

Regional Water Quality Control Board  
Central Valley Region Board Meeting  
9 December 2021

Response to Written Comments for the  
Rivermaid Trading Company Fruit Packing Facility  
Tentative Waste Discharge Requirements

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At a public hearing scheduled for 9 December 2021, the Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board) will consider adoption of new Waste Discharge Requirements (WDRs) for Rivermaid Trading Company in San Joaquin County. This document contains responses to written comments received from interested persons regarding the tentative WDRs circulated on 15 June 2021. Written comments were required by public notice to be received by the Central Valley Water Board by 16 July 2021 to receive full consideration. Comments were received from Ms. Jo Anne Kipps on 16 July 2021.

Written comments are summarized below, followed by responses from Central Valley Water Board staff. In addition, staff has made a few minor changes to the tentative WDRs to improve clarity and fix typographical errors.

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**MS. JO ANNE KIPPS COMMENTS**

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**MS. KIPPS COMMENT NO. 1:** Many of my comments concern apparent errors that would have been recognized by supervisory review and corrected by staff prior to Tentative Order issuance. If supervisory staff is too busy for such review, then management should hire a professional writer who is able to perform this review function.

**RESPONSE:** Comment noted.

**MS. KIPPS COMMENT NO. 2:** The Tentative Order uses the same name for both Discharger and Facility. To eliminate ambiguity when referencing either, the Facility name should reflect its function. Finding 1 refers to the Facility as “a fruit processing plant” so it would appear logical to name it “Fruit Processing Plant.” I thought there are CIWQS business rules that Place names (i.e., Facility names) should reflect the facility’s function, not ownership. Not that CIWQS business rules should dictate regulatory decisions, but they do help ensure statewide consistency in nomenclature.

**RESPONSE:** The Discharger recently submitted a revised Form 200 that shows the owner of the Rivermaid Trading Company is All State Packers, Inc. The Tentative WDRs have been revised accordingly.

**MS. KIPPS COMMENTS NO. 3:** Finding 2 should disclose that Rivermaid Trading Company is a California corporation. Also, Findings 4.a and 4.b should be revised (Site Map, Facility Map) to match the legend titles of Attachments B and C (or vice versa). Finding 3 cites the Facility’s address followed by APNs of two parcels, one for the 17.6-acre Facility and the other for the 11-acre LAA. Attachment B, SITE FEATURES MAP,

should identify the APNs of the two parcels cited in Finding 3, and Finding 3 should be revised to read: "..., as shown on Attachments A and B, which are attached hereto."

**RESPONSE:** The attachment descriptions in Finding 4 were revised to match the titles of the attachments. The parcel numbers have been added to Attachment B.

**MS. KIPPS COMMENT NO. 4:** The Tentative Order imposes new requirements for an unregulated waste discharge that has been ongoing since 1979. There are many similar unregulated facilities in the Central Valley Region. I appreciate the priority Central Valley Water Board management places on getting this and other such facilities regulated through individual WDRs (or waivers of WDRs). The Tentative Order does not explain why, after all these decades of noncompliance, the Discharger submitted a RWD in November 2020, along with supplemental information in March 2021.

**RESPONSE:** The Discharger submitted a RWD because they want to use wastewater from the facility to irrigate land application areas. They were likely instructed by San Joaquin County Environmental Health Department to obtain WDRs from the Central Valley Water Board.

**MS. KIPPS COMMENT NO. 5:** The RWD bases its characterization of the discharge on the analytical results of a single sample of commingled wastewater and storm water collected in mid-October 2019 from the Facility's 1.3-MG wastewater pond (Pond). The Tentative Order's terms and conditions relating to groundwater protection, then, hinges on whether that one sample is representative of the Facility's overall discharge.

Wastewater generated through the washing and cold storage of cherries (April - July) and pears (July - October) is discharged to the Pond, which is used to dispose of Facility's storm water. Currently, about seven MG wastewater and eight MG storm water are discharged annually to the Pond (Finding 12). The Tentative Order should disclose the current Pond infiltration rate to groundwater. Given that the Pond is 1.3 acres in size (Finding 11) and the area's average evapotranspiration annual rate is about 51 inches (Finding 26), then the current annual Pond discharge amounts to a net infiltration rate of about 30 feet per year  $[(8 \text{ MG/year} + 7 \text{ MG/year})(3.069 \text{ AF/MG})/(1.3 \text{ acres}) - (51 \text{ inches/year})/(12 \text{ inches/foot}) = 31 \text{ feet/year}]$ . Compared to the infiltration of rainfall and applied irrigation water, the Pond discharge represents a significant source of groundwater recharge.

Historical imagery of the Facility shows that, sometime between 1993 and 2002, the Discharger completed a major Facility expansion and relocated and enlarged the Facility's wastewater pond. And, between March 2016 and March 2017, the Discharger had rooftop solar panels installed on all the Facility's large buildings. The major Facility expansion and recent solar panel installation suggests the Discharger should have had sufficient financial resources to adequately characterize the discharge in its RWD. Yet, it only provided the results of one sample. Information necessary to characterize the discharge could have been requested in staff's response to the RWD and/or through issuance of a 13267 Letter or even a stand-alone MRP.

With only one sample to characterize the discharge, the Tentative Order relies on a small sample of wastewater TDS data from a similar situated facility owned by Delta Packing Company. While instructive, the data are not equivalent to an adequate characterization of the discharge subject to the Tentative Order. There is insufficient technical justification that the one sample taken at the tail end of the pear processing season is representative of the discharge from both the cherry and pear processing seasons, especially for BOD (discussed later). Lacking this justification, the Tentative Order should be tabled this data is obtained and evaluated.

**RESPONSE:** The Central Valley Water Board staff finds that there is enough site-specific information and analytical data (from Rivermaid Trading Company and from nearby Delta Packing) to make decisions regarding the protection of groundwater. Concentrations of salts and organics at both Facilities are considered low (source water and effluent concentrations are similar) and the depth to groundwater beneath Rivermaid Trading Company is greater than 80 feet below ground surface. The low concentrations, the type of food processing operations, and depth to groundwater were used to characterize the Facility's discharge as having a low threat to groundwater quality. In addition, the RWD states that "*A sample was collected from the on-site wastewater pond on October 14, 2019. At this time of the year, the pond was predominately wastewater.*" In discussions with the Discharger, they considered this sample to be the best representation of the quality of wastewater (worst-case scenario) because the wastewater was not diluted by storm water. Concentrations of constituents between the two facilities are similar. No changes have been made.

**MS. KIPPS COMMENT NO. 6:** Source water use (14 MG/year, Finding 8) and wastewater generation (7 MG/year, Finding 12) vary significantly. There appears to be no method to accurately measure Facility wastewater flow, so the 7 MG is an estimate. Can staff explain what happens to the 7 MG/year of source water that the Facility uses but is apparently not discharged as wastewater to the Pond?

**RESPONSE:** The Discharger is required to install a flow meter to measure the volume of wastewater from the wastewater pond to the LAAs (Provision H.1.b).

Based on discussions with the Discharger and their consultant, the difference is largely due to water loss from the operation of the evaporators and coolers. Because some of the units are old, they were unable to get manufacturer specifications on water loss, so the consultant provided their own calculations and estimates. In addition, municipal water is also used for the restrooms (which discharge to the septic system regulated by San Joaquin County) and for irrigation of on-site landscaping. The volume and specific uses of municipal water are not regulated by these WDRs.

**MS. KIPPS COMMENT NO. 7:** Finding 12 characterizes daily average influent flow as 20,000 gpd. While not stated as such, the annualized value is presumably all wastewater  $[(7 \text{ MG/year}) \times (1,000,000 \text{ gallons/MG}) / (\text{year}/365 \text{ days}) = 19,178 \text{ gpd}$ , round to 20,000 gpd]. Recommend finding clarify this. Also, when characterizing average daily discharge flow from industrial facilities, it is customary to divide the total flow generated

during a given time interval (year, month) by the number of days the facility was operating during this time interval. Why wasn't this approach used to characterize the Facility's average daily discharge flow?

**RESPONSE:** The flow volume referenced above does not include storm water runoff discharged to the pond, which is estimated at 7.8 MG annually. Finding 13 has been corrected to show 40,548 gpd.

$([7.8 \text{ MG}_{\text{sw}} + 7 \text{ MG}_{\text{ww}}] * 1000000) / 365 \text{ days} = 40,548 \text{ gallons/day}$ . The flow limit of 50,000 gallons per day gives the Discharger some flexibility in operations. Because approximately half of the flow volume is from storm water, it is unlikely that discharge will regularly reach that volume. If the 15 MG of combined wastewater and storm water is discharged for the year, the water balance indicates the pond and land application area will be able to manage that volume. Processing season is generally March through October, storm water is discharged generally October through April, and condensate is discharged year round.

**MS. KIPPS COMMENT NO. 8:** Finding 13's Table 3, Wastewater Quality, lists the concentrations of various constituents of concern in a sample of Pond water collected in mid-October 2019. It also identifies the WQOs for most of these constituents, information that is duplicated in the Antidegradation Analysis Finding 53 (more on this later). The units for Sodium and Chloride in Table 3 are presented as micrograms per milliliter instead of milligrams per milliliter (the same mistake occurs in Finding 53's Table 4). Table 3 shows that the sample's iron and manganese concentrations exceed their respective WQOs (Secondary MCLs). Total nitrogen is the sum of TKN (ammonia, organic and reduced nitrogen) and nitrate-nitrite. Table 3 cites pond wastewater TKN as 5.7 mg/L and Total Nitrogen as only 1.2 mg/L. Is there an explanation for this?

**RESPONSE:** The units in Table 3 are correct as presented. Table 3 shows that iron is less than the WQO and manganese slightly exceeds the WQO. However, manganese does not appear to pose a threat to first encountered groundwater because the depth to groundwater is greater than 80 feet bgs.

Different analytical methods were used to analyze the wastewater sample and *may* be the reason for the minor differences.

Extraction Method E415.3: Total Nitrogen = 1.2 mg/L.

Extraction Method E351.2: TKN = 5.7 mg/L

Extraction Method E300.1: Nitrate as N = ND (reporting limit of <0.1 mg/L is used in Table 3.)

It is unknown as to why the concentration of total nitrogen is less than the concentrations of TKN in this sample. However, the total nitrogen of the effluent is anticipated to be approximately the sum of TKN and nitrates as N or approximately 6 mg/L. Notes has been added to Table 3 highlighting the different analytical methods.

**MS. KIPPS COMMENT NO. 9:** The low value of 15 mg/L for BOD in Table 3 is likely not representative of the overall discharge, given that the Pond water sample was collected

at the tail end of the pear processing season following months of detention during which BOD naturally attenuated. It is unlikely that this low value is representative of the overall discharge. More likely, discharge BOD is significantly greater than 15 mg/L.

It is disingenuous to include the 15 mg/L BOD result without presenting BOD data from a similar situated facility (like the Antidegradation Analysis does for TDS). Pond water BOD data from Delta Packing Company, a similar situated facility cited in Finding 53.a, reveals higher BOD concentrations. Finding 13 of WDRs Order R5-2016-0029 for Delta Packing Company and John Tecklenburg presents the following pond wastewater BOD results: 230 mg/L (“Pre-Season Sample”), 23 to 130 mg/L (three Mid-Season Samples), and 61 mg/L (Post-Season Sample). The single BOD result of 15 mg/L makes it appear that the Pond discharge poses a low risk to groundwater from organic overloading compared to most unlined surface impoundments of food processing wastewater. It is more likely that the Pond discharge threatens to cause or contribute to groundwater impacts from organic overloading (e.g., unreasonable degradation for alkalinity and hardness, both contributors to TDS, as well as iron and manganese concentrations exceeding WQOs). This highlights the need for a complete characterization of the discharge prior to the drafting of the Tentative Order.

**RESPONSE:** The BOD concentrations in the effluent do not appear to be a concern at this time. Using the following conservative values of 250 mg/L for BOD concentration from Delta Packing; a 4-day irrigation cycle (2 days of irrigation at 50,000 gallons per day and 2 days of drying time); and an irrigation area of 1 acre, the BOD loading rate is 52 lbs/ac/day/irrigation cycle, which is below the proposed loading limit. It should be noted that the concentration of 230 mg/L from Delta Packing Company referenced in the comment, is a sample from a sump, before the wastewater discharges to the pond. The sample location for compliance at Delta Packing is the wastewater pond because pond systems, if operated correctly, can reduce BOD concentrations and is therefore a better representation of the quality of wastewater discharged to land. Concentrations of BOD in the wastewater pond during Delta Packing’s processing season range from 45 to 110 mg/L.

Using the actual concentration detected in the wastewater pond of 15 mg/L from Rivermaid Trading Company, the loading rate would be 3.1 lb/ac/day/irrigation cycle. Delta Packing have not had any odor issues and are in compliance with the BOD loading rates. Therefore, because the processes at both facilities are relatively the same, and the maximum concentration at Delta Packing was used to estimate BOD loading rates at Rivermaid, BOD in effluent does not appear to be a concern at this time. The BOD concentration is reasonable, consistent with other fruit washing facilities, and other food processing facilities.

**MS. KIPPS COMMENT NO. 10:** Finding 14 indicates the Discharger proposes to use wastewater to irrigate on-site landscaping and an 11-acre LAA cropped with alfalfa and “native vegetation” (euphemism for weeds?). Because of the potential for employee contact with on-site landscaping, the tentative Order should provide data on wastewater quality *prior* to Pond discharge confirming the absence of cross-connection contamination. Or, alternatively, the Order should require a short sampling period (say,

weekly for four weeks) during which Pond influent is monitored for total and fecal coliform (and perhaps caffeine). The Order should prohibit wastewater discharge to on-site landscaping until this sampling period is concluded and Pond influent data show shows no cross-contamination with the Facility's domestic wastewater collection system. The area encompassed by on-site landscaping appears to be around one acre, according to Google Earth images. Given the prescribed setback of 25 feet from the edge of the LAA to property boundary (Land Application Area Specification 5), the Discharger may find it more trouble than it's worth to install separate dedicated pipelines and sprinklers to use process wastewater to irrigate on-site landscaping.

**RESPONSE:** There is no known or reported cross-connection with the on-site domestic wastewater system, which is regulated under permit with San Joaquin County. Cross contamination between the wastewater system and domestic system is highly unlikely. The approximate locations of the domestic system have been added to Attachment B.

The setbacks shown in Table 8 are specifically for the LAAs, not the on-irrigation areas. Due to on-going drought conditions in the State, using wastewater for on-site irrigation purposes instead of drinking water reduces demands on potable water supplies. In addition, Discharge Prohibitions A.8, 9, and 10 prohibit cross contamination between process wastewater and domestic wastewater.

**MS. KIPPS COMMENT NO 11:** Finding 16 indicates that an on-site irrigation well will supply supplemental irrigation water to meet crop demand. The RWD should have provided information on this well's water quality and construction details, including annular seal depth and perforation interval(s). If it did, this finding should summarize this information.

**RESPONSE:** Since issuance of the Tentative Order, the Discharger has clarified that when supplemental irrigation is needed, they will use municipal water provided by the City of Lodi. Municipal water quality is presented on Table 1.

**MS. KIPPS COMMENT NO 12:** Finding 20 summarizes local land uses. This finding should also mention the nearby cemetery and identify the number of wineries and other food processors regulated by the Central Valley Water Board operating in the discharge vicinity (say, within a 0.5-mile radius). This information discloses the potential for cumulative impacts to groundwater from other winery and food processing wastewater discharges near the Facility.

**RESPONSE:** Finding 21 has been amended to reflect the presences of other food processors and wineries in the surrounding area. It is beyond the scope of WDRs to include all individual facilities in the area potentially impacting groundwater. If groundwater impacts from the discharge are occurring, enforcement occur from Central Valley Water Board staff. In addition, the CV SALTS program will address regional groundwater impacts by bringing together coalitions of agriculture, cities, industry, and regulatory agencies to find solutions to the nitrate and salt problems in the Central Valley.

**MS. KIPPS COMMENT NO 13:** Findings 24 and 25 should be removed because information on surface water and groundwater beneficial uses in the discharge area is duplicated in Basin Plan Implementation Findings 43 and 44. Finding 43 also locates the Facility within the San Joaquin Delta Hydrologic Area, presumably as depicted on the interagency hydrologic maps prepared by the Department of Water Resources in August 1986. If so, the finding should state as much. Given recently mandated groundwater basin management efforts, the finding might also indicate the Facility is within the boundaries of the Eastern San Joaquin Subbasin Groundwater Stability Plan.

**RESPONSE:** Duplicated findings 24 and 25 have been deleted. Finding 43.a states *“the Facility falls within Groundwater Sub-Basin 5-022.01 (San Joaquin Valley – Eastern San Joaquin), a Priority 2 Basin”*.

**MS. KIPPS COMMENT NO 14:** Finding 28 characterizes groundwater depth in the discharge vicinity based on data from DWR’s “Information Center Interactive Map Application website,” which is hyperlinked to DWR’s Groundwater Basin Boundary Assessment Tool. This tool does not appear to provide information on individual groundwater wells. The hyperlink is followed by another website in parentheses (<https://gis.water.ca.gov/app.bbat>) is no longer valid (404 – File or directory not found.) Recommend clarifying the source of the cited groundwater depth data.

**RESPONSE:** The link has been updated to <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>

**MS. KIPPS COMMENT NO 15:** Finding 50 refer to Finding 14 for “list of crops...that are or could be grown in the area affected by the discharge.” Finding 14 identifies only alfalfa and landscaping as “crops” grown on the Facility’s grounds and LAA. Recommend including a finding describing crops grown in the discharge vicinity that cites DWR land use data, which identifies deciduous fruit and vineyard as the dominant crops currently grown in the discharge vicinity (see <https://gis.water.ca.gov/app/CADWRLandUseViewer/>).

**RESPONSE:** Finding 15 has been revised to include crops grown in the discharge vicinity include, but are not limited to, grapes, almonds, walnuts, cherries, tomatoes, potatoes, and hay (see <https://gis.water.ca.gov/app/CADWRLandUseViewer/>).

**MS. KIPPS COMMENT NO 16:** Finding 51 is the Salt and Nitrate Control Programs Reopener finding regarding the Tentative Order’s implementation of new Basin Plan amendments for CV-Salts. Another Finding 51 follows this finding and appears to duplicate information provided in the last paragraph of the first Finding 51.

**RESPONSE:** Second Finding 51 has been deleted and the finding numbers have been updated.

**MS. KIPPS COMMENT NO 17: Antidegradation Analysis.** Finding 53 describes the results of staff’s Antidegradation Analysis for TDS, Nitrate, and Sodium and Chloride. The analysis relies on one sample of impounded commingled wastewater and storm

water collected during the tail end of the pear processing season. There is no information to indicate this sample is also representative of cherry processing wastewater. The tentative Order requires discharge monitoring and may be reopened and revised should data show the discharge is not what was represented in the RWD. However, this is unlikely given the current workload of Central Valley Water Board staff. Chances are that, once adopted, the Tentative Order will regulate the discharge for the next 20 years. This highlights the need for RWDs to include a complete characterization of the discharge.

**RESPONSE:** As discussed in previous response to comments (see responses to comments 5 and 9), Central Valley Water Board staff find that sufficient data and site-specific information are available to regulate the discharge for the protection of groundwater.

**MS. KIPPS COMMENT NO 18:** The Pond water sample described in Finding 13 contained 307 mg/L TDS, 26 mg/L sodium, and 14 mg/L chloride. Finding 53's Antidegradation Analysis for TDS compares the single result of 307 mg/L against similar results of three wastewater pond samples from Delta Packing Company. The single Pond water sample also contains iron and manganese in concentrations exceeding their respective WQOs. Future monitoring may confirm iron and manganese concentrations in Pond water consistently approach or exceed WQOs. Iron and manganese concentrations in Delta Packing Company's pond wastewater also exceed WQOs (WDRs Order R5-2016-0029, Finding 13). This evidence suggests iron and manganese are waste constituents of concern that have the potential to degrade groundwater. The Tentative Order's Antidegradation Analysis does not, but should, include these two constituents (see, for example, Finding 57.b in WDRs Order R5-2016-0029).

**RESPONSE:** The concentration for iron shown on Table 3 is less than the WQO. Given the depth to groundwater is greater than 80 feet bgs and the low concentrations of iron and manganese, impacts to groundwater are expected to be negligible. The Discharger is enrolled in the CV-SALTS program under the P&O Study, which will help identify specific salt concerns and address salinity issues on a regional level.

**MS. KIPPS COMMENT NO 19:** *Inconsistent WQOs for salinity constituents.* The Upper MCL for TDS is 1,000 mg/L. The Secondary Recommended MCLs for TDS and chloride are 500 mg/L and 250 mg/L, respectively. The lowest agricultural water quality goals for EC, sodium, and chloride are 700 umhos/cm, 69 mg/L, and 106 mg/L, respectively. The Analysis uses the correct WQOs for nitrate and TKN. However, it uses the Upper MCL for TDS, the Recommended MCL for chloride, and the lowest agricultural water quality goals for EC and sodium. The intent of the Antidegradation Policy is to maintain the highest water quality for the maximum public benefit. The Central Valley Water Board should not "give away the store" to a private for profit business that since 1979 had conducted an unauthorized waste discharge and only recently submitted a RWD that failed to properly characterize the discharge. Unless technical justification is provided, the WQOs for the identified constituents of concern should be: 700 umhos/cm EC, 500



mg/L TDS (or, preferably a lower value corresponding to an EC of 700 umhos/cm), 10 mg/L each for Nitrate as N and for TKN, 69 mg/L sodium, and 106 mg/L chloride.

**RESPONSE:** The WQO for the identified constituents for concern for the Antidegradation Analysis are: 500 mg/L for TDS [Recommended Secondary MCL (revised from tentative WDR)]; 10 mg/L for nitrate as nitrogen [Primary MCL (and TKN for comparison purposes)]; 250 mg/L for chloride [Recommended Secondary MCL]; and 69 mg/L for sodium [Agricultural Water Quality Goal]. Effluent concentrations for these constituents were less than their corresponding WQOs, therefore indicating the discharge will comply with the Antidegradation Policy.

The WQOs used throughout the WDRs are not the Groundwater Limitations. The Groundwater Limitations in these WDRs state:

Release of waste constituents from any portion of the Facility and LAAs shall not cause or contribute to groundwater containing constituent concentrations in excess of the concentrations specified below or in excess of natural background quality, whichever is greater:

1. Contain constituents in concentrations that exceed either the Primary or Secondary MCLs established in Title 22 of the California Code of Regulations, excluding salinity since the Discharger has chosen the Alternative Option for the Salt Control Program and is in good standing with the P&O Study.

**MS. KIPPS COMMENT NO 20:** The Tentative Order's Finding 53 compares the TDS value of 307 mg/L of one sample to the average source water TDS of 271 mg/L, and concludes the discharge is "unlikely to impact groundwater" for TDS. The Tentative Order establishes an effluent limitation of 600 mg/L for annual average TDS concentration without justifying why the limitation should be so much higher than discharge TDS, as currently characterized. Again, another example of why a complete discharge characterization is necessary for a RWD to be determined complete.

**RESPONSE:** Four samples analyzed for TDS were used in the evaluation in Finding 46; not one sample. Three samples were from Delta Packing and one sample was from Rivermaid Trading Company. The conclusion that TDS in effluent will not likely impact groundwater quality was based on the TDS effluent concentrations from four samples, concentrations of TDS in source water, and the depth to groundwater. In addition, because data from Delta Packing was used in the characterization of effluent quality for Rivermaid Trading Company, the same flow-weighted annual average effluent limit was set for both facilities for consistency between similar food processors with similar wastewater quality. Because groundwater in the area is deep (approximately 80 to 100 feet bgs) and concentrations in effluent are low, TDS in effluent is unlikely to degrade groundwater; however, this Order establishes a performance-based effluent limit for TDS to ensure reasonable, feasible, and practical efforts are implemented to control salinity and maintain existing effluent

concentrations since Rivermaid has elected to participate in the P&O Study of CV-SALTS.

**MS. KIPPS COMMENT NO 21:** Finding 54 lists two best management practices: (1) solids capture (via screened floor drains) and off-site disposal and (2) even wastewater application over the LAA. Finding 55 inappropriately elevates these arguably bare-bone BMPs as BPTC measures and concludes these will be sufficient to “minimize the extent of water quality degradation resulting from the Facility’s operation and discharge.” This finding makes this conclusion without

- A complete characterization of the discharge and accumulated Pond sludge for all waste constituents of concern
- An estimate of the annual Pond wastewater infiltration rate (feet/year)
- Evidence indicating waste constituents are not accumulating in Pond bottom soils to the extent that threatens violation of Discharge Prohibition A.3 regarding the discharge of designated waste.

Arguably, BPTC measures that would “minimize the extent of water quality degradation resulting from the Facility’s operation and discharge” include periodic monitoring of pond bottom soils to assess the extent to which waste constituents are accumulating in the soil profile in concentrations that threaten to unreasonably degrade groundwater. If such monitoring confirms this threat, the Tentative Order should include a provision to respond to this turn of events. The provision should require the Discharger to cease discharge to the Pond until such time it or a replacement pond is equipped with a liner similar to that specified in the State General Winery Order. Because lining the Pond would essentially cease Pond infiltration, the Discharger will also have to demonstrate its 11-acre LAA is sufficiently sized to dispose of all the Facility’s wastewater and storm water flows in accordance with the Tentative Order’s terms and conditions.

**RESPONSE:** In response to the bulleted list above, the pond sludge has been characterized and the information was included in the RWD. Finding 20 was added to the Tentative Order to include this information. The data represent how the pond was managed while unregulated, but once the Tentative WDRs are adopted, the Discharger will be required to implement better pond management procedures, including regular pond monitoring (as required in the Monitoring and Reporting Program [MRP]), wastewater sampling (as required in the MRP), the submittal a Sludge Cleanout Plan (Provision H.1.b), and monitoring the sludge accumulation (Discharge Specification D.13).

The second bullet refers to the percolation rates, which have been added to the WDRs as Finding 12. Percolation rates in locations surrounding the pond ranged from >100 to 36.6 inches per hour.

As stated in the Water Code, in order to be identified as a designated waste (for nonhazardous waste), the waste must consist or contain pollutants that could be released at concentrations exceeding applicable water quality objectives, or that could reasonably be expected to affect beneficial uses of the waters. Central Valley

Water Board staff has determined that the effluent is not considered “designated waste” based on the following:

- Constituent concentrations in effluent from both facilities (Rivermaid and Delta Packing) are considered low (less than WQOs with the exception of manganese). Manganese is not expected to impact groundwater (see response to comment 18). The sludge has been characterized and the information is included in the RWD and added as Finding 20 in the Tentative Order. In addition, the pond is not the final disposal location. All sludge and solids are hauled off-site for disposal at a licensed disposal facility and volumes of residual solids generated and disposed of is required to be reported in the quarterly monitoring reports.
- The depth to groundwater (>80 feet bgs) beneath the Rivermaid Trading Company provides sufficient separation between first encountered groundwater and the base of the pond and LAAs.
- The constituent loading at the bottom of the wastewater pond generally occurs in all ponds, resulting in the need for the sludge monitoring and removal requirements listed in response to bullet 1, which when implemented, could prevent or limit excessive loading. In addition, an approximate 12-foot thick confining layer was identified between 6 and 26 feet bgs (depending on the specific borehole) which will likely slow infiltration from the bottom of the pond to groundwater.

Therefore, the discharge is not reasonably expected to affect beneficial uses of the waters of the state.

Additional restrictions or requirements may be required from findings and conclusions of the P&O Study of the CV-SALTS program. The WDRs required the Discharger to submit a Sludge Cleanout Plan (Provision H.1.a) to ensure compliance with this Order.

**MS. KIPPS COMMENT NO 22:** Finding 62, the Title 27 exemption finding, shows the pitfalls of using a template for Tentative Orders. I have recently communicated my concern to management about the trend in recent WDRs to abbreviate past Title 27 boilerplate findings to almost an afterthought and recommend for inclusion the following new findings:

1. California Water Code (CWC) Section 13173 defines designated waste as either:  
*[definition of designated waste from comments are not included here]*
2. Release of designated waste is subject to full containment pursuant to the requirements of Title 27. Section 20090(b) of Title 27 exempts discharges of designated waste to land from Title 27 containment standards provided the following conditions are met:
  - a. The applicable regional water board has issued waste discharge requirements, or waived such issuance;

- b. The discharge is in compliance with the applicable basin plan; and
- c. The waste is not hazardous waste and need not be managed according to Title 22 as a hazardous waste.

A site-specific finding should follow that provides the technical justification for exempting the Pond discharge from Title 27 prescriptive standards.

**RESPONSE:** The text of applicable statutes and regulations need not be reproduced or paraphrased in WDRs Order. A simple citation will suffice in most cases. In administrative law, findings are declarations of fact that support the adoption of an administrative order (i.e., the requirements). The contents of statutes and regulations exist and are applicable (or are inapplicable) irrespective of whether they are included in the WDRs Order; such boilerplate is unnecessary and should be omitted wherever possible.

The substantive requirements of the Title 27 section 20090(b) wastewater exemption, subdivision (b)(1) does not warrant any separate discussion in a WDRs Order—the very existence of which is manifestly apparent. As for subdivision (b)(2), it is provided elsewhere in the WDRs Order that the WDRs implement the applicable water quality control plan. Finally, with respect to subdivision (b)(3), there is no serious contention that the wastewater needs to be managed as a “hazardous waste”.

Thus, where the Board is adopting WDRs for non-hazardous wastewater discharges, the only material issue regarding the applicability of Title 27 is whether the subject wastewater can be discharged in a manner that complies with the water quality control plan. (See Cal. Code Regs., tit. 27, §20090, subd. (b)(2).) If wastewater can be discharged, directly or indirectly, in accordance with the water quality control plan, it is exempt from management under Title 27. (See *id.*, §20090, subd.(b)(2).) Conversely, if it cannot be discharged to groundwater in accordance with the applicable water quality control plan, it must be contained within a waste management unit per Title 27. (*Id.*, § 20200, subd. (a).) These options are more or less mutually-exclusive.

“Designated waste” is defined in relevant part as “[n]onhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan.” (Wat. Code, § 13173, subd. (b).) In other words, “designated waste” in this context is wastewater capable of being indirectly discharged [released] from a surface impoundment under ambient conditions, and in doing so, are expected to directly affect beneficial uses [i.e., violate the water quality control plan]. Classification of wastewater as a “designated waste” is done on a case-by-case basis, and can often be dependent on the concentration of constituents in wastewater, as well as the permeability of the impoundment itself.

Ordinarily, temporary ponds are not regulated under Title 27. Although such ponds are not *per se* exempt from Title 27, the circumstances are often such that temporary storage does not threaten a sufficiently significant release to directly affect beneficial uses.

**MS. KIPPS COMMENT NO 23:** Finding 63 should ideally be tailored for the discharge situation (i.e., the Facility has no dedicated storm water basins).

**RESPONSE:** Finding 63 was revised as shown:

All storm water at the Facility is collected in ~~the storm drains water basin or~~ , commingled with process wastewater, and discharged *to the wastewater pond and then* to the LAAs.

**MS. KIPPS COMMENT NO 24: IT IS HEREBY ORDERED.** Terminology used in this section should ideally match that presented in the findings. For example, Flow Limitation B.1 refers to the Pond as a “wastewater treatment pond.” Granted, passive treatment for BOD and nutrient removal does occur in Pond, but information in the Tentative Order suggests that the Discharger doesn’t operate the Pond for treatment, but for disposal (and now for storage prior to reuse on a new cropped LAA). Perhaps designate the unlined wastewater pond as “Pond” from the start and use that term throughout the Tentative Order. The second sentence in Flow Limitation B.1, “Flows will be calculated as a portion of the total flow, which will include storm water and process wastewater and excludes supplemental irrigation water.” What is meant by “will be calculated as a portion of the total flow?”

**RESPONSE:** The text has been modified to consistently refer to the pond as a wastewater pond. The total flow will include storm water and process wastewater. If supplemental irrigation water is added to the pond, that volume will be included in the total flow (and was evaluated as part of the water balance). If irrigation water is discharged directly to the LAAs, then that volume does not need to be included in the total flow. The flow volume is measured as wastewater leaves the pond, prior to discharging to the LAAs. The hydraulic loading rate from each source to the LAAs is included in the Routine Monitoring Section of the MRP.

**MS. KIPPS COMMENT NO 25:** Because the vast majority of wastewater and storm water discharged to the Pond infiltrates to groundwater, it is more appropriate to establish the effluent flow limitation to the combined flow of wastewater and storm water entering the Pond. Should the Tentative Order be adopted in its current form, I predict that the “effluent flow” to the LAA will be considerably less than the 15 MG annual rate allowed by the Tentative Order. Unless technical justification is provided, the effluent flow limitation should apply to Pond influent flow. And, the MRP should require the Discharger to install and operate another meter to monitor Pond influent flow. Monitoring both Pond influent *and* effluent flow is necessary to estimate the amount of impounded wastewater and storm water that infiltrates annually to groundwater.

**RESPONSE:** Percolation is an acceptable disposal method under the appropriate conditions, such as low concentrations of constituents and depth to groundwater, as it applies to the antidegradation analysis. Wastewater constituents are required to be monitored in the wastewater pond as part of the MRP. The Discharger is required to maintain pond conditions to prevent nuisance conditions and overtopping the berms (2-feet of freeboard is required at all times which limits the volume of water that can be in the pond). The volume of wastewater applied to the LAAs is regulated to prevent flooding, oversaturation, the mobilization of metals, and wastewater migrating off-site. This approach is consistent with WDRs for other food processors.

**MS. KIPPS COMMENT NO 26:** Effluent Limitation C.1 states:

The total volume of treated wastewater and contact storm water in the wastewater pond shall not exceed an **TDS annual average concentration of 600 mg/L**. The FDS flow weighted annual average is based on total flow and concentration of wastewater discharged.

This limitation needs work. Perhaps something like:

The 12-month rolling average TDS of pond wastewater shall not exceed 600 mg/L  
Compliance with this limit shall be determined monthly.

**RESPONSE:** The FDS reference has been corrected to state TDS. The requirement in the WDRs for effluent limits are set based on annual flow weighted average and is a performance based effluent limit since the Discharger has selected to participate in the P&O Study. The purpose of this limit is to ensure the Discharger is implementing appropriate performance-based measures at the Facility based on the performance of the site.

**MS. KIPPS COMMENT NO 27:** Discharge Specification E.13 does not specify when the Discharger is to begin monitoring of pond sludge accumulation. Perhaps specify the beginning date with, for example, "within 60 days of Order adoption." Also, because Pond sludge is a concentrated source of waste constituents and its removal a potential odor and fly nuisance, the Tentative Order should include a finding discussing Pond sludge accumulation rates and removal practices.

**RESPONSE:** Sludge accumulation monitoring will begin in 2022. In addition, Provision H.1.a requires the submittal of a Sludge Cleanout Plan at least 180 days prior to any sludge removal and disposal.

**MS. KIPPS COMMENT NO 28:** Discharge Specification E.10 cites E.7 and E.8 (should be E.8 and E.9).

**RESPONSE:** The text has been corrected.

**MS. KIPPS COMMENT NO 29:** There should be a discharge specification regarding cross connections along the lines of:

No physical connection shall exist between wastewater piping and any domestic water supply or domestic well, or between wastewater piping and any irrigation well that does not have an air gap or reduced pressure principle device.

**RESPONSE:** Discharge Prohibitions A. 8, 9, and 10 and the Standard Provisions and Reporting Requirement already prohibit the discharge of domestic wastes to the process wastewater treatment system and the discharge of process wastewater to the septic system. No additional requirements are necessary.

**MS. KIPPS COMMENT NO 30:** Groundwater Limitation preface should read: "Release of waste constituents from any portion of the facility *and the LAA* shall not cause groundwater to:"

**RESPONSE:** The preface has been revised as noted; however, as stated in Finding 2, the LAA is a portion of the facility.

**MS. KIPPS COMMENT NO 31: Monitoring and Reporting Program.** The Flow Monitoring section refers to a compliance flow meter location depicted in Attachment C. At this location, the flow meter would monitor flow discharged from the pond to the LAA (or on-site irrigation). The Flow Monitoring section begins with, "When wastewater is discharged to the pond, the Discharger shall monitor wastewater flows from the" cited flow meter location. If the intent is for the monitoring data to show compliance with Effluent Flow Limitation B.1, then the section should read: "When wastewater is discharged to *from* the pond...." And, again, what is meant by "Flows will be calculated as a portion of total flow?"

**RESPONSE:** The text has been corrected to state "from" the pond. The flow volume will include storm water and process water, and only include supplemental irrigation water if it is added directly to the wastewater pond.

**MS. KIPPS COMMENT NO 32:** As mentioned previously, the effluent flow limitation should apply to Pond influent flow and the MRP should require a meter to monitor this flow (also update Attachment C).

**RESPONSE:** In response to the flow limit, please see the response to comment 25. The Discharger is required to install a flow meter to measure the volume of wastewater discharged to the LAAs, as required by Provision H.1.b in the WDRs.

**MS. KIPPS COMMENT NO 33:** The Tentative Order establishes Discharge Specification E.7 concerning the minimum Pond DO content. Yet, the MPR does not, but should, require Pond DO monitoring.

**RESPONSE:** DO monitoring has been added to the MRP.

**MS. KIPPS COMMENT NO 34:** The MRP should require the Discharger to estimate and report the annual net infiltration rate of wastewater and storm water from the Pond in feet/year (e.g., by means of an annual water balance). Also, the MRP should require annual monitoring of the Pond soil profile to a minimum depth of six feet bgs. The soil

samples should be analyzed for the typical waste constituents of concern, including TKN, nitrate, salinity (TDS or EC), iron, manganese, and total organic carbon. Annual reports should include a summary of this data and an evaluation of the extent to which the existing Pond discharge threatens to unreasonably degrade groundwater.

**RESPONSE:** Infiltration is an acceptable means of disposal, based on site conditions and wastewater quality and as long as it complies with the Basin Plan and Antidegradation Policy. Due to the low concentrations in wastewater in the pond, the additional monitoring and reporting suggested are not warranted at this time. The scope of monitoring may be reevaluated later under the CV SALTS program.