**Regional Water Quality Control Board**
**Central Valley Region**
**Board Meeting –12 December 2025**

**Response To Written Comments for**
**O'Neill Beverages Co. LLC**
**Reedley Winery and Distillery**
**Fresno County**
**Tentative Waste Discharge Requirements**

At a public hearing scheduled on 12 December 2025, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider the adoption of Waste Discharge Requirements (WDRs) and a Monitoring and Reporting Program (MRP) for the O'Neill Beverages Co. LLC. (Discharger) Reedley Winery and Distillery (Facility) in Fresno County. This document contains responses to written comments received from interested persons regarding the tentative WDRs and MRP circulated on 3 October 2025. Written comments from interested parties were required to be received by the Central Valley Water Board by 5:00 p.m. on 3 November 2025 to receive full consideration. Comments were received from the Discharger, and Ms. Jo Anne Kipps on 3 November 2025.

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

## 3 November 2025 DISCHARGER COMMENTS

**COMMENT 1:** The Discharger requests modification of the Performance Based Salinity Limit proposed in the tentative WDRs from 2,000 mg/L to at least 2,110 mg/L, based on a four-year average FDS concentration of 1,688 mg/L and a 25 percent contingency.

> **RESPONSE:** Effluent data from late 2024 were unavailable when Staff calculated the limit. Reanalysis of data through 2024 yields a four-year average FDS concentration of 1,674 mg/L. Consequently, utilizing the same approach to calculate the performance-based effluent limit detailed in the tentative WDRs (i.e., average FDS plus 25 percent contingency), the Performance Based Salinity Limit is revised to 2,100 mg/L. Revisions were made to Table 3 reflect the complete 2021-2024 dataset.

**COMMENT 2:** The Discharger requests increasing the BOD loading rate for Fields A-East and A-West from 50 lbs/ac/day to 100 lbs/ac/day, citing improved practices and stable groundwater conditions.

> **RESPONSE:** The reduced loading rate proposed in the tentative WDRs was based on reduced assimilative capacity resulting from historical overloading and prior to

treatment system upgrades. Considering the impact of the BioFiltro® system on the effluent quality, sprinkler irrigation methods at the LAAs, and that remnant historical loading impacts are limited to the interior of the LAA and downgradient monitoring exhibit constituent of concern concentrations at or below detection limits, a cycle average BOD loading rate for the original Fields A-East and A-West of 100 lbs/ac/day is appropriate. Provision G.3 was revised to prescribe a cycle average $BOD_5$ loading limit of 100 lbs/ac/day on Fields A-East and A-West provided sprinkler irrigation is used; otherwise, a cycle average $BOD_5$ loading rate of 50 lbs/ac/day shall apply.

**COMMENT 3:** The Discharger notes that the Facility is experiencing decreased production and effluent flows from an industry wide reduction in demand, suggesting additional LAA acreage may not be needed. As such, the Discharger will assess the need for additional acreage in the required Wastewater and Nutrient Management Plan and will provide an updated plan(s) as needed based monitoring and compliance with WDRs.

**RESPONSE:** Noted.

**COMMENT 4:** The Discharger requests administrative edits to address typographical errors and corrections.

**RESPONSE:** Most revisions were made to the tentative WDRs based on the comment, with an exception. Staff does not agree that MW-25 should be classified as downgradient relative to existing LAA.

**COMMENT 5:** The Discharger proposes removing INF-01 and INF-02 monitoring locations due to infrastructure limitations, and continuing monitoring at EFF-01.

**RESPONSE:** Monitoring of influent is essential to ensure that the Biofiltro® pre-treatment system operates effectively, and to identify any necessary source control measures. The MRP and WDRs have been revised to reflect one influent monitoring location (INF-01).

**COMMENT 6:** The Discharger requests removal of metals analyses, with the exception of arsenic at monitoring location EFF-01 based on low or non-detect monitoring results since 2021.

**RESPONSE:** This change was made as requested.

**COMMENTS 7 through 10:** With regard to soil monitoring requirements, the Discharger requests clarifications on sampling schema, reduced sampling frequency (once per year), and removal of CEC and moisture content analyses.

**RESPONSE:** The Discharger provided a table with a proposed sampling schema that appears appropriate; however, the table was not added to the MRP. Semiannual soil sampling during the specified timeframes provides seasonal information LAA soil concentrations during the crush period, and several months after, allowing for better management and planning of wastewater applications throughout the available LAA. No changes were made to the soil sampling frequencies.

Moisture content analysis can enhance wastewater application planning, but its benefits are likely to require more frequent than semiannual testing. Conversely, CEC soil monitoring need not be so frequent, as it relates to stable soil properties like texture and organic matter. While high pH levels may influence CEC, soil and wastewater quality pH observations from 2021 to 2024 remain near neutral. Therefore, both moisture content and CEC soil sampling requirements have been removed.

**COMMENTS 11 through 14:** With regard to quarterly monitoring report requirements, the Discharger requests extended report deadlines, annual (not monthly) FDS reporting, use of rolling averages for BOD calculations, and exclusion of lab reports from submissions.

**RESPONSE:** Revisions were made to allow the use of a four-sample rolling average to calculate cycle average BOD loading rates and remove the requirement of reporting annual average FDS in monitoring reports for Quarters 1 through 3. No other changes were made based on the comments.

The requirement to submit monitoring reports after one month is consistent with other recently issued MRPs for similar regulated facilities (e.g., Constellation Brands US OPS, Inc. Mission Bell Winery) and should provide sufficient time for the Discharger to compile, analyze, and submit timely monitoring reports. Additionally, GeoTracker reporting requirements should eliminate issues with submitting large file sizes.

**COMMENTS 15 through 18:** The Discharger requests use of rolling averages for loading rates (total nitrogen, salinity), removal of potassium from annual loading calculations, shifting the soil nitrogen discussion to the Wastewater and Nutrient Management Plan, and removal of calibration log submittals.

**RESPONSE:** A revision was made to allow the use of four-sample rolling average concentrations to calculate constituent loading rates. The soil nitrogen discussion requirements were modified to only include an annual evaluation of soil monitoring data. Additionally, footnote 4 below Table 9 was revised to clarify that salt loading shall include FDS and potassium. Lastly, the requirement to submit calibration logs with self-monitoring reports was removed; however, equipment

calibration/maintenance records shall be retained onsite for a minimum of three years and be made available upon request.

## 3 November 2025 KIPPS COMMENTS

**KIPPS – Comment 1:** Revise Finding 13 to refer to Table 1 in the Information Sheet for additional information on LAA fields, revise Table 1 to include more details about the LAAs, and clarify the status of Phase 2 expansion fields.

**Response:** Staff included a reference to Table 1 of the Information Sheet in Finding 13. In addition, Finding 26 was modified to state that the WDRs authorize the discharge to up to 325 acres proposed in the Phase 2 expansion. No modifications were made to Table 1 of the Information Sheet.

**KIPPS – Comment 2:** Include additional groundwater quality data (e.g., TDS, hardness, TOC, iron, arsenic) in Table 13 and consider grouping similar constituents together.

**Response:** Staff did not make the requested changes.

**KIPPS – Comment 3:** Consider including a numerical groundwater limitation for ammonia (1.5 mg/L) to translate the narrative odor limitation and cite this value in Table 10.

**Response:** The commentor incorrectly referenced the source of the 1.5 mg/L value as being from the U.S. EPA, Office of Water, Drinking Water A*dvisory: Consumer Acceptability Advice and Health Effects Analysis* document. The correct reference is J.E. Amoore and E. Hautala, *Odor as an Aid to Chemical Safety: Odor Thresholds Compared with Threshold Limit Values and Volatilities for 214 Industrial Chemicals in Air and Water Dilution, Journal of Applied Toxicology* (Amoore and Hautala Article).

Nevertheless, the Central Valley Water Board recognizes that ammonia can impart taste and odor to groundwater. However, it is important to clarify that neither the EPA's Health Advisories and odor thresholds, nor values from the Amoore and Hautala Article, are enforceable water quality objectives under California law. In California, water quality objectives are established in the Basin Plan and Title 22 of the California Code of Regulations. The Basin Plan and Title 22 do not specify a numerical water quality objective for ammonia in groundwater. Instead, the Basin Plan includes narrative objectives to prevent taste, odor, or other nuisance conditions, and Title 22 sets Maximum Contaminant Levels (MCLs) for constituents with direct health impacts. While the Board may use EPA guidance and odor thresholds to interpret narrative objectives, these values are not directly enforceable unless adopted into the Basin Plan or Title 22.

For this Order, the groundwater limitation for ammonia will remain narrative, consistent with the Basin Plan, stating that the discharge shall not cause groundwater to contain concentrations of ammonia that result in taste, odor, or nuisance conditions, or that adversely affect beneficial uses. Staff may use the 1.5 mg/L odor threshold as a reference point when evaluating compliance with the narrative objective but will not establish it as a formal numerical limitation.

**KIPPS – Comment 4:** Ms. Kipps requests that the tentative WDRs be revised to designate monitoring wells MW-14 and MW-19 as downgradient wells. Based on this revision, Ms. Kipps asserts that current discharge practices will continue to result in groundwater flowing offsite with waste constituents exceeding groundwater limitations. While acknowledging the Discharger's compliance with the existing Cease and Desist Order (CDO), Ms. Kipps contends that the discharge authorized by the tentative WDRs still poses a threat of violating groundwater limitations and related discharge specifications. Therefore, she recommends that the Board rescind the current CDO and replace it with a new CDO establishing a time schedule, not to exceed five years, for ceasing all waste discharge to Fields A-West and A-East. Alternatively, Ms. Kipps suggests the tentative WDRs should directly prohibit discharge to these fields within five years, citing that the affected area is less than 30 acres and that the Discharger owns sufficient acreage to develop alternative land application areas.

**Response:** Staff have evaluated the request to reclassify MW-14 and MW-19 as downgradient wells and to prohibit discharge to Fields A-West and A-East within five years. Based on the hydrogeologic data and groundwater flow direction, MW-14 and MW-19 are considered interior wells for the purposes of the tentative WDRs. The groundwater gradient in this area moves to the southwest, onto property owned by O'Neill (Field P), where additional monitoring wells (MW-23A, MW-23B, and SI-5) are located. Data from these wells collected between 2020 and 2024 indicate non-detect for ammonia and low levels of nitrate, with the exception of MW-23A, which has nitrate concentrations slightly above the 10 mg/L Maximum Contaminant Level (MCL).

As noted in the Findings, the Discharger is participating in the Nitrate Control Program as a member of the Kings Water Alliance. This participation addresses nitrate management and compliance in the region. Based on the current groundwater monitoring data and the Discharger's ongoing participation in the Nitrate Control Program, staff do not propose changes to the tentative WDRs and do not recommend issuance of a Cease and Desist Order restricting use of Fields A-West and A-East.

**KIPPS – Comment 5:** Ms. Kipps expresses concern that the Discharger has not provided information on the annual quantities of anhydrous ammonia and magnesium hydroxide used for pH control. She requests that the Discharger be required to report

these quantities in Table 2 of the tentative WDRs. The comment notes that elevated ammonia concentrations in the pretreatment system effluent suggest excessive use of anhydrous ammonia, which, combined with the high permeability of the LAA soils, increases the risk of ammonia passing through to groundwater, especially during winter months when crop nitrogen demand is low. Ms. Kipps recommends including a provision requiring the Discharger to submit a technical report evaluating ammonia use for pH adjustment and proposing corrective measures to reduce groundwater impacts. Suggested measures include improved dosing procedures, use of high-ammonia effluent for pH control, and winter-time effluent storage. She also requests that the Monitoring and Reporting Program (MRP) be revised to require annual reporting of chemical additive quantities used during the reporting year.

> **Response:** Staff has already inquired with the Discharger regarding the annual quantities of anhydrous ammonia and magnesium hydroxide used for pH control and is currently awaiting information on the volume and amount of these chemicals. The tentative MRP requires the Discharger to provide, as part of the Fourth Quarter Monitoring Report, details on all chemicals used at the facility, including quantities. Additionally, staff has revised the WDRs to include a requirement for O'Neill Beverages to prepare and implement an Ammonia Evaluation and Minimization Plan, which will evaluate the utilization of ammonia and propose measures to minimize its impact on groundwater quality (see Provision J.8).

**KIPPS – Comment 6:** Provide technical justification for proposed BOD loading rates to Fields A-West and A-East.

> **Response:** The tentative WDRs provide a detailed discussion of the Facility's discharge practices, groundwater quality, and the significant improvements O'Neill has implemented to enhance discharge management. Recent groundwater monitoring data do not indicate elevated iron or arsenic concentrations in the downgradient wells at the Facility. If the Facility's discharge were causing reducing conditions beyond the property boundary, it would typically be reflected by increased concentrations of these constituents in the downgradient wells. The available data suggest that such impacts are not occurring at this time with the current Facility's treatment and manner of discharge.
>
> Furthermore, based on information provided by the Discharger, the proposed BOD loading rate for Fields A-West and A-East will remain at 100 lbs/acre/day (cycle-average), not 50 lbs/acre/day as referenced in the comment. Staff's rationale for this loading rate is discussed in response to the Discharger's comment #2. The tentative WDRs also include robust monitoring and reporting

requirements to ensure ongoing evaluation of groundwater quality and compliance with applicable limitations.

No changes to the tentative WDRs are proposed in response to this comment.

**KIPPS – Comment 7:** Retain the current order's finding that long-term discharge to the original 36.8-acre LAA has depleted the soil's assimilative capacity for potassium. Furthermore, revise the tentative WDRs to establish a mass loading limit for potassium in Fields A-West and A-East that does not exceed expected crop uptake rates.

**Response:** Staff has determined that the tentative WDRs already include sufficient information and analysis regarding the Facility's discharge and its impacts to groundwater with respect to potassium. The findings and supporting documentation address the assimilative capacity of the land application areas and the relationship between potassium loading and crop uptake. No changes to the tentative WDRs are proposed in response to this comment.

**KIPPS – Comment 8:** Clarify whether the winery generates spent regenerant from wine ion exchange in Finding 15. Also, revise Discharge Prohibition B.5 to explicitly prohibit discharge of bottling plant and tank farm wastewater, high salinity waste streams (e.g., bottling wash water, boiler/cooling tower blowdown, ion exchange regenerant) to any location other than the Title 27 Class II Surface Impoundment.

**Response:** According to the Discharger, spent regenerant is directed to the Class II Surface Impoundment. Staff revised the WDRs to provide this clarification.

**KIPPS – Comment 9:** Revise Finding 17 to identify solid stockpiles near the worm beds and Field H, describe their containment, and assess compliance with Discharge Specification F.4. If noncompliant, consider requiring improved containment.

**Response:** According to the Discharger, the identified stockpiles are wood chips but did not elaborate on whether they are spent substrate from the worm beds or other treatment related solids. Staff have requested further clarification regarding the identified stockpiles, and any associated containment features. Additionally, the WDRs include adequate requirements for management of waste treatment solids (see Discharge Specification F.4 and Solids Disposal Specification I.3).

**KIPPS – Comment 10:** Revise Finding 19 to specify the stormwater basin's location, confirm property ownership, and describe the function of the two basins north of Field Q, and the 1-acre earthen basin that is located between the Class II surface impoundment and Riverview Elementary School.

**Response:** According to available Fresno County parcel information, the rectangular basin directly north and adjacent to Field Q, and the earthen basin west of the Class II Surface impoundment are located on land owned by the Discharger. According to the Discharger, these are stormwater basins for the Facility and do not receive process wastewater. The square basin northwest of Field Q is not associated with the Facility. The WDRs have been revised to clarify relative locations of the Discharger's stormwater basins.

**KIPPS – Comment 11:** Revise Table 3 to include ammonia data reflecting increased concentrations from anhydrous ammonia use. Confirm whether the rise in alkalinity and magnesium levels is due to magnesium hydroxide used for pH control.

**Response:** The data summarized in the tentative WDRs Order adequately characterizes the Facility's discharge. Ammonia concentrations are reflected in the reported Total Kjeldahl Nitrogen (TKN) averages. No changes were made to Table 3 per this comment. Based on currently available information, staff cannot confirm whether the observed increase in magnesium is attributable to the use of magnesium hydroxide. Staff is working with the Discharger to obtain chemical usage records related to magnesium hydroxide for further evaluation.

**KIPPS – Comment 12:** Clarify whether all stillage receives pretreatment before land application. If not, estimate the volume that does not. Confirm whether stillage is cooled via a tower prior to application and describe this process. Also, verify that all stillage is routed to the pretreatment system and, if possible, provide current stillage flow data.

**Response:** Staff's understanding is that the Facility's distillery operates approximately 105 days per year, generating an estimated 0.15 to 0.2 million gallons per day (mgd) of stillage waste. This waste is temperature treated via the cooling tower and then combined with the Facility's overall discharge for further treatment. Please note, that the influent monitoring locations in the tentative MRP have been revised accordingly (see Discharger Comment 5 and staff's response for details).

**KIPPS – Comment 13:** Revise Finding 31 to acknowledge that VDS decomposition in soil releases carbon dioxide, which forms weak acids that dissolve calcium and magnesium. This process increases hardness and contributes to leachate FDS, potentially underestimating salinity impacts to groundwater.

**Response:** Noted, however, no changes were made to the Finding

**KIPPS – Comment 14:** Revise Finding 33 to state that the soil and groundwater beneath the original 36.8-acre LAA lack assimilative capacity for potassium, and use

this to justify limiting potassium loading in Fields A-West and A-East to crop uptake rates.

> **Response:** Tthe tentative WDRs provide sufficient discussion and evaluation of the Facility's discharge impacts. Furthermore, no changes were made to include additional potassium loading requirements.

**KIPPS – Comment 15:** Revise Table 6 to include soil ammonia and plant available nitrogen (nitrate and ammonia) in lbs/acre for each sampled depth interval. Due to ammonia impacts on groundwater, this data, ideally presented in landscape format as a separate attachment, would help assess whether LAA soils already contain sufficient nitrogen to meet crop demand.

> **Response:** The tentative WDRs already include a thorough analysis of Facility and LAA data, including soil monitoring. Additional data is available in the Discharger's SMRs for public review. No changes were made in response to this comment.

**KIPPS – Comment 16:** Revise Finding 42 to disclose that the eastern boundary of the LAA is located within 1,000 feet of the sports fields at Reedley Community College.

> **Response:** Staff made the requested revision.

**KIPPS – Comment 17:** Move MW-14 and MW-19 to the list of downgradient wells in the WDRs. This change would require staff to re-evaluate and revise the conclusions presented in Finding 48.

> **Response:** See Staff's prior response. No changes were made to Finding 48.

**KIPPS – Comment 18:** Revise Finding 49 to define "heat map" and identify the software used to generate it (e.g., Surfer, ArcGIS, Maptive). Acknowledge the lack of groundwater monitoring data south of the 36.8-acre LAA and how this limits interpretation of heat maps. Reference data from MW-14, MW-19, and MW-20 to disclose that groundwater downgradient of the Discharger's property contains waste constituents exceeding limits or reflects upgradient conditions. Revise the conclusion of no offsite impacts, if appropriate.

> **Response:** The heat maps referenced in Finding 49 were generated using Microsoft Excel's 3D Maps function. Staff acknowledges that the accuracy of these maps is limited by the availability of groundwater data. However, the Facility maintains an extensive groundwater monitoring network, which supports the development of reasonably representative concentration heat maps. Reference to the 3D Maps function was added to Finding 14. No other revisions were made in response to this comment.

**KIPPS – Comment 19:** Revise Finding 60 to identify ammonia as a taste- and odor-producing substance, referencing values from the State Water Board's Water Quality Goals database, 1.5 mg/L for odor and 30 mg/L for taste, to support the narrative limitation.

> **Response:** See staff's prior response. No changes were made in response to this comment.

**KIPPS – Comment 20:** Revise Finding 72 to clarify that while best management practices (BMPs) may help reduce impacts from high-strength wastewater application, they are not always sufficient to prevent groundwater degradation. When groundwater is of high quality, the Antidegradation Policy requires implementation of best practicable treatment or control (BPTC) measures, not just BMPs, to protect water quality.

> **Response:** Finding 72 discusses the potential impacts of high-strength wastewater application and the role of BMPs in mitigating those impacts. While BMPs are commonly used to manage discharge-related risks, staff recognizes that in some cases, particularly where groundwater is of high quality, BMPs alone may not be sufficient. In such instances, the Antidegradation Policy may require implementation of measures that constitute the best practicable treatment or control (BPTC) for the particular discharge to prevent pollution and maintain water quality. The Antidegradation Policy discussion and listed measures that constitute BPTC for the Facility are discussed in Findings 79 through 84. No changes were made to Finding 72 per this comment.

**KIPPS – Comment 21:** The commenter challenges the conclusion in the tentative WDRs, stating that high ammonia concentrations in groundwater beneath certain fields indicate insufficient oxygen for nitrification and potential for metal mobilization. They argue this supports prohibiting all discharges to those fields.

> **Response:** See staff's prior response to this contention. No changes were made in response to this comment.

**KIPPS – Comment 22:** Revise Finding 81.b to clarify that the MRP requires the Discharger to estimate nitrogen concentrations ($NO_3$-N and TKN) in the upper six feet of Land Application Area (LAA) soils and to include this nitrogen as a source when calculating crop nitrogen demand for the following year. The commenter also recommends that the MRP be revised to require the use of plant-available nitrogen ($NO_3$-N and $NH_4$-N) rather than total Kjeldahl nitrogen (TKN) for estimating nitrogen availability. Additionally, the commenter suggests revising the fourth sentence of Finding 81.b to more accurately describe the nitrogen transformation process, including mineralization, volatilization, nitrification, and denitrification.

**Response:** Finding 81.b is intended to provide a general explanation of nitrogen transformation processes in soil. While TKN includes both organic nitrogen and ammonia, the finding is not intended to provide a detailed breakdown of nitrogen species. The tentative WDRs and MRP already require the Discharger to estimate nitrogen availability in LAA soils and consider it in crop nitrogen demand calculations. Staff believes the current language is sufficient and no changes were made in response to this comment.

**KIPPS – Comment 23:** Recommends prohibiting all waste discharge to Fields A-West and E-East unless potassium loading is limited to crop demand. They express concern that continued discharge without such restrictions will further degrade groundwater quality due to elevated potassium levels, which significantly contribute to total dissolved solids (TDS) in the affected groundwater.

**Response:** See staff's prior response to this comment. No changes were made.

**KIPPS – Comment 24:** The tentative Order is not consistent with the Antidegradation Policy because groundwater affected by the discharge contains waste constituents in concentrations exceeding applicable water quality objectives, nor is it exempt from the prescriptive containment requirements of Title 27.

**Response:** Findings 79-84 describe the requirements of the Antidegradation Policy and how this Order complies therewith. The fact that groundwater underlying limited portions of the Facility exhibit exceedances of water quality objectives does not mean that the tentative Order does not comply with the Antidegradation Policy; it means that the tentative Order must contain adequate prohibitions, limitations, and specifications to ensure that discharges regulated thereunder will not cause or contribute to further exceedances that impact beneficial uses. The tentative Order contains such adequate measures, as described herein and in the Findings, including requirements to comply with Groundwater Limitations implementing applicable water quality objectives and prohibitions on causing pollution or nuisance, as required by the Antidegradation Policy.

With respect to Title 27, the discharge regulated by the tentative Order, which implements the applicable Basin Plan, consists of nonhazardous wastewater that, if discharge in accordance with the requirements of the Order, should not cause or contribute to pollution or nuisance. This satisfies the requirements of the Title 27 exemption described in Finding 90 (i.e., Cal. Code Regs., tit. 27, § 20090, subd. (b).) This is consistent with the Board's application of this exemption to numerous other facilities' discharges across the region and the intent of Title 27, which is typically applied in regulation of landfills, not agricultural operations.

**KIPPS – Additional Comments:** The last three pages of Ms. Kipp's comments includes requests for various clarifications and corrections (e.g., rescinding previous orders, flow limitation wording, reporting requirements).

> **Response:** In response, staff made several revisions to the draft Order and MRP to address these concerns where appropriate. Notably, the revised Order now explicitly rescinds the prior WDRs Order, and the MRP has been updated to clarify and improve certain monitoring and reporting provisions. However, not all suggested edits were incorporated, as some were determined to be either unnecessary or addressed in Staff's prior comments.