC for this project does not require Gallo to achieve similar emission reductions, and EPA believes that the accompanying analysis does not adequately support for this determination. Please see also our comment letter dated May 5, 2014 regarding a different Gallo project that identifies similar issues.

Appendix A of the permit evaluation for this project, "BACT Guideline 5.4.14 and Top Down BACT Analysis" summarizes the potential controls for wine fermentation tanks. The District identifies as "Achieved in Practice or contained in the SIP," temperature-controlled open top tanks with maximum average temperature of 95 degrees F. The District also identifies as "Technologically Feasible" several control techniques involving the capture and control of VOC emissions such as thermal or catalytic oxidation, adsorption, absorption, and condensation. The District concluded that the source could utilize the identified achieved in practice controls and determined that none of the technologically feasible control options were cost-effective.

Attachment B of Appendix A, "Achieved in Practice Analysis for Emission Control Technologies Used to Control VOC Emissions from Wine Fermentation Tanks" (AIP Memo) states on page 4:

> The District considers the following when determining whether a control technology has been successfully operated for achieved in practice BACT determinations:
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> 1. Was the control technology operated in the same manner that would be required by the District if the control technology was required for BACT?

2. How reliable has the control technology been over the life of its use?
3. Has the control technology been verified to perform effectively over the range of operation expected for that type of equipment? Was the effectiveness verified by performance test(s), when possible, or using other performance data?

Other typical considerations that the District considers when making an achieved in practice BACT determination include:

1. Is the control technology commercially available from at least one vendor?
2. On what class and category of source has the control technology been demonstrated?

EPA is concerned that the District's AIP analysis applies the first criterion to exclude technologies that have achieved actual emission reductions that would not have otherwise occurred on the ground that the controls were not used during the entire batch fermentation process or as part of a BACT determination. EPA believes the use of this factor might inappropriately exclude some controls from the achieved in practice determination. For example, if a control device is capable of reducing emissions by 90%, and is used for only part of the batch fermentation process (which may range from 2 to 21 days), the quantity of emissions reduced while the control device is in use represents the overall control efficiency rate. Therefore, the allowable emission rate would be calculated using the overall control efficiency rate, and should be included as part of the LAER analysis since LAER is an emission rate that reflects the most stringent emission limitation that has been achieved in practice.

Regarding the District's second criterion, EPA agrees that control technology reliability is an important consideration. EPA has not identified any specific issues regarding the reliability of the emissions control technology used at the Central Coast Winery Services (CCWS), and the District's analysis does not point to any such concerns. Although the Terravant facility appears to have difficulty maintaining the control efficiency required by its permit, the technology (water scrubber) is well established as capable of achieving the permitted emission rate. At a minimum, the District should consider the emission rate that the control technology has been able to consistently achieve. EPA notes that, in all emission tests, the source was able to maintain a control efficiency rate of at least 47.6%, which the District should evaluate as LAER.

Regarding the District's third criterion, the "range of operation" appears to relate to the size of the emission unit. For this project, EPA does not agree that the size of the emission unit is an appropriate basis for determining what constitutes LAER. While larger fermentation tanks will have higher hourly emission rates, water scrubbers are a well-established VOC control technology that has successfully been scaled up to handle larger flow rates. Another alternative is the use of multiple emission control units to handle large volume air streams. EPA is unaware of any technical reason why ethanol emissions from wine fermentation tanks of any size could not be controlled effectively through the use of some type of scrubber system.

Regarding the question whether effectiveness has been verified by performance testing, in 2013, BAAQMD conducted a performance test of the NoMoVo system. The test results show that the NoMoVo system is capable of achieving a 99.4% control efficiency. EPA notes that the second NoMoVo system used at the CCWS facility is the exact same unit tested by BAAQMD while installed at the Kendall Jackson facility. According to CCWS records maintained for the 2014 crush season, CCWS was able to achieve a 76.6% overall control efficiency rate (captured emissions compared to

calculated emissions using emission factors) on all red wine fermentation tanks. Due to the batch nature of the fermentation process and the simultaneous use of a single control device on multiple tanks, only an overall control efficiency can be determined for this type of operation.

Regarding the District's fourth and fifth criteria, the District's Top Down BACT Analysis acknowledges that at least two different companies manufacture and market control devices specifically for wine fermentation operations, and EPA has previously stated that the appropriate class and category of source for a LAER determination for wine fermentation tanks is simply wine fermentation operations. The class or category of source is not dependent on the size of the emission unit.

EPA requests that, prior to issuing the ATC for this project, the District provide for our review a revised LAER analysis for this project that relies on criteria appropriate to LAER determinations. If you have any questions related to this matter, please contact Laura Yannayon of my staff at (415) 972-3534.

Sincerely,

Gerardo C. Rios
Chief, Permits Office
Air Division

Enclosure

cc: Mike Tollstrup, CARB

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