Regional Water Quality Control Board
Central Valley Region
Board Meeting – 5/6 June 2014

Response to Written Comments for
Delano Growers Grape Products
Grape Juice Processing Plant
Kern County
Tentative Waste Discharge Requirements
And
Draft Time Schedule Order

At a public hearing scheduled for 5/6 June 2014, the Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) will consider adoption of Waste Discharge Requirements (WDRs) and a Draft Time schedule Order (TSO) for the Delano Growers Grape Products, Grape Juice Processing Plant (the Plant). This document contains responses to written comments received from interested parties regarding the tentative WDRs and TSO circulated on 28 February 2014. Written comments from interested parties were required by public notice to be received by the Central Valley Water Board by 5:00 pm on 4 April 2014 to receive full consideration. Comments were received from Ms. Jo Anne Kipps.

Written comments from Ms. Kipps are summarized below, followed by the responses of Central Valley Water Board staff. Based on the comments, Central Valley Water Board staff did make some changes to the tentative WDRs. Central Valley Water Board staff also made some changes to the tentative WDRs to correct typographical errors and to improve clarity. These changes are summarized at the end of this document.

JO ANNE KIPPS COMMENTS

On 4 April 2014, Ms. Kipps submitted written comments via email that requested revisions to the tentative WDRs and Monitoring and Reporting Program (MRP) and asked general questions to clarify her understanding of the discharge.

Requested Revision No. 1: Ms. Kipps indicates that since the Discharger has implemented Best Practicable Treatment or Control (BPTC) for biochemical oxygen demand (BOD) removal in the waste stream, the discharge does not contain the, "unavoidable concentrations of organic dissolved solids from the raw food product" cited in the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition* (Basin Plan) as a condition that may allow the Central Valley Water Board to exempt industrial food processing discharges from the Basin Plan's electrical conductivity (EC) effluent limitation of source water plus 500 micromhos per centimeter (umhos/cm). In addition, Ms. Kipps indicates the Discharger has not demonstrated, "best available technology and best management practices that control inorganic dissolved solids to the maximum extend feasible" that would also qualify the discharge to be exempt from the Basin Plan's source water plus 500 umhos/cm EC effluent limitation. Therefore, Ms. Kipps requests the tentative WDRs be revised to either: (a) prescribe an average monthly effluent EC limitation of source water EC plus 500 umhos/cm to the discharge prior to blending with supplemental irrigation water, or (b) describe how the Discharger has demonstrated "best available technology and best management practices that control inorganic dissolved solids to the maximum extent feasible" that would allow the industrial discharge to be exempt from the source water plus 500 umhos/cm EC limitation of the Basin Plan.

Response: No changes have been made to the tentative WDRs in response to this requested revision. Although the wastewater treatment plant (WWTP) removes a significant amount of organic dissolved solids from Waste Stream 02, the average effluent BOD concentration is still 348 mg/L. The presence of BOD, following treatment, demonstrates there are, "unavoidable concentrations of organic dissolved solids from the raw food product" in the discharge. Furthermore, to control the inorganic dissolved solids content of wastewater, the Discharger removes solids from the waste stream, utilizes electro dialysis units in lieu of ion exchange beds for cation and anion removal from reconstituted grape juice, replaced water softeners with a reverse osmosis unit to supply mineral free water to the boiler, and switched from sodium hydroxide to calcium hydroxide for pH control. The EC effluent limitation of 1,100 umhos/cm included in the tentative WDRs is based on the average background or upgradient groundwater concentration measured in monitoring well MW-1.

Requested Revision No. 2: Ms. Kipps indicates the Basin Plan does not identify waste dilution as a designated beneficial use of valley floor surface water. Therefore, Ms. Kipps requested the tentative WDRs be revised to: (1) explain why the establishment of an EC effluent limitation for a discharge following blending with high-quality surface water is compliant with the California Water Code and applicable regulations and is consistent with Central Valley Water Board plans and policies, and (2) identify other Central Valley Region WDRs for food processing wastewater discharges that establish similar effluent EC limitations for a discharge following blending.

Response: No changes have been made to the tentative WDRs in response to this requested revision. The Dilution section on page IV-25 of the Basin Plan allows blending of wastewater with surface or groundwater to promote beneficial reuse of wastewater in water short areas. The Delano area is a water short area; therefore, the point of compliance for the EC effluent limitation (monitoring location EFF-003) after the Plant discharge is blended with surface water is acceptable. The Discharger will be required to comply with the effluent EC limitation whether or not surface water is available for blending. The Central Valley Water Board has previously adopted WDRs that establish fixed dissolved solids (FDS) effluent limitations after wastewater has been blended with storm water and/or irrigation water and are summarized in the list below.

- Order No. R5-2012-0103 (Winery)
- Order No. R5-2012-0105 (Pet Food Processing and Cogeneration)
- Order No. R5-2013-0028 (Winery)
- Order No. R5-2014-0059 (Almond Processing)

Although these WDRs do not establish a blended effluent limitation specifically for EC, they illustrate how the Central Valley Water Board has interpreted and implemented relevant plans and policies regarding the point of compliance for salinity of a blended discharge.

Requested Revision No. 3: Revise the tentative WDRs to include the blended and unblended sodium adsorption ratio (SAR) of the water discharged to the land application area (LAA). If the SAR is excessive, explain why the discharge to the 176-acre LAA will not deleteriously affect soil permeability and crop viability.

Response: The SAR of water is calculated using the following formula:

$$SAR = \frac{Na}{\sqrt{(Ca + Mg)/2}}$$

Where sodium (Na), calcium (Ca), and magnesium (Mg) are reported in milliequivalents per liter (meq/L).

Data for Na, Ca, and Mg are not available for the blended effluent; therefore, the blended SAR cannot be calculated. However, the table in Finding 14 (and the Wastewater section of the information Sheet) have been revised to include a calculated SAR value of 20 based on the average Na, Ca, and Mg data from 2012 and 2013 for the unblended discharge.

According to *Water Quality for Agriculture* by Ayers and Westcot, salinity and SAR must be considered together for proper evaluation for the ultimate effect on water infiltration rate. Irrigation water with a SAR of 20 and an EC of 2.4 decisiemens per meter (dS/m) (which is the SAR and EC of the current unblended Plant discharge based on data from the table in Finding 14) results in a slight to moderate reduction in the infiltration rate. The infiltration rate generally decreases with either decreasing salinity or increasing SAR. Blending wastewater with surface water from the Friant-Kern Canal would decrease the salinity. Therefore, a Provision in section F of the tentative WDRs has been added (and the appropriate section of the Information Sheet have been revised) to require the Discharger to submit a Nutrient and Wastewater Management Plan. The plan will require the Discharger to identify the management practices to be implemented that will allow viable crop production with the water applied to the LAA.

Requested Revision No. 4: Revise the tentative MRP to change the monitoring location of EFF-003 to be the direct discharge from Pond 3, following any pH adjustment, and prior to any dilution with Friant-Kern Canal water. The Discharger should also report the dilution ratio on a daily basis and the SAR each time general minerals are monitored.

Response: No changes have been made to the tentative MRP in response to this requested revision. As noted in response to Requested Revision No. 2, the point of compliance for the EC effluent limitation is after the Plant discharge is blended with surface water. pH adjustment occurs on the influent to the WWTP; therefore, current monitoring location EFF-003 is after pH adjustment. The tentative MRP already requires continuous

monitoring of Plant discharge and Friant-Kern canal water applied to the LAA. The SAR can be calculated, as needed, from the general mineral data submitted.

Requested Revision No. 5: Revise the tentative MRP to require the Discharger to monitor soil in the LAA and background soil for pH, EC, sodium, and nitrogen [nitrate as nitrogen (NO_3-N), total Kjeldahl nitrogen (TKN), and total nitrogen (total N)].

Response: The tentative MRP has been revised (and the appropriate section of the Information Sheet have been revised) to require soil monitoring of the LAA and background for pH, EC, sodium, NO_3-N, TKN, and total N from depths of 2, 4, and 6 feet below ground surface. The Discharger shall establish, with concurrence of Central Valley Water Board staff, the number and location of soil samples.

Requested Revision No. 6: Revise the tentative WDRs to require the Discharger to submit a solids management plan that describes the method(s) the Discharger will use for dewatering, storage, and disposal of stems and pumice removed from the grapes and solids removed from the dissolved air flotation (DAF) unit and storage ponds.

Response: A Provision in section F of the tentative WDRs has been added (and the appropriate section of the Information Sheet have been revised) to require the Discharger to submit a Solids Management Plan that describes how the Discharger will manage and dispose of all solids generated at the Plant to comply with Discharge Specification B.2, "No waste constituent shall be released, discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations of this Order" and to preclude nuisance and odor conditions and damage to the liner in Pond 3.

Requested Revision No. 7: Revise the tentative MRP to require the collection of biochemical oxygen demand (BOD) and total nitrogen data from the influent and effluent of the WWTP. This data should be collected twice monthly (in non-consecutive weeks) during the first year following the adoption of the Order.

Response: No changes have been made to the tentative MRP in response to this comment. Monitoring requirements of the tentative MRP are adequate to characterize the Plant discharge. However, data included in the Discharger's 2012 Report of Waste Discharge (RWD) indicate the average concentrations of BOD, total suspended solids (TSS), TKN, and pH of the Plant discharge prior to the construction of the WWTP (January 2006 through April 2009) were approximately 4,300 mg/L, 2,400 mg/L, 600 mg/L, and 3.7 pH units, respectively. Following construction of the WWTP (May 2009 through August 2011), the concentrations were 175 mg/L, 165 mg/L, 35 mg/L, and 7.4 pH units, respectively. The Information Sheet has been updated with the data from the RWD to identify the effectiveness of the WWTP.

Requested Revision No. 8: Revise the tentative MRP to require pond freeboard to be monitored in at least 0.5-foot increments, not 1-foot increments. If pond freeboard is not really a concern, its monitoring frequency should be decreased from daily to weekly. In addition, if the dissolved oxygen (DO) monitoring indicates DO concentrations are consistently above 1.0 mg/L, its frequency should also be decreased from daily to weekly.

Response: The tentative MRP has been modified to require pond freeboard to be monitored in at least 0.5-foot increments and the monitoring frequency for pond freeboard and DO have been reduced from daily to weekly.

Requested Revision No. 9: Revise the tentative MRP to require total organic carbon and arsenic in the suite of constituents monitored quarterly in groundwater.

Response: The tentative MRP has been modified as recommended.

The following general questions regarding the discharge were included with the comments received from Ms. Kipps. Unless otherwise indicated in each response, the tentative WDRs, MRP, or draft TSO were not revised in response to these questions.

Question No. 1: How can the tentative WDRs find that impoundment of Waste Stream 01 in unlined, aerated ponds is reflective of Best Practicable Treatment or Control (BPTC) when it does not characterize the quality of the waste stream? The provision of aeration in the two unlined ponds that impound this waste suggests it contains sufficient organic matter that, without aeration, may generate objectionable odors during impoundment.

Response: Waste Stream 01 is condensed water separated from grapes and retentate from a reverse osmosis system that treats the Plants source water to provide mineral free water to the boiler. Only one sample from November 1995 has been submitted to characterize this waste stream and is included in the table below.

Waste Stream 01 (November 1995)

Parameter	Units	Number of Samples	Result
Alkalinity as $CaCO_3$	mg/L	1	<2
Hydroxide as $CaCO_3$	mg/L	1	<2
Carbonate as $CaCO_3$	mg/L	1	<2
Bicarbonate as $CaCO_3$	mg/L	1	<2
Phosphate	mg/L	1	0.53
Chloride	mg/L	1	<2
Nitrate as Nitrogen	mg/L	1	<0.1
Sulfate	mg/L	1	<2

Parameter	Units	Number of Samples	Result
Boron	mg/L	1	0.06
Calcium	mg/L	1	0.57
Iron	mg/L	1	<50
Potassium	mg/L	1	8.8
Magnesium	mg/L	1	0.38
Silica	mg/L	1	<1
Sodium	mg/L	1	<1
pH	pH units	1	3.7
Temperature	°C	1	15.9
Total Dissolved Solids	mg/L	1	390
Electrical Conductivity	umhos/cm	1	120
Ammonia	mg/L	1	1.4
Biochemical Oxygen Demand	mg/L	1	1,200

The Information Sheet has been revised to include the data from the sample collected from Waste Stream 01 in November 1995. The tentative MRP has been revised to require the Discharger to collect samples of Waste Stream 01 once per month for a year to provide an updated characterization of the waste stream, particularly with respect to the concentration of BOD. The samples shall be analyzed for general minerals, metals, and BOD. If needed, additional Specifications for the storage of Waste Stream 01 in a lined pond can be implemented following evaluation of the characterization data.

Question No. 2: Finding 14 states, "Effluent samples collected from the Pond 2 prior to mixing with canal water are required by Monitoring and Reporting Program Number 86-068." Actually, MRP 86-068 requires monitoring of the discharge prior to its application to the disposal area and, following revision in 2005, after pH control. Did staff mean to refer to Pond 3, since this is the terminal pond prior to discharge to the LAA? Or did the Discharger use Pond 2 to impound Waste Stream 02? Please clarify.

Response: Prior to the construction of Pond 3 in fall 2013, Waste Stream 01 was discharged to Pond 1 and Waste Stream 02 was discharged to Pond 2. Ponds 1 and 2 were, and still are, hydraulically connected. Therefore, the reference to the effluent from Pond 2 in Finding 14 is correct.

Question No. 3: What are the types and annual quantities of chemicals used in the Plant's grape juice and concentrate processes?

Response: An estimate of the annual chemical usage at the Plant is presented in the table below. The Information Sheet has been updated to include this data. The waste streams that contain the chemicals in the table below are processed through the WWTP.

Annual Chemical Usage

Chemical	Amount	Use
Sodium Hydroxide/Potassium Hydroxide Blend	44,000 gallons	Cleaning Agent
Sodium Hypochlorite	8,000 gallons	Cleaning Agent
Hydrochloric Acid	15,000 gallons	pH Adjustment/Cleaning Agent
Calcium Hydroxide	97,800 gallons	pH Adjustment
Ferric Chloride	10,000 gallons	Clarifying Agent
Klaraid (coagulant)	242,600 pounds	Clarifying Agent
Polyfloc (polymer)	41,400 pounds	Clarifying Agent

Question No. 4: When did the Discharger construct the WWTP, and what is its design flow and BOD removal?

Response: pH adjustment commenced in March 2009 and the anaerobic digester was seeded in April 2009. The design flow rate and BOD removal of the WWTP during the peak harvest season are 450 gallons per minute and at least 85% removal, respectively.

Question No. 5: Do the WWTP unit operations have adequate containment to preclude releases of waste constituents to soil in concentrations that may affect water quality or cause nuisance?

Response: The WWTP plant consists of a series of sealed above ground tanks. The site is graded so that any leaks will be contained on-site and can be pumped into the 400,000 gallon concrete sump that is lined with a high density polyethylene (HDPE) liner on the influent side of the WWTP.

Question No. 6: Does the Discharger have backup power to run the WWTP and pond aerators during power outages?

Response: Electrical power for the WWTP and the aeration system in Pond 3 is supplied by an on-site solar power facility. If needed, these components can draw electrical power from the Plant. Electrical power for the aeration systems in Ponds 1 and 2 are supplied by electrical power from the Plant. No other back-up power is available. However, if a power outage occurs, the entire Plant (including grape processing) is shut down and there is not a continuous waste stream requiring treatment.

Question No. 7: What is the Discharger's method(s) of pH control, where does pH control occur, and what is the pH of the monitored wastewater before and after pH control?

Response: Either calcium hydroxide or hydrochloric acid are added to Waste Stream 02 in a concrete sump lined with a HDPE liner on the influent side of the WWTP for pH control. The current MRP does not require monitoring of the pH of Waste Stream 02 prior to and after pH control. However, the average pH of comingled Waste Streams 01 and 02 from 2012 through 2013 was 7.9. The table in Finding 14 of the tentative WDRs (and the appropriate section of the Information Sheet have been revised) have been revised to include the pH data of comingled Waste Streams 01 and 02.

Question No. 8: Does the 176-acre land application area (LAA) include the original 20-acre disposal area?

Response: No, the new HPDE lined Pond 3 was constructed on the original 20-acre parcel.

Question No. 9: Did the Discharger propose to expand its discharge area in its 2012 Report of Waste Discharge?

Response: The 2012 RWD provided information for the discharge as it existed at the time the RWD was submitted. The RWD did not propose to expand the LAA beyond its existing 176 acres.

Question No. 10: When did the Discharger initiate discharge to areas beyond its original 20-acre disposal area?

Response: Records in the Central Valley Water Board's project file indicate Waste Stream 01 had been discharged to off-site orchards in the late 1990's through the late 2000's and Waste Stream 02 discharged beyond the original 20-acre disposal area in the early 2000's.

Question No. 11: Does Revised Monitoring and Reporting Program 86-068 apply to the original 20-acre disposal area or to all or portions of the 176-acre LAA?

Response: Revised Monitoring and Reporting Program 86-068 applies to the entire 176-acre LAA.

Question No. 12: What does soil monitoring data reveal about suitability of LAA soils for crop production?

Response: Soil data collected annually since the WWTP began operation in 2009 are summarized in the table below. The Information Sheet has been revised to include this data.

Average Soil Concentrations (2009 - 2013)

Location	Depth	NO_3-N (mg/kg)[1]	TKN (mg/kg)[1]	Total N (mg/kg)[1]	pH (pH units)	EC (umhos/cm)
Northwest	2 feet	3	206	205	7.4	295
	4 feet	4	155	159	7.4	221
	6 feet	8	99	105	7.3	217
Southwest	2 feet	5	209	213	7.3	360
	4 feet	4	187	191	7.6	283
	6 feet	2	100	101	7.3	430
Northeast (new)[2]	2 feet	180	1,100	1,300	6.3	2,050
	4 feet	67	440	510	5.2	1,170
	6 feet	12	330	340	4.6	3,640
Northeast (old)[3]	2 feet	45	1,250	1,273	5.1	1,633
	4 feet	51	1,015	1,057	4.5	1,463
	6 feet	11	913	923	5.8	1,897
Southeast	2 feet	39	381	415	6.5	563
	4 feet	21	198	218	7.3	342
	6 feet	25	101	123	7.3	446
Background	2 feet	10	375	388	5.2	1,294
	4 feet	6	208	213	7.9	823
	6 feet	3	160	164	8.0	705
Suitable Range	--	<10[4] 10 - 25[5] >25[6]	--	--	5.5 - 7.0[7]	<2,500[8]

1. mg/kg = milligrams per kilogram
2. One sample from 2013 available in the "new" Northeast sample location.
3. Average concentrations from samples collected from 2009 through 2011.
4. Soil NO_3-N concentrations less than 10 mg/kg may be inadequate (Table 9-1, *Western Fertilizer Handbook, Ninth Edition*).
5. Soil NO_3-N concentrations within this range may provide a safe growing environment (Table 9-1, *Western Fertilizer Handbook, Ninth Edition*).
6. Soil NO_3-N concentrations greater than 25 mg/kg may be necessary for some high-yielding plants (Table 9-1, *Western Fertilizer Handbook, Ninth Edition*).
7. Suitable soil pH ranges for wheat and sudan grass from Table 7, *United Stated Department of Agriculture, Soil Quality Test Kit, July 2001*
8. Salt tolerance of wheat and sudan grass from Table 6, *United Stated Department of Agriculture, Soil Quality Test Kit, July 2001*.

The data indicate the soil in the LAA is suitable for crop production of the wheat and sudan grass grown in the LAA. The Northwest and Southwest samples are in areas that have historically been fallow and have not received wastewater. Shortly after the WWTP was constructed in 2009, crops were planted and wastewater discharge was initiated to this area. The "new" Northeast sample is in an area that received wastewater as part of the expansion of the LAA from the original 20-acres to 88-acres in the early 2000's. Only one sample from the "new" Northeast location has been collected and it was in 2013. The "old" Northeast sample is in an area that has historically been used for emergency discharge and did not have crops. In the fall of 2013, excavated soil from the construction of Pond 3 was placed in this area. The excavated soil was leveled and crops were planted and the area now receives wastewater. The Southeast sample is in an area that also received wastewater as part of the expansion of the LAA from the original 20-acres to 88-acres in the early 2000's; however, not as frequently as the area monitored by the "new" Northeast sample.

Data from the "new" Northeast and Southeast samples are most representative of the condition of the LAA after receiving wastewater; however, the elevated concentrations of nitrogen and EC and lower pH values of the "new" Northeast sample likely reflect previous wastewater management and overloading of this area. The requirements of the tentative WDRs, including the submittal of the Nutrient and Wastewater Management Plan (see Response to Requested Revision No. 3) and the monitoring requirements of the MRP, require the Discharger to properly manage wastewater application to the LAA and should improve soil conditions in the "new" Northeast sample area.

Question No. 13: What type of water right does the Discharger hold to Friant-Kern Canal water?

> **Response:** The Discharger's water right to Friant-Kern canal water is unknown. However, the tentative WDRs require the Discharger to comply with the EC effluent limitation regardless of whether or not supplemental irrigation water is available.

Question No. 14: Does the Discharger have any other source of supplemental irrigation water bedsides the Friant-Kern Canal? If so, what is the quality of that water?

> **Response:** There are no other sources of supplemental irrigation water available to the Discharger at this time. However, the tentative WDRs require the Discharger to comply with the EC effluent limitation regardless of whether or not supplemental irrigation water is available.

Question No. 15: What is the screened interval of the Plant's single groundwater supply well?

> **Response:** The water supply well for the Plant is screened between 400 and 800 feet below ground surface.

Question No. 16: Is the Discharger's current flood control infrastructure (e.g., berms) adequate to prevent inundation of the Plant, the WWTP, and the entire LAA during a 100-year flood event?

Response: No base flood elevations have been determined for the portions of the Plant and LAA that are in Zone A, area with a 1% annual chance of flooding. In addition, The Discharger's insurance provider does not require flood insurance for the Plant. The adequacy of the current flood control infrastructure for the Plant and LAA is unknown.

Question No. 17: What changed in the manufacturing process to reduce effluent sulfate concentrations to levels much less than what is evident in groundwater impacted by past discharges?

Response: The use of electro dialysis units in lieu of ion exchange beds to remove cations and anions from reconstituted grape juice has resulted in a decrease in the sulfate concentrations in the Plant discharge. Sulfuric acid was used in the regeneration of the ion exchange units, while a sodium hydroxide/potassium hydroxide blend is used in the cleaning of the electro dialysis units.

Question No. 18: What are the average concentrations of total organic carbon (TOC) in groundwater monitoring wells?

Response: The concentrations of TOC in the groundwater wells are summarized in the table below. The tables in Findings 26 and 27 of the tentative Order (and the appropriate section of the Information Sheet have been revised) have been revised to include the TOC groundwater data.

Total Organic Carbon Groundwater Data

Well ID	Sample Date	TOC (mg/L)
MW-1	2004 - 2007 average	<2.0
MW-1A	October 2013	1.5
MW-2	2004 - 2007 average	3.4
MW-2A	October 2013	0.7
MW-3	2004 - 2007 average	3.4
MW-3A	October 2013	1.4
DW-1	2004 - 2007 average	<2.0

Question No. 19: How many people are employed at the Plant? What is the average salary of the people employed at the Plant?

Response: The Plant employs eight salaried personnel and 55 hourly employees on a year-round basis with the hourly employee work force increasing during the harvest season. The hourly staff are represented by a union with average hourly wages in the top 10% for the area.

Question No. 20: What is the Discharger's annual contribution in taxes to the local and county governments cited in Finding 48?

Response: According to the Kern County Assessor's office web page, the property at 32351 Bassett Avenue was assessed a property tax in the amount of $323,224.20 for 2013.

CENTRAL VALLEY WATER BOARD STAFF CHANGES

Change No. 1: Finding 8 has been revised as follows:

The evaporation process removes approximately 75% of the water from the grape juice to produce "rough" grape juice concentrate. The condensed water separated from the rough grape juice concentrate is discharged to Ponds 1 and 2 (Waste Stream 01) and has a relatively low electrical conductivity (EC) of approximately 100 umhos/cm. ***Waste Stream 01 also includes retentate from the reverse osmosis system that treats the Plant's source water to provide mineral free water to the boiler.*** From Pond 2, Waste Stream 01 mixes with Waste Stream 02 prior to discharging to Pond 3.

The Wastewater Section of the Information Sheet has also been revised to include the updated information regarding Waste Stream 01.

Change No. 2: Finding 9 has been revised as follows:

The rough grape juice is processed further to make a final product based on customer specifications. All wastewaters (other than the condensed water from the evaporative process ***and reverse osmosis retentate*** of Waste Stream 01) from the processes associated with processing rough grape juice into the final product are identified as Waste Stream 02 and include ultrafiltration retentate, boiler blowdown, cooling tower blowdown, process equipment wash water, ~~regenerate from electro-dialysis and ion exchange units~~, ***and*** vacuum pump seal water~~, and reverse osmosis retentate~~. EC data are not available for Waste Stream 02; however, for 2012 and 2013, the EC of combined Waste Streams 01 and 02 ranged from 1,410 umhos~~uhmos~~/cm to 3,300 umhos~~uhmos~~/cm with an average of 2,437 umhos~~uhmos~~/cm.

The Wastewater Section of the Information Sheet has also been revised to include the updated information regarding Waste Stream 02.

Change No. 3: Finding 12 has been revised as follows:

Pond 3 was completed in August 2013 and is lined with a single layer of 40-mil high density polyethylene (HDPE) and has a storage capacity of 65 million gallons. The Discharger submitted a construction quality assurance (CQA) report on 27 September 2013, with an addendum on 4 February 2014, which documents that the pond was constructed in accordance with an approved Design Report. Central Valley Regional Board staff conditionally approved the CQA report in a***n 11 April*** ~~March~~ 2014 letter.

Change No. 4: Finding No. 14 has been revised as follows:

Effluent samples collected from ~~the~~ Pond 2 prior to mixing with canal water are required by Monitoring and Reporting Program Number 86-068. The effluent wastewater analytical results (comingled Waste Streams 01 and 02) from January 2012 through December 2013 are summarized below.

Change No. 5: Finding 40 has been revised as follows:

According to the Discharger, the 176-acre LAA is irrigated every 5 days in the summer; therefore it can be irrigated about 6 times per month. The maximum monthly volume of wastewater applied to the LAA occurs in July and is approximately 32 million gallons. Therefore, approximately 5.3 million gallons of wastewater is applied per irrigation cycle. With an average wastewater BOD concentration of 348 mg/L, the BOD loading of the LAA is approximately 17 pounds per acre ***per day*** per irrigation cycle.

Change No. 6: Finding 45c and the Treatment and Control Practices sub-section of the Information Sheet have been revised to remove the reference that anhydrous ammonia is used for pH control of wastewater. The Discharger discontinued the use of anhydrous ammonia at the site since it increased the nitrogen concentration of the waste stream and required special permitting and reporting requirements by the County.

Change No.7: The Proposed Order Terms and Conditions Section of the Information Sheet has been revised to indicate that Time Schedule Order No. R5-2014-XXXX was adopted by the Central Valley Water Board on XX June 2014 for the discharge.