



Giumarra
VINEYARDS

May 7, 2015

Dale Harvey
California Regional Water Quality Control Board
1685 E Street
Fresno, CA 93706

RE: Administrative Draft WDR/MRP Comments

Dear Mr. Harvey:

Thank you for the opportunity to review and provide comments on the Administrative Draft Waste Discharge Requirements and Administrative Draft Monitoring and Reporting Program for the Giumarra Vineyards.

We have identified major comments and clarifications with supporting changes made throughout the document. Please refer to the attached comment letter from NV5 for explanation of the 5 major comments and rationale. Additional minor or supporting changes for the document are provided in the attached list and Word file as "tracked changes".

If you have any questions, please do not hesitate to contact Patrick Dunn at 916-641-9207 or Crystal Macias at 661-395-7083.

Sincerely,

GIUMARRA VINEYARDS

John Giumarra
President

Crystal Macias
Operations Manager
PFD/

May 7, 2015

Via Email

Mr. Jeff Giumarra and Ms. Crystal Macias
 Giumarra Vineyards
 11220 Edison Highway
 Bakersfield, CA 93307

Re: Response to Administrative Draft WDRs and MRP - Review and Comments for the Giumarra Vineyards Corporation

Dear Mr. Giumarra and Ms. Macias:

NV5 appreciates the opportunity to provide review and comments regarding the 2015 Administrative Draft Waste Discharge Requirements (ADWDRs) and Monitoring and Reporting Program (ADM RP) for the Giumarra Vineyards Corporation (Giumarra or Facility). As part of this comment effort, NV5 reviewed the following: Administrative Draft WDR, Administrative Draft MRP, glossary, information sheet and associated attachments and October 2014 ROWD (NV5).

NV5 has developed the following 5 major comments and clarifications with supporting rationale. Additional proposed revisions in the ADWDR, glossary and information sheet are provided in support of these comments and marked in "tracked changes" mode within the document:

- 1) Section B – Effluent and Mass Loading Limitations – Item 1 - ...existing "Provision G. 13. Tasks 1 and 3", ... change to 192,000 gpd (total annual flow of 70 mgy). If results of Provision G.11, Tasks 1 and 3, indicate exceedances of Provisions B.2 and B.3, flow restrictions to 78,900 gpd will be required if suitable agronomic and engineering controls cannot be implemented..

The Wastewater and Nutrient Management Plan (WNMP) (G.11 Task 1) document will utilize the ROWD proposed flow totals of 192,000 gpd for nutrient loading calculations and land application area requirements specific to BOD loading. Calculations provided in the plan will demonstrate the Facility's ability to utilize the LAA (80 acre or expanded) and wastewater flows in a manner that will meet WDR requirements for nutrient loading rates (Effluent and Mass Limitations B.1 and B.2). The submittal date for the WNMP is six months following the order adoption. An additional technical

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assessment documents will be submitted in the next month and also following one growing season to assess the implementation of the Wastewater and Nutrient Management Plan and demonstrate continued compliance with the Effluent and Mass Limitations B.1 and B.2. If the Facility is found to be out of compliance after the implementation of the WNMP and assessment, engineering controls for nutrient loading, expansion of the LAA and other treatment options will be explored.

Restricting plant flow to less than half of the proposed flow is onerous and would inhibit the Facility's ability to operate normally. The assessment report (Provision 11, Task 3) to be completed would fully assess the implementation of the best practices as well as LAA field assessment, detailing loading rates and compliance with the WDR. If the assessment determines that the plant has not been in compliance with the limitations, then the Facility will investigate ways to engineer wastewater quality improvements (including pond aeration treatment), expand the LAA and/or engineer wastewater flow reduction measures to the lower flow of 79,900 gpd. Additional BOD cycle period information will be provided as referenced in the next month.

- 2) Section B – Effluent and Mass Loading Limitations – Item 2 - ...existing “discharge cycle” (i.e. the time between successive applications) ... insert after applications “as detailed in the Nutrient Management Plan under Provision 11, Task 1).

The insertion allows for some clarity. As explained above, if WNMP assessment determines loading rates are in excess of the WDR provisions, engineering alternatives may be implemented to facilitate the lowering of BOD concentrations which may include the use of chemicals or aeration techniques. Additional demonstration of the rest cycle information will also be provided as referenced. If a three day application cycle period cycle (i.e., one day of application plus two days of drying) is determined to be acceptable in the Nutrient Management Plan, the typical cycle average BOD loading rate would be 104 lbs/acres/day to the 80-acre LAA (assuming an effluent BOD concentration of 1,735 mg/L and a monthly average flow of 192,000 gpd). With the addition of 46 acres of farmland, the typical cycle average BOD loading rate would be 66 lbs/acres/day.

- 3) Section B – Effluent and Mass Loading Limitations – Item 3 - ... Change as follows
The chloride and boron monthly average concentrations of the discharge shall be subject to compliance limits and the Compliance Schedule provided in Provision

G.11, Tasks 2 and 4. [Compliance shall be determined at EFF-001 and within 3 years of the order adoption] Based on the Provision G.12 findings regarding site specific ambient ground water quality, the referenced basin plan limits will be addressed with specific facility information and approved by the Executive Officer.

These changes clarify that the Facility will be able to use monthly averages (data collected weekly) and will have 3 years to achieve compliance with chloride and boron limitations described in this provision. The wastewater averages in excess of 220 mg/l annually; so this limit is onerous without the completion and implementation of a salinity control plan. Chloride concentrations for the effluent stream are elevated and engineering methods or water blending considerations need to be explored and implemented to assess their effectiveness at reducing concentrations using this 3 year timeframe. No historic boron data is available for the effluent flow to the LAA, so it is unknown the amount of potential treatment for chloride or boron that will be required to reduce concentrations is unknown at this time. The referenced reports in Provision 12 will be critical to the assessment of alternative water sources for blending and the monitoring program.

- 3) Section C – Discharge specification No. 8 add sentence “The existing stormwater ponds shall be utilized for discharge on limited emergency basis.”

Clarification only.

- 4) Section G – Provision Order requested change and insertions to support the following Finding - Ground Water Consideration Statement No. 49e. and 49.f, respectively. Prepare and implement the Salinity Control Plan and Wastewater and Nutrient Management Plan followed by the adoption of an existing well monitoring network or installation of a groundwater monitoring well network up to 3 years following Order adoption. The installation of new monitoring wells per the RWQCB standards will be determined based on a Ground Water Beneficial Use Study and Existing Irrigation/Domestic Well Assessment effort.

In order to fully understand existing water quality, well locations and groundwater beneficial use, NV5 may complete a Groundwater Beneficial Use and Existing Irrigation/Domestic Well Assessment Report. This report will provide details on the local hydrogeologic conditions and local groundwater quality observations from selected irrigation and domestic wells surrounding the Facility and LAA. Pending well log

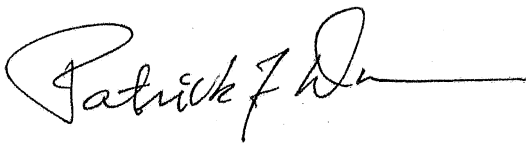
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review, a monitoring network may be proposed to the Regional Board from already existing monitoring wells, irrigation wells or domestic wells to be sampled per the MRP schedule and reporting. If suitable existing wells cannot be identified for a monitoring network, then NV5 will provide future monitoring well locations for a monitoring well network.

This Groundwater Beneficial Use study would determine if any water quality impacts currently exist surrounding the Facility that may impact the beneficial uses of the aquifer. The evaluation of existing domestic and irrigation wells would provide sample locations that would collect pertinent groundwater quality data without requiring Giumarra to install monitoring wells. As referenced above, this assessment may be used to identify an alternative water source for the plant that will have lower chloride and boron.

We appreciate the opportunity to serve your ground water needs and look forward to working with you. Please contact me at (916) 641-9207 if you have questions or require clarifications.

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Patrick F. Dunn, M.S., P.G., C.Hg.
Group Director

Enclosure:
List of Administrative Draft WDR/MRP Proposed Changes

List of Administrative Draft WDR/MRP Proposed Changes
WDR CHANGES

Findings

- Finding 2 – past ground water and source water monitoring
- Finding 3 – remove Beyond Engineering
- Finding 17 – footprint and depth of ponds
- Finding 29 – nitrogen uptake from Appendix C RWD
- Finding 31 – maximum historical water quality for source water
- Finding 45 – additional area water quality results (RV park)
- Finding 46 – 1) additional water quality objectives language
2) ground water quality evaluation, then propose network
- Finding 48.c – add within 3 years of order adoption for timeline
- Finding 49.f – evaluation of existing water quality with option for existing well network

Provisions

- B.1 – maintain max flow option unless proven cannot use, then flow restrictions to 78,900 gpd
- B.2 – time between successive applications detailed in WNMP
- B.3 – monthly average concentrations limits to be considered based on G.12 findings
- C.8 – stormwater ponds for emergency discharge
- G.11 – change order (previous G.13 provision); add consider removing crops Task 1; add or as early as one growing season Task 3 due date
- G.12 – change order (previous G.11 provision); add option to design from existing wells; new report option Task a for Beneficial Use report – new plant water source consideration; Task b network of existing wells, due date to 3 years following adoption; new Task e antidegradation analysis update based on G.11 and G.12 documents
- G.13 – add existing wells option for network

MRP CHANGES

- SW-001 – add alternative water source option
- Effluent Monitoring:
 - Add boron as weekly 24-hr composite sample
 - Add option to reduce monitoring frequency after 1 year of monitoring
- Source Water Monitoring:

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- Add boron and chloride as quarterly parameters
- Glossary:
 - Add boron to general minerals list

INFORMATION SHEET CHANGES

- Pg 1, Par 3 – remove Beyond Engineering
- Pg 2, Par 4 – utilize max flow rate (192,000 gpd) unless proven cannot be managed
- Pg 3, Par 1 – remove incremental flow increase language
- Pg 3, Par 4 – add RV water quality discussion (generally good, few individual exceedances noted)
- Pg 4, Par 4, list item 6 – add evaluation of existing water quality and wells for existing monitoring network or new monitoring well install
- Pg 5, Par 3 – flow limitation to 192,000 gpd; remove tiered incremental flow language
- Pg 5, Par 4 – add existing well network option; add groundwater beneficial use study option