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## Comments on Tentative Waste Discharge Requirements Order for Constellation Brands U.S. Operations, Inc., Mission Bell Winery, Madera County

The subject tentative order, issued 6 June 2025, proposes to update and rescind Waste Discharge Requirements (WDR) Order 95-164 for Constellation Brands U.S. Operations, Inc. (Discharger) Mission Bell Winery (Facility). Below are my comments and recommendations. For brevity, the word, "Finding" is abbreviated to "F."

F1 This finding indicates the Discharger is a California corporation. The Discharger is a domestic business corporation registered in the State of New York. A recent article in Wine Business reports that Constellation Brands Inc. "is in negotiations to sell its entire wine portfolio to two other top producers in a deal that would see the fifth largest U.S. company throw in the towel on what's been a brutal fight for share in a decreasing wine market."<sup>1</sup>

*Comment:* Revise Finding 1 to indicate the Discharger is a domestic business corporation registered in the State of New York.

*Questions:* What are the Discharger's plans for the Facility? Is it planning to sell the Facility to Delicato Family Wines as reported in a recent decanter.com article?<sup>2</sup>

- F9 Suggest revise 1<sup>st</sup> sentence to read: "The most recent prior *current* WDRs, Order 95-164, were *was* issued to Canandaigua West, Inc…."
- F14 This finding indicates that about 94 additional acres are available outside of pivot-sprinkler Fields H, I, and K to dispose of wastewater via flood irrigation. However, the combined acreage of the "Flood Fields" identified in Attachment D is about 38 acres (or 46 acres if the unlabeled 8-acre polygon northeast of the Facility is a Flood Field).

*Comment:* The tentative order's Discharge Prohibition B.3 limits the discharges of wastes to locations identified in the findings (and presumably in the LAAs identified in Attachment D). Unless the finding is revised to indicate that areas within the Discharger's property other than the LAAs identified in Attachment D may be developed into Flood

<sup>&</sup>lt;sup>1</sup> Constellation Eyeing Exit from Wine Business, by Sarah Brown, Mar 4, 2025. Wine Business, https://www.winebusiness.com/news/article/299062

<sup>&</sup>lt;sup>2</sup> See <u>https://www.decanter.com/wine-news/constellation-brands-may-offload-its-entire-wine-portfolio-552133/</u>

Fields, the finding should be revised to identify the additional area available for wastewater disposal as 46 acres and refer to the Flood Fields labeled in Attachment D. And, as appropriate, Attachment D should be revised to identify the unlabeled 8-acre polygon northeast of the Facility as a Flood Field, and the tentative MRP revised to recognize this Flood Field.

F15 & Finding 4 of the current order reads, in part: "In May 1995, the Discharger estimated the F20 maximum combined waste stream discharge to be 330 million gallons per year."

*Comment:* Suggest revise 1<sup>st</sup> sentence to read: "WDRs Order 95-164 recognized *indicated that in 1995 the Discharger estimated* a maximum combined waste stream discharge of 330 million gallons annually of winery processing wastewater to the LAAs...."

Table 2 – Flow Limitations identifies the current order's seasonal discharge flow limitations (Discharge Specification B.1), along with maximum discharge application depths (Discharge Specification B.4) and minimum drying times (Discharge Specification B.6), both contained in the Central Valley Regional Water Board's Stillage Guidelines, adopted in 1983 and included as an amendment in the Region's Basin Plans. The finding does not explain why Table 2 displays values for maximum depth and drying time. These values, from the Stillage Guidelines, are used along with the area available for wastewater disposal (206 acres) to yield maximum discharge flows for the three seasons indicated. Later, in Finding 20, the tentative order explains the current seasonal flow limitations as being "based on guidelines for applying stillage waste to land, in accordance with the Basin Plan."

The current order does not include a maximum annual discharge flow limitation. However, its seasonal flow limitations technically authorize a maximum annual discharge flow of almost 700 million gallons (MG).

*Comment:* Suggest revise Finding 15 to include a final explanatory sentence: "The flow limitations are based on (1) the maximum depth and drying time identified in Table 2 and the Central Valley Regional Water Board's Stillage Guidelines, adopted in 1983 and included in both Basin Plans; and (2) an LAA of 206 acres."

Finding 20 explains the derivation of the tentative order's proposed annual discharge flow limitation of 255 MGY as based on the average annual discharge flow from 2018 through 2023 plus one standard deviation.

F21 This finding uses the word, champagne, to refer to a line of wine production at the Facility. This word is generally restricted to sparkling wines produced in France, specifically, the Champagne region.

Comment: Suggest revise finding to replace "champagne" with "sparkling wine."

F22 This finding indicates that wine making operations at the Facility ceased in 2023. This implies that the Facility will no longer produce wine and that discharge flows reported for 2023 and 2024 actually reflect what Facility operations may be in the future.

*Question:* If the Facility no longer produces wine, why should the Regional Water Board authorize a discharge flow reflecting the Facility's former use as a wine production facility?

This finding presents average results for various waste constituents/parameters for the years 2022 through 2024. The values presented in Table 4 would be more informative if the table identified the monitoring frequency for each constituent/parameter (e.g., weekly for pH and EC; monthly for BOD<sub>5</sub>, total nitrogen, chloride; and twice yearly for TKN, etc.).

*Comment:* Suggest revise Table 4 to include a column identifying the monitoring frequency for listed constituent/parameter. And, kudos to staff for understanding how to characterize effluent pH data (i.e., using median pH values, not averages as in a few recent tentative WDR orders).

Also, Table 4 indicates annual average effluent chloride ranges from 210 to 254 mg/L. Elsewhere, in Finding 40, Table 9, source water chloride is characterized as being 43 mg/L (Well 1) and 42 mg/L (Well 2). The increase in source water chloride with use appears excessive and deserves explanation. WDR orders for food processors typically include a finding disclosing the type(s) and amount(s) of chemicals used. The tentative order does not include such a finding.

*Comment:* Please revise the tentative order to address the apparent excessive increase in source water chloride with use, and consider including a finding disclosing the type(s) and amount(s) of chemicals used annually in the Facility.

F23 This finding presents an informative characterization of ion exchange analytical results. While it does not include pH, the elevated concentrations of hydroxide and carbonate alkalinity suggests this waste stream has an elevated pH.

The elevated concentrations for total nitrogen and several salinity constituents would appear to qualify ion exchange waste as a designated waste as defined in California Water Code (CWC) section 13173(b): "Nonhazardous 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."

While the tentative order does not identify ion exchange waste as a designated waste under CWC section 13173(b), it nevertheless wisely prohibits the discharge of ion exchange waste to land. Kudos to staff for including this prohibition.

F24 This finding concerns BOD<sub>5</sub> loadings to the LAAs. It presents annual average and peak month loadings for years 2018 to 2023, presumably derived from actual data and not estimates presented in the RWD. It is unclear whether the values presented in Table 6 reflect average values for instantaneous loadings or for cycle average loadings, or something else entirely. *Comment:* Suggest revise finding to clarify how values were calculated for annual average and peak month BOD<sub>5</sub> loadings (i.e., average instantaneous, average cycle, or something else). And revise finding to clarify that the values presented in Table 6 are derived from actual data and not obtained from estimates presented in the RWD.

If the Table 6 values for annual average and peak month BOD<sub>5</sub> loadings reflect cycle averages, then it would appear that the Discharger would be in noncompliance with the tentative order's 100 lbs/ac/day cycle average loading limit (Land Application Area Specification H.6).

F26.a This finding describes the Discharger's 25 July 2024 response letter concerning BOD<sub>5</sub> loading. It cites an area of 202 acres for the pivot-sprinkler LAAs, which reflects the combined acreage identified in Finding 13. It also cites an area of 217 acres as the combined LAA acreage, and 296 acres as the total available LAA acreage. It also indicates that the Discharger used 19 to 85 acres for wastewater disposal in 2023, not the entire 202 acres of pivot-sprinkler LAA.

*Comment:* Why is the finding cite the value of 217 acres for disposal area? What area does this represent, 202 acres of pivot sprinkler fields and 15 acres of flood fields? And, again, do the monthly average BOD<sub>5</sub> loadings reflect the average cycle loadings or simply the total mass of BOD<sub>5</sub> applied over the month to a particular LAA (or all LAAs) divided by the product of LAA area used and number of days in the reporting month?

F26.b This finding concerns the Discharger's 25 July 2024 response letter concerning total nitrogen loading. Using a discharge flow of 109.7 MGY in 2023 (F19), an average total nitrogen concentration of 29 mg/L (F22), and a wastewater disposal area of 85 acres (F26.a), the nitrogen loading in 2023 was about 300 lbs/ac/yr, which is twice the 150 lbs/ac/yr required for pasture grass grown on the LAAs.

*Comment:* Suggest revise finding to also identify the actual nitrogen loading to LAAs in recent years based on SMR data.

F26.c This finding's 3<sup>rd</sup> sentence reads: To further address salinity in the discharge, this Order requires the ion exchange discharge to be dried on-site in the CST SteamBoy system and disposed offsite at an approved disposal facility.

*Comment:* The Regional Water Board typically does not specify in WDR Orders the type(s) of patented treatment process required to meet effluent limitations or discharge specifications. And, the tentative order does not actually specify the use of the CST SteamBoy system. Recommend revise to read: To further address salinity in the discharge, this Order *prohibits the discharge of ion exchange waste to land. The Discharger intends to comply with this prohibition by properly storing this waste (as necessary) prior to onsite drying in the CST SteamBoy system and offsite disposal at an approved facility. requires the ion exchange to be dried on-site in the CST SteamBoy system and disposed offsite at an approved disposal facility.* 

F32 This finding summarizes soil monitoring data for total nitrogen, EC, and pH. The current MRP requires soil monitoring for nitrate-nitrogen, TKN, total nitrogen, pH, and soluble salts determined by the USDA Saturation Extraction Method. The units for all but pH are specified as mg/kg.

*Question:* Did the Discharger monitor soil salinity as EC and not as soluble salts (mg/kg) as required by the current MRP?

*Comment:* The finding's presentation of soil nitrogen data would be more informative if it included nitrate-nitrogen, a constituent that, along with ammonia, comprises plant available nitrogen (PAN). Unfortunately, the current MRP does not require soil monitoring for ammonia. However, Table 8 should include column summarizing nitrate-nitrogen data to disclose the accumulation of soil PAN comprised of this constituent. This would allow for the determination of the amount of nitrate-nitrogen (in terms of lbs/acre) stored in the 6-foot soil profile and available for plant uptake (at least for crops with a root depth of six feet). Elsewhere the tentative order should disclose the amount of soil nitrate-nitrogen in LAA fields and background in terms of lbs/acre within the 6-foot soil profile (e.g., in Finding 33 or in the Information Sheet).

The point is that the tentative order should utilize available soil monitoring data to disclose the amount of nitrate-nitrogen stored in the soil profile in terms of lbs/acre. If the amount exceeds crop uptake rates, then the data would demonstrate the discharge routinely overloads LAA soil with nitrogen.

F33 This finding discusses the soil monitoring results summarized in Finding 32. The current order includes Discharge Specification B.11: The resulting effect of the discharge on soil pH shall be such as to not exceed the buffering capacity of the soil profile. The tentative order carries over this specification as Land Application Area Specification H.7. The soil sampling results show some LAA fields have a soil pH frequently below 7 (as low as 4.3) and at times as high as 9. This data demonstrates that the discharge has exceeded the buffering capacity of the soil profile in violation of the current order's Discharge Specification B.11 and the tentative order's Land Application Area Specification H.7. The tentative order does not recognize the soil pH monitoring data as demonstrating the discharge has exceeded the soil's buffering capacity.

*Comment:* Revise finding to discuss the soil pH monitoring results as they relate to soil buffering capacity and disclose that the discharge has caused the soil buffering capacity to be exceeded in violation of the current order's Discharge Specification B.11 and the tentative order's Land Application Area Specification H.7. Consider including a provision requiring the Discharger to submit a work plan and schedule for implementation of corrective measures to restore LAA soil buffering capacity and achieve compliance with Land Application Area Specification H.7.

F36 This finding describes land uses surrounding the Facility. The 2<sup>nd</sup> sentence refers to "California Almond Growers Oberti Olive processing facility." The California Secretary of State business lookup website<sup>3</sup> identifies an active corporation, California Almond Growers Exchange. The finding implies that California Almond Growers Exchange is the current owner of APN 046-010-050, the 140.15-acre parcel containing the former Oberti Olive evaporation ponds. The finding indicates that the Oberti Facility was issued CDO 94-202 in June 2024 and CDO 5-01-191 in July 2001 and that olive processing operations ceased in 2004. The Regional Water Board's WDR website<sup>4</sup> shows CDO 5-01-191 was rescinded by Order No. R5-2009-0102.

*Comment:* Revise finding to indicate CDO 5-01-191was rescinded by Order No. R5-2009-0102. Also, revise to identify the entity named in CDO 5-01-191 (Tri Valley Growers?). Suggest revise finding to read: Inactive evaporation ponds from the former California Almond Growers Oberti Olive Company processing facility are present to the northeast of the Facility and are directly north and adjacent to one of the land application areas (Field H). California Almond Growers Exchange is the current owner of the 140.15-acre parcel containing the inactive evaporation ponds (APN 046-010-050).

F37 This finding identifies nearby commercial facilities, including a glass bottling manufacturing plant (Glass Facility) owned and operated by Ardagh Glass, Inc. (the tentative order refers to this entity as Ardagh Groups). WDR Order R5-2016-0019 for Ardagh Glass, Inc., Air Liquide Industrial U.S. Limited Partnership and Strategic Materials Inc. regulates the discharge of the Glass Facility's industrial and domestic wastewater to three evaporation/percolation ponds adjacent to Avenue 12 and immediately east of Field I. The evaporation/percolation ponds also receive cooling tower blowdown from an onsite manufacturing facility operated by Air Liquide Industrial U.S. Limited, and storm water from this facility and a cullet processing facility operated by Strategic Materials Inc.

The Glass Facility's 1-acre Fire Water Pond is located about 270 feet southwest of Pond 2. Google Earth images show a 5-acre area north of the Glass Facility on property owned by the Discharger (APN 046-010-015) that appears to be used for stockpiling materials likely processed by the Glass Facility and/or the cullet processing facility. The stockpile area covers 2.5 acres at Latitude 36°55'46"N and Longitude 120° 6'14"W.

The tentative order does not mention WDR Order R5-2016-0019 or disclose the proximity of the Glass Facility's wastewater evaporation/percolation ponds to Field I.

*Comment:* Suggest revise finding to identify the Glass Facility's three wastewater evaporation/percolation ponds and their proximity to Field I, and to mention the discharge is regulated by WDR Order R5-2016-0019. Also, identify the material(s) stockpiled near the Glass Facility and discuss the potential for stormwater leachate percolating from this area to affect groundwater quality. Also, confirm whether this stockpile area is on the Discharger's property.

<sup>&</sup>lt;sup>3</sup> <u>https://bizfileonline.sos.ca.gov/search/business</u>

<sup>&</sup>lt;sup>4</sup> <u>https://www.waterboards.ca.gov/centralvalley/board\_decisions/adopted\_orders/index.html</u>

F40 This finding describes the Facility's source water supply wells. It does not indicate that these wells also supply supplemental irrigation water to the LAAs. The tentative order does not disclose the existence of supplemental irrigation water wells, but the tentative MRP establishes a monitoring location for each supplemental irrigation water supply.

*Comment:* Please revise this finding to disclose if one or more of the Facility's source water supply wells also supply groundwater to supplement the LAA irrigation supply if and when wastewater volumes are insufficient to sustain crop production. Alternatively, include a description of the Discharger's supplemental irrigation supply (i.e., irrigation supply wells and/or surface water supplied by a local irrigation district).

- F41-F43 These findings provide an exemplary technical description of regional groundwater occurrence, flow direction, and historical and current quality. Kudos for staff for providing this level of detail to characterize regional groundwater conditions. The findings demonstrate that this level of detail is possible to provide in WDRs orders, even in NPDES permits/WDRs orders that involve waste discharges to land.
- F46 These findings identify constituents monitored in groundwater pursuant to the current MRP.
  F47 These include chloride, sodium, calcium, and magnesium. Chloride is a conservative constituent that informs on the extent to which waste constituents in the discharge concentrate due to evaporative losses. Calcium and magnesium are useful minerals to track to assess the extent to the discharge has degraded groundwater from the decomposition of oxygen-demanding substances in the discharge.

*Comment:* Please consider adding three rows to Table 13 for chloride, calcium, and magnesium; alternatively, add two rows, one for chloride, the other hardness using the formula:<sup>5</sup> Water Hardness (mg/L as CaCO<sub>3</sub>) =  $(2.5 \times [Ca^{2+}]) + (4.1 \times [Mg^{2+}])$ .

Finding 46 refers to Table 13, which appears in Finding 47, and Finding 47 briefly discusses the data presented in the Table. Usually, findings that refer to a table for the first time in the document includes the cited table.

*Comment:* Consider revising Finding 46 to include Table 13, as is the case with other cited tables.

F47 This finding discusses groundwater monitoring results presented in Table 13. It characterizes MW-4B as being both upgradient and downgradient of Field K. MW-4B is located at the southeast corner of APN 045-019-011, the parcel containing Field K, and is about 660 ft southeast of the pivot-sprinkler area of Field K. MW-15B is located near the intersection of Avenue 13 and Road 21, and is about 4,200 feet northwest of Pond 2 and Field H. Finding 45 indicates groundwater flow direction is typically to the northwest. Therefore, MW-4B is upgradient of Field K's pivot sprinkler coverage, and MW-15B is

<sup>&</sup>lt;sup>5</sup> A handy website for this conversion is <u>https://ctrlcalculator.com/chemistry/water-hardness-calculator/</u>

downgradient from Pond 2 and Field H. The finding indicates that, compared to upgradient MW-4B, downgradient 11B contains higher salinity and lower nitrate. The decreased concentrations of nitrate as N indicates that the organic loading to Field K is conducive for denitrification but not excessive.

*Comment:* Revise finding to consistently refer to MW-4B as upgradient of Field K and to indicate MW-15B is downgradient of Pond 2 and Field H. And, consider identifying the distance of these wells from cited LAAs (e.g., MW-20 is about 3,500 ft northwest of Field K).

F60.b This finding identifies the tentative order's discharge salinity performance limit of 1,850 mg/L of TDS, and states, "This limit considers the current annual average TDS concentration of the discharge (1,703 mg/L) and includes an approximate 10 percent contingency to accommodate for drought and water conservation efforts." According to data provided in Finding 22 (Table 4, Average Effluent Analytical Results), the average annual TDS from 2022 to 2024 is about 1,530 mg/L. The CST SteamBoy system was not in operation from late 2022 through August 2024 (Finding 18). Because the tentative order wisely prohibits the discharge to land of ion exchange waste, future discharge TDS should be lower than that identified from 2022 through 2024. Therefore, it is not appropriate to increase average TDS by 10% to allow for water conservation efforts.

*Comment:* Revise the tentative order to decrease the proposed salinity performance limit to 1,530 mg/L, which reflects the average annual TDS from 2022 through 2024 when the discharge contained high-salinity ion exchange waste. The TDS increase from the ion exchange discharge should be more than adequate to accommodate an increase in salinity due to future water conservation efforts.

F72 This finding discusses waste constituents in the discharge with the potential for groundwater degradation. Its Table 14 identifies the range of annual effluent concentrations for several constituents for 2022 to 2024 that do not match the values presented earlier in Table 4. For example, Table 4 indicates the average annual values of TDS in mg/L were 1,642 in 2022, 1,343 in 2023, and 1,614 in 2024, yielding a range of 1,343 to 1,642 for these years. Table 14 identifies the effluent TDS as ranging from 1,343 to 1,703 mg/L.

*Comment:* Revise Finding 72, Table 14, to cite the same ranges for effluent quality as identified in Table 4. Or, revise Table 4 to be consistent with data presented in Table 14.

F72a This finding describes wells providing pre-1968 water quality data as being northeast (upgradient) and north (cross-gradient) of the Facility. Given groundwater flow direction is typically to the northwest, wells northeast of the Facility as not downgradient.

*Comment:* Revise finding to correct the location of cited wells in a manner consistent with the typical northwest groundwater flow direction.

F72b This finding concerns nitrate. It cites the annual average concentration of effluent total nitrogen as 81 mg/L in 2024. Elsewhere, Table 4 identifies the annual total nitrogen average as 78 mg/L in 2024.

*Comment:* Revise finding to cite the same annual average value of 78 mg/L for 2024 as cited in Table 4.

- F72c This finding discusses organics as a waste constituent with potential to degrade groundwater. Kudos to staff to recognizing organics as a waste constituent of concern and explaining how excessive organic loading can lead to mobilize iron, manganese, and arsenic from soil.
- HEREBY The tentative order proposes to rescind and replace the current order; however, it does not rescind the current order in its "IT IS HEREBY ORDERED" preface.

*Comment:* Revise this preface to read: "IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267 *WDRs Order No. 95-164 is rescinded (except for enforcement purposes); and* that the Discharger and their agents, employees and successors shall comply with the following.

D.2 This flow limitation refers to the Region's obsolete Stillage Guideline's flow limits for stillage discharges. The current discharge is not exclusively stillage and, given that wine (and stillage) production at the Facility has ceased, the future discharge will not include a land discharge exclusively of stillage. A more appropriate approach for identifying and justifying a daily discharge flow limit for crush and non-crush seasons is to base the values on actual discharge flow data for the last three years.

*Comment:* Revise the tentative order to remove D.2 or revise D.2 to identify discharge flow limits for the each of the three seasons identified (i.e., May to September, October to November, and December to April) that reflect current discharge flow conditions.

E.1 This requirement establishes a performance-based effluent TDS limitation of 1,850 mg/L.

*Comment:* Revise this value to reflect effluent TDS values presented in Table 4 and to eliminate the 10% increase as explained previously.

F.3 This requirement identifies three specific pond liner designs that meet the hydraulic conductivity standard of 10<sup>-6</sup> centimeters per second (cm/sec). The tentative order's description of the Facility's two double-lined wastewater storage ponds does not mention the presence of a "prepared base or a secondary clay or concrete liner."

*Comment:* Revise F.3 to include a 'none-of-the-above-but-equivalent' liner design (e.g., *An equivalent engineered alternative*) and somewhere in the tentative order (e.g., Information Sheet) identify the current pond liner design, construction, and operation as capable of meeting the tentative order's hydraulic conductivity standard of  $10^{-6}$  cm/sec.

F.7 This discharge specification requires use of rotary screens to treat wastewater "generated from the cleaning and sanitation of the wine/grape juice concentrate equipment at the Facility (not including ion exchange or stillage)."

*Comment:* During my years at the Central Valley Water Board, staff was instructed that it was inappropriate for the Regional Board to require a specific type of patented treatment technology in WDR orders. Rather, staff was instructed to identify effluent limitations that reflect the implementation of the specific treatment technology used by the discharger. In this case, the tentative order requires the use of rotary screen treatment via its Discharge Prohibition B.3 (Discharge of wastes other than the Facility's winery wastewater, at the locations and in the manner described in the Findings and authorized herein is prohibited). Consider removing Discharge Specification F.7 and revising Finding 17, which discusses the Discharger's use of rotary screens, to indicate that all wastewater "generated from the cleaning and sanitation of the wine/grape juice concentrate equipment at the Facility (not including ion exchange or stillage)" is subject to rotary screen treatment prior to discharging to the ponds.

F.8.a. This discharge specification requires the dissolved oxygen content in the upper food of any wastewater storage pond not be less than 1.0 mg/L for three consecutive sampling events. The tentative order does not indicate the existence of aerators in Ponds 1 or 2.

*Comment:* How confident is staff in the Discharger's ability to consistently comply with this new discharge specification? Are there recent pond dissolved oxygen monitoring results that staff can cite as evidence that the Discharger is capable of consistently complying with this new requirement?

H.3 This Land Application Area Specification requires application of waste constituents to the LAAs to be at reasonable agronomic rates states, "The annual nutritive loading of the LAAs, including nutritive value of organic and chemical fertilizers, and the wastewater shall not exceed the annual crop demand." It does not require the Discharger to consider the plant available nitrogen (PAN) stored in LAA soils when determining annual nitrogen crop requirements.

*Comment:* Consider revising 2<sup>nd</sup> sentence to read: "The annual nutritive loading of the LAAs, including nutritive value of organic and chemical fertilizers, *plant available nitrogen stored in LAA soils,* and the wastewater shall not exceed the annual crop demand.

H.7 This requirement states, "The resulting effect of the discharge on soil pH shall not exceed the buffering capacity of the soil profile." Soil data summarized in Finding 32 indicates the pH of some LAA soil samples are sufficiently low (or high) as to indicate the current discharge is in violation of this requirement, which is carried over from the current order.

> *Comment:* Please address the Discharger's apparent noncompliance with this requirement. Consider adding a provision requiring the Discharger to submit a work plan and schedule to implement corrective measures to achieve and maintain compliance with Land Application Area Specification H.7.

H.9 This requirement states, "The Discharger shall not discharge process wastewater to the LAA when soils are saturated (e.g., during or after significant precipitation)." The tentative order does not describe what measures the Discharger will implement to consistently achieve compliance with this requirement beyond providing a total of 500,000 gallons of effluent storage capacity in Ponds 1 and 2.

*Comment:* Please describe how the Discharger will comply with this requirement (e.g., will it decrease / suspend processing when soils are saturated?).

H.10 This requirement states, "The Discharger shall ensure that all water is applied and distributed with reasonable uniformity on adequate acreage to preclude the creation of nuisance conditions." This requirement is also relevant for groundwater protection.

*Comment:* Consider revising to read: ... reasonable uniformity on adequate acreage to preclude the creation of nuisance conditions *and violations of groundwater limitations*.

I.3 This requirement states, "Any handling and storage of residual solids shall be temporary and controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils in a mass or concentration that will violate the groundwater limitations of this Order." The tentative order does not describe the nature of containment provided to areas used to temporarily store spent diatomaceous earth (DE), rotary screen solids, and pomace. Google Earth images dated 3/31/2017 and 4/21/2021 show a 0.5-acre solids stockpile area (36° 55' 48" N, 120° 6' 16" W). The wine-colored solids suggest a pomace and/or spent DE storage area.

*Comment:* Please revise the tentative order to characterize the Facility's pomace and DE stockpile area(s). And, please describe the function and construction of the 0.5-acre surface impoundment within the Facility's tank farm (36° 55' 53" N, 120° 6' 16" W).

J.17 This provision concerns Facility ownership changes, and requires the new owner/discharger to submit a written request to the Executive Officer for transfer of the WDRs order.

*Comment:* Due to new requirements related to CV-Salts, consider revising this provision to require the new owner/discharger to also submit with its request for transfer of the WDRs order documentation indicating its participation (or intent to participate) in the (1) Prioritization and Optimization Study to develop a long-term salinity strategy for the Central Valley and (2) Management Zone Approach (Path B) for the Nitrate Control Program (i.e., by participating in the Valley Water Collaborative's Preliminary Management Zone Implementation Plan for the Madera Management Zone.

J.19 This provision regarding discharge flow increases typically applies only to municipal wastewater treatment facilities.

*Comment:* Consider deleting this provision or explain why it applies to this industrial processing facility.

## Monitoring and Reporting Program comments

I.B. Table 1 identifies and defines the Facility's monitoring locations. It defines EFF-01 as "Location where a representative sample of the process wastewater can be collected from the main lift station sump, but prior to the manual diversion valve that diverts process wastewater to either lined Pond 1 or lined Pond 2." From Finding 17: Each pond is equipped with a rotary screen to remove solids from the combined waste stream prior to discharging into the ponds." As such, wastewater sampled at EFF-01 is not representative of the discharge to the ponds and LAA.

*Comment:* As defined, EFF-01 is appropriate only for effluent flow monitoring, but not for monitoring the quality of wastewater following rotary screen treatment discharged to the ponds and LAA. By removing solids, rotary screen treatment will decrease discharge concentrations of BOD<sub>5</sub> and nitrogen constituents. Consider relabeling EFF-01 to INF-01, as it monitors the influent to rotary screen treatment; adding EFF-01 for PND-01 and EFF-02 for PND-02 and defining these as: *Locations where representative samples of the process wastewater can be collected following rotary screen treatment but prior to discharge to either Pond 1 or Pond 2.* [Note: I did not include the qualifier "lined" because the ponds are described as being lined elsewhere in the tentative order.]

II.A. Table 2 establishes the Facility's effluent monitoring requirements. Because PND-02 does not receive Facility stormwater (according to Attachment E, Process Flow Diagram), monitoring wastewater discharged to this pond reflects the actual year-round discharge.

*Comment:* Revise MRP to include a new section, A. Influent Monitoring (INF-01) for continuous metered flow (mgd). Apply the non-flow effluent monitoring requirements in Table 2 to EFF-02 (screened discharge to PND-02). Identify monitoring requirements for EFF-01 (screened discharge to PND-01) as including twice/month monitoring for pH and EC on the same days as EFF-02 EC and pH monitoring. This will provide data to assess the extent to which Facility stormwater discharges to PND-01 dilutes wastewater quality.

II.C Table 4 establishes stillage monitoring requirements for several parameters and constituents, but not for BOD<sub>5</sub>. Since stillage typically contains elevated BOD<sub>5</sub> compared to winery wastewater, monitoring of this waste constituent in stillage provides information on the stillage discharge's contribution to wastewater BOD<sub>5</sub>.

Comment: Consider revising Table 4 to include 1/month monitoring for BOD<sub>5</sub>.

I.D This section presents a table (should be labeled Table 5) for effluent storage pond monitoring. It wisely includes annual monitoring of solids depth, but identifies sample type as "Observation."

*Comment:* Because technology exists to measure pond sludge (e.g., Sludge Judge®), the sample type should be "Measured" with a footnote requiring the pond sludge depth monitoring results be accompanied by a description of pond sludge measurement method.

I.G Table 7 establishes groundwater monitoring requirements. Samples collected for arsenic monitoring, like those for iron and manganese, should be filtered prior to preservation.

*Comment:* Revise Table 7 to include a footnote for Arsenic: *Samples shall be filtered* with a 0.45-micron filter prior to preservation, digestion, and analysis.

I.I This section specifies soil monitoring requirements. Kudos to staff for carrying over the current order's soil monitoring requirements. However, Table 9 does not include ammonia, which together with nitrate, comprises plant available nitrogen.

*Comment:* Revise Table 9 to include annual monitoring for ammonia as N. Because the current and tentative orders include a discharge specification related to soil buffering capacity, consider revising Table 9 to include annual monitoring of soil lime buffering capacity (LBC), where LBC is defined as the weight of pure lime (CaCO<sub>3</sub>), in milligrams, needed to raise the soil pH of one kilogram of soil by one unit.

III The tentative MRP requires the Discharger to submit all monitoring reports and analytical monitoring results to the State Water Board's GeoTracker database. KUDOS TO STAFF FOR INCLUDING THIS REQUIREMENT!!! [Sorry for the use of the all caps Trump font, but inclusion of this requirement deserves a special shout-out).

Thank you for your time and consideration.

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