

**Regional Water Quality Control Board  
Central Valley Region  
Board Meeting – 1-3 August 2012**

**Response to Written Comments for Golden State Vintners, Inc. Fresno Winery  
Tentative Waste Discharge Requirements**

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At a public hearing scheduled for 1-3 August 2012, the Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) will consider adoption of Waste Discharge Requirements (WDRs) for the Golden State Vintners, Inc., Fresno Winery. This document contains responses to written comments received from interested parties regarding the Tentative WDRs (TWDRs) circulated on 25 May 2012. Written comments from interested parties were required by public notice to be received by the Central Valley Water Board by 25 June 2012 to receive full consideration. Comments were received by Kennedy Jenks Consultants Engineers & Scientists on behalf of Golden State Vintners, Inc. (GSV).

Comments from the above interested party are included along with suggested changes in the appropriate sections below, followed by responses from Central Valley Water Board staff.

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**GSV COMMENTS**

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**GSV - COMMENT No. 1:** For Finding 3, the screen that was installed at the Fresno Winery is a parabolic screen. To provide flexibility for the Winery, GSV requests that the reference to a specific type of screen be deleted and simply indicate that the wastewater is screened. In addition, wastewater discharge to the holding pond was discontinued in October 2010 but the pond was not closed. All wastewater lines from the Winery to the pond have been capped but the pond continues to have the ability to receive Fresno Irrigation District water. Furthermore, the WDR requires an evaluation of wastewater storage needs that may result in the pond being brought back into service. Therefore, the following change to Finding 3 is proposed:

*“...In addition, the Discharger has reconfigured its treatment system to add a ~~rotary~~ screen to remove solids from the wastewater and bypassed the holding pond to tie directly into the irrigation system. ~~The holding pond was closed~~ Wastewater discharge to the holding pond was discontinued in October 2010. All wastewater lines from the Winery to the pond have been capped. The pond has the ability to receive Fresno Irrigation District water.”*

**RESPONSE:** The Order has been modified to reflect this change.

**GSV - COMMENT No. 2:** The blending ratio of 4:1 (four parts irrigation water to one part wastewater) stipulated in Finding 10 is an approximation based on pump capabilities. Therefore, the following change to Finding 10 is proposed:

*“After treatment, the wastewater is pumped directly into the irrigation system. According to the Discharger, the winery wastewater is blended with irrigation water at approximately a 4:1 ratio (four parts irrigation water to one part wastewater) and spread between the vineyard rows via flood irrigation. Supplemental irrigation water to meet crop demand is supplied via drip irrigation.”*

**RESPONSE:** The Order has been modified to reflect this change.

**GSV – COMMENT No. 3:** The prohibition against irrigating with wastewater within 24 hours prior to and following a storm event as stated in Finding 12 and Use Area Specification C.8 is unnecessary since Use Area Specifications C.2, C.7, and C.10 are also required.

- Use Area Specification C.2 requires that the perimeter of the Use Area be graded to prevent runoff onto adjacent properties.
- Use Area Specification C.7 prohibits wastewater from being discharged to the Use Area in a manner that causes wastewater to stand for greater than 24 hours.
- Use Area Specification C.10 requires that the Use Area be managed to prevent breeding off mosquitoes and specifically that all applied irrigation water must infiltrate completely within 24 hours.

It is also noted that prohibiting irrigation within 24 hours of a storm event means that the discharge would be prohibited for at least two days, and if back to back storms occur the discharge could be prohibited for several days. Due to the nature of its operations, the Winery is not capable of ceasing discharges for a period of several days. Cleaning and sanitizing activities associated with wine processing occurs on a daily basis. In order to cease discharge the Winery would have to shut down operations until the discharge could resume. Furthermore, Provision F.13 of the WDR requires the Discharger to conduct a water balance study, taking into account wastewater flow and 100 year annual precipitation, to evaluate whether wastewater storage is needed in order to meet the requirements of the WDR (including prohibitions against runoff and standing water). Therefore, GSV requests that the prohibition to discharge to the Use Area within 24 hours of a storm event be removed

**RESPONSE:** Given that Use Area Specifications C.2, C.7, and C.10 require control of the wastewater application, and Use Area Specification C.5 requires that hydraulic loading to the Use Area be at agronomic rates, the Order contains enough requirements to ensure that the discharge is controlled in a manner that precludes hydraulic overloading and site runoff. Therefore, Use Area Specification C.8 has been removed and Finding 12 has been modified as follows:

*“According to the RWD, winery operations will occur year round. ~~With closure of the holding pond~~ By discontinuing discharge to the holding pond the Discharger no longer has the capacity to store wastewater during periods of wet weather. The Water Balance submitted with the RWD addresses the need to continue discharge during wet weather by increasing the daily application area to minimize the potential to cause oversaturated conditions. The RWD concludes that expansion of the daily application area during wet weather will result in an insignificant increase in the hydraulic loading rate. This Order proscribes ~~prohibits~~ irrigation*

*with treated wastewater in a manner that would cause runoff onto adjacent properties, ponding for greater than 24 hours, or exceedance of agronomic application rates, ~~within 24 hours prior to or following a storm event or when soils become oversaturated~~ and requires the Discharger to submit a technical report including a revised water balance to provide an appropriate plan to accommodate wastewater flow and seasonal precipitation with a time schedule to provide wet weather storage, if required.”*

**GSV – COMMENT No. 4:** Reference to “naturally occurring background water quality” is ambiguous. Therefore, the following change to the first paragraph in Finding 38 is proposed:

*“Groundwater Limitations are set at ~~the naturally occurring~~ background water quality or applicable limits...”*

**RESPONSE:** If the Board just removed the term “natural” when referring to background groundwater quality, the Board could be setting up a scenario where up-gradient dischargers could pollute groundwater, and then GSV would be allowed to discharge in exceedance of water quality objectives. This would be inconsistent with the State’s Antidegradation Policy. Instead, due to the fact that the Board has allowed limited degradation of groundwater up-gradient of GSV through the issuance of WDRs Order 5-01-254 for the Fresno-Clovis Metropolitan Regional Wastewater Treatment Facility, the limits in the Order will be set so that they are consistent with the other Orders that affect the groundwater. Finding 38 has not been modified.

**GSV – COMMENT No. 5:** The use of the term “nutritive” in Use Area Specification C.6 is unclear and should be modified to be consistent with the language in Provision F.14, which requires preparation of a Wastewater and Nutrient Management Plan. Therefore, the following change to Use Area Specification C.6 is proposed:

*“Application of waste constituents shall be at reasonable agronomic rates to preclude creation of nuisance conditions and/or degradation of groundwater, considering the crop, soil, climate, and irrigation management. The annual ~~nutritive~~ nutrient loading to the Use Area, including ~~nutritive value of~~ organic and chemical fertilizers and ~~of the wastewater~~ shall not exceed the annual agronomic rate for the crop demand.”*

**RESPONSE:** The Order has been modified to reflect this change.

**GSV – COMMENT No. 6:** As discussed in Comment No. 3 above, the prohibition of irrigating within 24 hours of a storm event is unnecessary given other Use Area Specifications,

specifically, C.2, C.5, C.7, and C.10. Therefore, the following change to Use Area Specification C.8 is proposed:

*"Irrigation with wastewater shall ~~not~~ be performed ~~within 24 hours of a storm event of measurable precipitation or when soils become saturated in a manner to preclude runoff of wastewater from the land application area to adjacent property during saturated conditions.~~"*

**RESPONSE:** See response to GSV - Comment No. 2. The Order has been modified to remove Use Area Specification C.8 and the numbers of the remaining specifications were adjusted accordingly.

**GSV – COMMENT No. 7:** As discussed in Comment No. 4, the use of the term "natural" when discussing background water quality is ambiguous. Therefore, the following change to Groundwater Limitation E.1.a is proposed:

"a. Containing constituent concentrations in excess of the concentrations specified below or ~~natural~~ background quality, whichever is greater:"

**RESPONSE:** For the reasons discussed previously under Comment No.4, the Order has not been modified.

**GSV – COMMENT No. 8:** The Winery currently does not have a wastewater pond and pending the results of the technical evaluation required in Provision F.13, a pond may or may not be required. GSV recommends that clarification to Provision F.10 be added so that a permanent marker be installed if the pond is used for wastewater storage. Therefore, the following change to Provision F.10 is proposed:

"... As a means of management and to discern compliance with this Provision, if the pond is used for wastewater storage the Discharger shall install and maintain a permanent marker with calibration that indicates the water level at the design capacity and enables determination of available operational freeboard."

**RESPONSE:** The Order has been modified as follows:

"... As a means of management and to discern compliance with this Provision, a pond is used for wastewater storage the Discharger shall install and maintain a permanent marker with calibration that indicates the water level at the design capacity and enables determination of available operational freeboard."

**GSV – COMMENT No. 9:** GSV proposes a clarification to Provision F.14 indicating that the calculations for the monthly and annual nutrient balances will ensure that nutrients from wastewater, irrigation water and fertilizers are applied at agronomic rates. The following change to Provision F.14 is proposed:

*“...management practices that will ensure that nutrients from wastewater, irrigation water, and commercial fertilizers are applied at agronomic rates.”*

**RESPONSE:** The proposed change has not been made. The Wastewater and Nutrient Management Plan must ensure that the proposed management practices address the hydraulic as well as nutrient demands of the crop.

**GSV – COMMENT No. 10:** The Discharger recognizes the need to the control salinity of its discharge and requests to modify the language of Provision F.15 (regarding the Salinity Control Plan) to require identification of methods that could be used to control salinity rather than reduce it. The Basin Plan references the use of best management practices that control (not reduce) inorganic dissolved solids to the maximum extent feasible. Therefore, the following change to Provision F.15 is proposed:

*The Discharger shall submit a Salinity Control Plan, with salinity source reduction goals and an implementation time schedule for Executive Officer approval. The control plan should identify any additional methods that could be used to further ~~reduce~~ control the salinity of the discharge to the maximum extent feasible...”*

**RESPONSE:** The Order has been modified to reflect this change.

**GSV – COMMENT No. 11:** Provision F.16 requires the Discharger to install and maintain a groundwater monitoring network in coordination with the Fresno-Clovis WWTF. GSV does not currently have access to information on the Fresno-Clovis WWTF and will therefore need to request the relevant information and will need time to review and evaluate the information. Therefore, GSV requests an extension of the compliance task dates included in Provision F.16 and the following changes are proposed:

*The Discharger shall comply with the following compliance schedule in implementing the work required by this Provision:*

	<b><u>Task</u></b>	<b><u>Compliance Date</u></b>
a	Submit Work Plan and Time Schedule for monitoring well installation.	< <del>90</del> <u>120</u> Days> following adoption of the Order

- b ~~Commence installation of additional monitoring wells~~ *<30 Days> following approval of the Work Plan*  
implementation of the Work Plan

**RESPONSE:** The Order has been modified to reflect this change.

**GSV – COMMENT No. 12:** GSV proposes the following suggestions and changes to the Monitoring and Reporting Program (MRP):

**General Comment:** The list of the general mineral constituents should be included in the foot notes of the various Tables, if required, in addition to being listed in the glossary.

**RESPONSE:** The Order has been modified to reflect this change.

**Groundwater Monitoring:** The groundwater monitoring well network may include monitoring wells owned and controlled by the Fresno-Clovis WWTF. It is conceivable that GSV may not have full access to the monitoring wells owned by the Fresno-Clovis WWTF. As such the following change to the Groundwater Monitoring Section of the MRP is proposed;

*“The Discharger shall monitor the wells installed in accordance with the Work Plan and Time Schedule for Monitoring Well Installation, and any subsequent additional wells, for the following:”*

**RESPONSE:** The Order has been modified to reflect this change.

**Source Water Monitoring:** It is our understanding that the Central Valley Water Board is interested in the flow weighted average concentration of water supplied to the Winery, but also interested in characterization of various sources of water used for supplemental irrigation in the Use Area. The following changes to the Source Water Monitoring Section are proposed:

*The Discharger shall monitor all ~~For each sources~~ (either well or surface supply), ~~the Discharger shall calculate the flow weighted average concentrations for the specified constituents~~ to the Winery facility and land application area for EC and general minerals according to the following Table. Measurements for EC supplied to the facility shall be a flow weighted average concentration based on different sources supplied to the facility.”*

**RESPONSE:** The Source Water Monitoring Section in the MRP has been modified to read as follows:

*The Discharger shall monitor all sources (either well or surface supply) to the Winery and Use Area for EC and general minerals in accordance with the following Table. Measurements for EC supplied to the Winery shall be a flow-weighted average concentration of all sources supplying the Winery.*

<u>Frequency</u>	<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sample Type</u>
<u>Supply Water</u>			
Quarterly	Flow-Weighted EC	umhos/cm	Computed Average
Annually	General Minerals <sup>2,3</sup>	mg/L	Grab
<u>Irrigation Water</u>			
Annually	EC	umhos/cm	Grab
Once every 3 years <sup>1</sup>	General Minerals <sup>2,3</sup>	mg/L	Grab

<sup>1</sup> The first sampling event shall occur in the year that the Order is adopted.

<sup>2</sup> Samples collected for metals shall be filtered with a 0.45 micron filter prior to preservation and analysis.

<sup>3</sup> At a minimum the General Minerals analysis shall include alkalinity, bicarbonate, calcium, carbonate, chloride, hardness, magnesium, potassium, phosphorus, sodium, sulfate, TDS, and a cation/anion balance.

**Wastewater Reporting Item 3:** Results of the study required by Provision F.13 may preclude the need for a pond. Therefore, the following change to Wastewater Reporting Item 3 is proposed:

*“A summary of the notations made in the pond monitoring log during each quarter, if applicable. The entire contents of the log do not need to be submitted”*

**RESPONSE:** The Order has been modified to reflect this change.

**Solids Reporting Item 1:** To provide clarification, GSV proposes the following change to the Solids Reporting Item 1:

*“Annual production totals for solids (excluding general trash and recyclables) in dry tons or cubic yards.”*

**RESPONSE:** The Order has been modified to reflect this change.

**Glossary: 24-Hour Composite:** Flow proportioned composite sampling may be difficult given the hydraulic setup of the wastewater system. Wastewater discharge at the Winery is not expected to vary significantly over the course of a day. Therefore, it is proposed that the 24-hour composite sample be of representative aliquots collected every hour rather than a flow-proportioned sample as stated in the Tentative

Order.

**RESPONSE:** The Order has been modified to require the 24-hour composite sampling be time proportioned rather than flow proportioned.

**GSV – COMMENT No. 13:** GSV proposes that all changes to the WDRs be incorporated into the Information Sheet. Specifically, changes made to Findings 3 and 10.

**RESPONSE:** The Order has been modified to reflect this change.