CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
[TENTATIVE] MONITORING AND REPORTING PROGRAM R5-2025-0XXX
FOR
O'NEILL BEVERAGES COMPANY, LLC
REEDLEY WINERY AND DISTILLERY
FRESNO COUNTY

This Monitoring and Reporting Program Order (MRP), which is separately issued pursuant to Water Code section 13267, subdivision (b)(1), establishes monitoring and reporting requirements related to waste discharges regulated under Waste Discharge Requirements (WDRs) Order R5-2025-XXXX (Order). Findings set forth in the Order, including those pertaining to the need for submission of reports, are hereby incorporated as part of this MRP.

O'Neill Beverages Company, LLC (O'Neill) owns and operates the Reedley Winery and Distillery (Facility) and surrounding land application area (LAA). The reuse of process wastewater from the Facility on the LAA is subject to Order R5-2025-XXXX. O'Neill is referred to as Discharger herein and is responsible for compliance with this MRP. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Regional Water Quality Control Board (Central Valley Water Board) issues a revised MRP.

A glossary of terms used in this MRP is included on the last page.

This MRP may be separately revised by the Executive Officer, in accordance with their delegated authority under Water Code section 13223.

I. GENERAL MONITORING REQUIREMENTS

A. FLOW MONITORING

Hydraulic flow rates shall be measured at the monitoring points specified in this MRP. All flow monitoring systems shall be appropriate for the conveyance system (i.e., open channel flow or pressure pipeline) and liquid type. Flow measurements shall be based on flow meter readings unless specifically stated otherwise. The method of measurement must be specified. Unless otherwise specified, each flow meter shall be equipped with a flow totalizer to allow reporting of cumulative volume as well as instantaneous flow rate. Flow meters shall be calibrated at the frequency recommended by the manufacturer; typically, at least once per year and records of calibration shall be maintained for review upon request.

B. MONITORING AND SAMPLING LOCATIONS

Samples and measurements shall be obtained at the monitoring points specified in this MRP. Central Valley Water Board staff shall approve any proposed changes to sampling locations prior to implementation of the change. The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this MRP:

Table 1 – Monitoring Locations

Monitoring Location	Monitoring Location Description
INF-01	Location where a representative sample of the combined influent of winery process wastewater and stillage waste can be collected prior to entering the Biofiltro® pre-treatment system.
INF-02	Location where the discharge from the distillery (stillage) can be monitored prior to blending with other process wastewater.
EFF-01	Location where a representative sample of the effluent can be collected at the effluent storage tank after the Biofiltro® pre-treatment system and prior to being sent to the effluent storage sumps and LAA.
SUMP-1, SUMP-2, and SUMP-3	Sump monitoring
PW-01 and PW-03	Source water supply wells
SW-01	Surface water used for supplemental irrigation
IRR-01, etc.	Irrigation wells used for supplemental irrigation
Field A-East, Field A-West, Field C, etc.	LAA fields
MW-1 to MW-X, SI-1 to SI-X and EX-01	Groundwater monitoring wells and any future monitoring wells added to the Facility's groundwater monitoring well network including monitoring wells around the Class II surface impoundment and extraction well EX-01 in the center of the LAA.
SOIL-01, etc.	Soil monitoring
SOLIDS	Solids monitoring

C. SAMPLING AND SAMPLE ANALYSIS

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. Except as specified otherwise in this MRP, grab samples will be considered representative of water, wastewater, soil, solids/sludges and groundwater. The time, date, and location of each sample shall be recorded on the sample chain of custody form.

Field test instruments (such as those used to measure pH, temperature, electrical conductivity, dissolved oxygen, wind speed, and precipitation) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated at the frequency recommended by the manufacturer;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following (as applicable to the medium to be analyzed):

- *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater* (EPA);
- *Test Methods for Evaluating Solid Waste* (EPA);
- *Methods for Chemical Analysis of Water and Wastes* (EPA);
- *Methods for Determination of Inorganic Substances in Environmental Samples* (EPA);
- *Standard Methods for the Examination of Water and Wastewater* (APHA/AWWA/WEF); and
- *Soil, Plant and Water Reference Methods for the Western Region* (WREP 125).

Approved editions shall be those that are currently approved for use by the United States Environmental Protection Agency (EPA) or the State Water Resources Control Board (State Water Board), Division of Drinking Water's Laboratory Accreditation Program (ELAP). The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

II. SPECIFIC MONITORING REQUIREMENTS

A. INFLUENT MONITORING (INF-01)

The Discharger shall monitor the Facility's process wastewater influent after pH adjustment but prior to entering the Biofiltro® pre-treatment system at INF-01. Samples shall be representative of the volume and nature of the discharge. Time of collection of all samples shall be recorded. At a minimum, the influent monitoring shall include at least the following:

Table 2 – Influent Monitoring (INF-01)

Constituent/Parameter	Units	Sample Type	Frequency
Flow	mgd	Metered	Continuous
pH	s.u.	24-hr Composite	1/Week
EC	µmhos/cm	24-hr Composite	1/Week
BOD_5	mg/L	24-hr Composite	1 or 2/Month (see 1 below)
TSS	mg/L	24-hr Composite	1 or 2/Month (see 1 below)
FDS	mg/L	24-hr Composite	1 or 2/Month (see 1 below)
Nitrate + Nitrite (as N)	mg/L	24-hr Composite	1 or 2/Month (see 1 below)
TKN	mg/L	24-hr Composite	1 or 2/Month (see 1 below)
Total Nitrogen	mg/L	24-hr Composite or Calculation	1 or 2/Month (see 1 below)
General Minerals (see 2 below)	mg/L or µg/L	24-hr Composite	1/Year (see 3 below)

1. Samples shall be collected twice per month in non-consecutive weeks during the crush season (i.e., between August and November) and once per month the rest of the year (i.e., between December and July).
2. See the Glossary for the definition of General Minerals.
3. General Minerals shall be collected once a year in October.

B. STILLAGE MONITORING (INF-02)

The Discharger shall monitor the discharge from the distillery prior to blending with other Facility process wastewater at INF-02. At a minimum, stillage discharge monitoring shall include at least the following:

Table 3 – Stillage Monitoring (INF-02)

Constituent/Parameter	Units	Sample Type	Frequency
Flow	mgd	Metered (see 1 below)	Continuous
Days of operation	Days	Observation	Daily
pH	s.u.	Grab	1/Week (see 2 below)
EC	µmhos/cm	Grab	1/Week (see 2 below)

1. Flow measurements may be metered or estimated based on potable water supply, pump run times, or other approved methods. Method and calculations shall be included in the report.
2. Samples shall be collected once per week when the distillery is in operation.

C. EFFLUENT MONITORING (EFF-01)

The Discharger shall monitor the quality of its treated effluent at the effluent storage tank after all treatment and prior entering the effluent storage sumps (i.e., Sumps #2 and #3) and discharge to the LAA. Samples shall be representative of the volume and nature of the discharge. Time of collection of all samples shall be recorded. Effluent monitoring shall include at least the following:

Table 4. Effluent Monitoring (EFF-01)

Constituent/Parameter	Units	Sample Type	Frequency
pH	s.u.	Grab	1/Week
EC	µmhos/cm	Grab	1/Week
BOD_5	mg/L	Grab	2/Month
TSS	mg/L	Grab	2/Month
Potassium	mg/L	Grab	2/Month
TDS	mg/L	Grab	2/Month
FDS	mg/L	Grab	2/Month
Nitrate + Nitrite (as N)	mg/L	Grab	2/Month
Ammonia (as N)	mg/L	Grab	2/Month
TKN	mg/L	Grab	2/Month
Total Nitrogen	mg/L	Grab	2/Month
General Minerals (See 1 below)	mg/L or µg/L	Grab	1/Quarter
Metals	mg/L or µg/L	Grab	1/3 Years (see 2 below)

1. See the Glossary for the definition of General Minerals.
2. Samples for metals shall be collected once every three years in October during the crush season, starting in 2026. At a minimum, metals analysis shall include aluminum, arsenic, boron, chromium, copper, lead, molybdenum, nickel, and zinc.

D. SUMP MONITORING

The Discharger shall monitor the lined sumps (Sumps #1, #2, and #3) at monitoring locations Sump-1, Sump-2, and Sump-3 when wastewater is present. Freeboard shall be measured to the nearest 0.5 feet vertically from the surface of the water to the lowest elevation on the berm. Water quality samples shall be collected at a depth of one foot below the surface of the water opposite the inlet. Sump monitoring shall include the following:

Table 5 – Sump Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Flow	mgd	Metered	Continuous
Freeboard	0.5 Feet	Observation	1/Week
pH (see 1 below)	s.u.	Grab	2/Month
DO (see 1 below)	mg/L	Grab	2/Month
Solids depth (see 2 below)	Feet	Ovservation	1/Year
Liner Condition (see 3 below)	---	Observation	1/Year

1. Samples for pH and DO shall be collected between 8:00 am and 10:00 am when there is more than one foot of water in the sump twice per month in non-consecutive weeks. If there is insufficient water in the sump no sample shall be collected and the Discharger shall report it in the appropriate monitoring report.
2. The thickness of settled solids accumulated in the sumps shall be monitored in July prior to the start of the crush season and clean out the sumps, as needed, to ensure proper operation of the system. The method of measurement shall be provided.
3. The Discharger shall monitor the condition of the sump liners at least once a year in July prior to the start of the crush season. If any evidence of leaks or damage are observed the Discharger shall inform the Central Valley Water Board immediately with a plan and time schedule to repair the damage.

E. SOURCE WATER MONITORING

The Discharger shall monitor the Facility's source water wells at PW-01 and PW-03. Samples shall be representative of the source water supplied to the Facility after treatment (if any). If the source water is from more than one source, the results shall be presented as a flow-weighted average of all sources. At a minimum, the source water shall be monitored as specified in Table 6:

Table 6 – Source Water Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
EC	µmhos/cm	Grab	1/Year
Nitrate (as N)	mg/L	Grab	1/Year
FDS	mg/L	Grab	1/Year
General Minerals (see 1 below)	mg/L or µg/L	Grab	1/Year (see 2 and 3 below)

1. See the Glossary for the definition of General Minerals.
2. Samples for General Minerals shall be collected once a year in October.
3. For constituents with Secondary MCLs listed in California Code of Regulations Title 22 Table 64449-A (e.g., iron, and manganese), samples shall be filtered with a 1.5-micron filter prior to preservation, digestion, and analysis. For all other constituents, samples shall be filtered with a 0.45-micron filter prior to preservation, digestion, and analysis.

F. SUPPLEMENTAL IRRIGATION WATER MONITORING

The Discharger shall monitor supplemental irrigation water supplied to the LAA from irrigation supply wells (IRG-01, etc.), and surface water from the Consolidated Irrigation Ditch (SW-01). Samples of the irrigation water shall be representative of the irrigation water being applied to the LAA. If supplemental irrigation water is from more than one source, the results shall be presented as a flow-weighted average of all sources. At a minimum, supplemental irrigation water shall be monitored as specified in Table 7:

Table 7 – Supplemental Irrigation Water Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Flow	Gallons	Meter	Continuous (see 1 below)
EC	µmhos/cm	Grab	1/Year
Nitrate (as N)	mg/L	Grab	1/Year
FDS	mg/L	Grab	1/Year

1. The Discharger shall monitor the flow of supplemental irrigation water added at Sumps #1, #2, and #3 from each source (e.g., irrigation well or surface water) as well as any additional supplemental irrigation water sent directly to the LAA.

G. GROUNDWATER MONITORING

After measuring water levels and prior to collecting samples, each monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Purging shall continue until pH, EC, and turbidity have stabilized. Depending on the

hydraulic conductivity of the geologic setting, the volume removed during purging is typically from 3 to 5 casing volumes.

Groundwater monitoring shall be conducted semiannually or twice per year(2/Year) in April and October. The Discharger shall monitor active groundwater monitoring wells in its monitoring well network including MW-1 through MW-26 around the Facility and LAA, monitoring wells SI-1 through SI-5 around the Class II Surface Impoundment, the on-site extraction well (EX-1), and any subsequent or additional monitoring wells installed at the Facility. Active wells will include any monitoring wells with sufficient water available to sample during any sampling event. At a minimum, groundwater shall be monitored as specified in Table 8:

Table 8 – Groundwater Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Depth to Groundwater (see 1 below)	0.01 Feet	Measured	2/Year
Groundwater Elevation	Feet	Calculated	2/Year
Groundwater Gradient	Feet/Feet	Calculated	2/Year
pH	s.u.	Grab	2/Year
EC	µmhos/cm	Grab	2/Year
TDS	mg/L	Grab	2/Year
Nitrate + Nitrite (as N)	mg/L	Grab	2/Year
Ammonia (as N)	mg/L	Grab	2/Year
TKN	mg/L	Grab	2/Year
Total Nitrogen	mg/L	Grab or Calculation	2/Year
Arsenic	µg/L	Grab	2/Year
Total Organic Carbon	mg/L	Grab	2/Year
General Minerals (see 2 and 3 below)	mg/L or µg/L	Grab	2/Year

1. Groundwater elevation shall be calculated based on depth-to-water measurements from a surveyed measuring point.
2. See the Glossary for the definition of General Minerals.
3 For constituents with Secondary MCLs listed in California Code of Regulations Title 22 Table 64449-A (e.g., iron, and manganese), samples shall be filtered with a 1.5-micron filter prior to preservation, digestion, and analysis. For all other constituents, samples shall be filtered with a 0.45-micron filter prior to preservation, digestion, and analysis.

In addition, the Discharger shall maintain its groundwater monitoring well network. If a groundwater monitoring well(s) is dry for four consecutive sampling events or is damaged, the Discharger shall submit a work plan and proposed time schedule to replace the well(s), as needed to maintain coverage around the Facility and LAA. The work plan shall be submitted within 90 days of submittal of the monitoring report identifying the fourth dry sampling event. The well(s) shall be replaced following Executive Officer approval of the work plan and time schedule. Once installed, all new monitoring wells shall be added to the existing groundwater monitoring well network.

H. LAND APPLICATION AREA MONITORING

The Discharger shall inspect the LAA at least once daily prior to and during irrigation events. Evidence of erosion, field saturation, broken lines/sprinklers, runoff, or the presence of nuisance conditions (i.e., flies, ponding, etc.) shall be noted in the Facility's logbook. A summary of the notations made in the logbook shall be provided in each quarterly report. In addition, the Discharger shall perform the following routine monitoring and loading calculations for each discrete irrigation area (or Field) within the LAA each day when wastewater is applied. The data shall be collected and presented in graphical (map) and/or tabular format and shall include the following:

Table 9 - Land Application Area Monitoring

Parameter	Units	Sample Type	Frequency (see 1 below)
Field Irrigated	Acres	---	Daily
Wastewater flow to each field	Gallons	Metered	Daily
Wastewater loading to each field	Inches/day	Calculated	Daily
Supplemental irrigation to each field	Gallons	Metered	Daily
Supplemental Irrigation loading	Inches/day	Calculated	Daily
Precipitation	Inches/day	Rain gauge (see 2 below)	Daily
Total Hydraulic Loading (see 3 below)	Inches per acre month	Calculated	1/Month
BOD Loading (see 4 below)			
Daily Loading	lbs/acre	Calculated	Daily
Cycle Average (see 5 below)	lbs/ac/day	Calculated	Cycle

Parameter	Units	Sample Type	Frequency (see 1 below)
Nitrogen Loading (see 4 below)			
From wastewater	lbs/ac/year	Calculated	1/Year
From fertilizers (and any solids applied)	lbs/ac/year	Calculated	1/Year
From supplemental irrigation water	lbs/ac/year	Calculated	1/Year
Salt Loading (see 4 below)			
From wastewater	lbs/ac/year	Calculated	1/Year
From supplemental irrigation water	lbs/ac/year	Calculated	1/Year
Field Conditions			
Nuisance, odors, vectors	--	Observation	Weekly
Discharge runoff	--	Observation	Weekly

1. Daily when wastewater is being applied to the LAAs.
2. National Weather Service or CIMIS data from the nearest weather station is acceptable.
3. Combined hydraulic loading from wastewater, supplemental irrigation water, and precipitation.
4. BOD, nitrogen, and salt loading shall be calculated as specified in Section III of the MRP.
5. A cycle average is calculated by taking the pounds of BOD_5 applied to an individual LAA (i.e., Field) in a given period, divided by the sum of the total day's wastewater was applied to that Field plus the number of days of rest (no application of wastewater or supplemental irrigation water). See section III of this MRP for the calculation.

I. SOIL MONITORING

The Discharger shall establish, four representative sampling locations within each field set (i.e., Set 1 will consist of Fields A-East and A-West; Set 2 will consist of Fields D, E, F, and G; and Set 3 will consist of Fields I and J) and at least one background location (i.e., that historically has not received process wastewater). Each set will consist of at least four sampling points within the designated fields to create a composite sample. The Discharger shall submit a map to the Central Valley Water Board with the identified sample locations (e.g., latitude and longitude) at least 60 days prior to the first soil sampling event, in accordance with this Order. Soil samples shall be collected at 2- and 6-feet below ground surface at each location for

composite analyses. All composite samples shall be analyzed for the constituents and frequencies specified in Table 10:

Table 10 – Soil Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Soil pH	s.u.	Composite	2/Year (see 1 below)
Moisture Content	% moisture	Composite	2/Year (see 1 below)
Cation Exchange Capacity	meq/100 grams	Composite	2/Year (see 1 below)
Potassium	mg/kg	Composite	2/Year (see 1 below)
Nitrate (as N)	mg/kg	Composite	2/Year (see 1 below)
TKN	mg/kg	Composite	2/Year (see 1 below)

1. Composite samples shall be collected for analysis in the Spring (between April and May) and the fall (between October and November).

J. SOLIDS MONITORING

The Discharger shall maintain detailed records for disposal and/or recycling of residual solids removed from the Facility (e.g., wastewater screenings, pomace, settled solids, worm castings, etc.). The record should include information on quantity and method of disposal (i.e., livestock feed, soil amendment, composting, etc.) and receipts (if applicable). A summary of the information shall be included in the Fourth Quarter Monitoring Report.

III. REPORTING REQUIREMENTS

The Discharger must submit all monitoring reports and analytical monitoring results to the State Water Resources Control Board's (State Water Board's) GeoTracker database. GeoTracker is an Internet-accessible database system used by the State Water Board, regional boards, and local agencies to track and archive compliance data from authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This system consists of a relational database, online compliance reporting features, a geographical information system (GIS) interface, and other features that are utilized by regulatory agencies, regulated industries, and the public to input, manage, or access compliance and regulatory tracking data.

GeoTracker Electronic Reporting Requirements: All monitoring reports and monitoring results shall be submitted to GeoTracker in accordance with the timeframes specified below and in searchable Portable Document Format (PDF). The Discharger shall follow the applicable Electronic Submittal of Information (ESI) requirements under the Facility-specific **Global Identification Number WDR100033016** at the GeoTracker database.

(https://geotracker.waterboards.ca.gov/esi/login.asp)

In order to submit reports electronically, the Discharger shall create a secure GeoTracker Electronic Submittal of Information (ESI) account and log in credentials, claim their facility by requesting access in GeoTracker, and finally uploading PDF copies of the required reports via the ESI portal as outlined in the GeoTracker ESI Beginner's Guide for Responsible Parties (Beginner's Guide) linked below. The Discharger may complete the above tasks by accessing the 'Getting Started' section on the GeoTracker ESI webpage .

(https://www.waterboards.ca.gov/ust/electronic_submittal/index.html)

Additional GeoTracker support information can be found at the following:

a. 'Guides/Resources' document link in the "Tools" on the Discharger's GeoTracker ESI account.

b. Resources on the GeoTracker ESI website, such as the Beginner's Guide (https://www.waterboards.ca.gov/ust/electronic_submittal/docs/geotracker_esi_rp_beginners_guide_revisedoct2019.pdf)

c. General GeoTracker Help Desk contact information:

Phone: 1-866-480-1028, Email: geotracker@waterboards.ca.gov

A transmittal letter shall accompany each monitoring report. The letter shall include a discussion of all violations of this MRP during the reporting period and actions taken or planned for correcting each violation. If the Discharger has previously submitted a report describing corrective actions taken and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent certifying under penalty of perjury that the report is true, accurate and complete to the best of the signer's knowledge.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, groundwater, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

Laboratory analysis reports shall be included in the monitoring reports. All laboratory reports must also be retained for a minimum of three years. For a discharger conducting any of its own analyses, reports must also be signed and certified by the chief of the laboratory.

Monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less

than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

All monitoring reports that involve planning, investigation, evaluation or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. QUARTERLY MONITORING REPORTS

Quarterly monitoring reports shall be prepared and submitted to the Central Valley Water Board by the **1st day of the second month after the quarter** (i.e., the 1st Quarter [January – March] quarterly report is due 1st May). Each Quarterly Monitoring Report shall include the following:

1. Results of the **Influent Monitoring** (INF-001) as specified in Section II.A, including:

    a. Calculation of the maximum daily, monthly average, and cumulative flow for each month of the quarter.

    b. Comparison of the cumulative and average monthly flow with the applicable flow limits.

2. Results of the **Stillage Monitoring** (INF-002) as specified in Section II.B.

3. Results of the **Effluent Monitoring** (EFF-001) as specified in Section II.C.

    a. Calculation of the annual average FDS of the discharge for each month of the quarter.

    b. Calculation of the monthly and cumulative effluent flow and supplemental irrigation water discharged to the LAA.

4. Results of the **Groundwater Monitoring** as specified in Section II.G.

    a. A field log for each well documenting depth to groundwater; sample preparation (e.g., filtering); and sample preservation. For each sampling event, the Discharger may provide a table summarizing this information for all groundwater monitoring wells in lieu of providing field logs. The field logs should be made available upon request.

    b. Calculation of groundwater elevation at each monitoring well, and determination of groundwater flow direction and gradient on the date of measurement.

c. For each monitoring well provide a table showing groundwater depth, elevation, and constituent concentrations for at least five previous years, up through the current sampling event.

d. A scaled map showing relevant Facility features, location of monitoring wells, surface waters, and groundwater elevation contour referenced to an appropriate datum (e.g., National Geodetic Vertical Datum).

5. Results of the **Land Application Area Monitoring** as specified in Section II.H.

a. A summary of the LAA inspection activities conducted by the Discharger.

b. Calculate the cycle average BOD_5 loading rates for each LAA unit and compare it with the BOD_5 loading limits specified in the Order.

The mass of BOD_5 applied to each discrete irrigation area within the LAA on a cycle average basis shall be calculated using the following formula:

$$M = \frac{8.345(CV)}{AT}$$

Where: M = Mass of BOD_5 applied to each discrete LAA field in lbs/ac/day

C = Concentration of BOD_5 in mg/L based on the average concentration for the month

V = Total volume of wastewater applied to the LAA field(s) during the irrigation cycle, in millions of gallons

A = Area of the LAA field in acres

T = Irrigation cycle length in days (from the first day wastewater was applied to the last day of the drying time)

8.345 = Unit conversion factor.

6. Results of **Soil Monitoring** as specified in Section II.I

7. Copies of all laboratory analytical reports.

All quarterly reports shall include summary data tables of analytical results and observations collected or conducted during the quarter.

B. FOURTH QUARTER MONITORING REPORT

In addition to the above information, the fourth quarter monitoring report, due **1st February of each year,** shall include the following:

1. Total annual influent flow and the average monthly flows for each month of the year expressed as millions of gallons per day.

2. Calculation of the annual average FDS effluent limit for Monitoring Location EFF-01, and comparison with the annual average Performance-Based Effluent Limit specified in the Order.

3. Results of the **Source Water Monitoring** as specified in Section II.E. If the source water supply is from more than one source, the Discharger shall calculate the flow-weighted average concentration for each constituent monitored (include supporting calculations).

4. Results of **Supplemental Irrigation Water Monitoring** as specified in Section II.F.

5. **For the LAAs**, a chronological log of dates of fertilizer application, residual solids application, irrigation, precipitation, and runoff control operations. Nitrogen and salt loading calculations shall be included as follows:

    a. The mass of total nitrogen, FDS, and potassium applied to each LAA on an annual basis shall be calculated using the following formula and compared to published crop demand for the crops grown:

$$M = \sum_{i=1}^{12} \frac{(8.345(C_i V_i) + M_x)}{A}$$

Where: M = Mass of total nitrogen/FDS applied to each discrete LAA field in lbs/ac/year

C_i = Flow-weighted average concentration of total nitrogen/FDS/potassium for the month in mg/L of the blended wastewater and irrigation water

V_i = Total volume of wastewater applied to each discreet LAA field(s) during the irrigation cycle, in millions of gallons

A = Area of the LAA field irrigated in acres

I = The number of the month (e.g., January = 1, February = 2, etc.)

M_x = Nitrogen/FDS/potassium loading from other sources (e.g., fertilizer and compost) in pounds

    b. Discussion of an evaluation of **Soils Monitoring** data collected over the reporting period, as specified in Section II.H., to estimate the concentrations

in the upper six feet of LAA soils of Nitrate-N and TKN in units of lbs/acre. The discussion shall propose how soil nitrogen concentrations will be considered as a nitrogen source for crops grown the following year.

6. The types of crop(s) grown, planting and harvest dates, and the quantified nitrogen and fixed dissolved solids uptakes including potassium (as estimated by technical references or, preferable, defined by representative plant tissue analysis). Include a copy of plant tissue analysis if used to determine crop uptake.

7. Tabular and graphical summaries of all data collected during the year.

8. Names, titles, and contact information for persons to contact regarding the Facility for emergency and routine situations.

9. A summary of the handling and disposal of solids removed from the Facility during the calendar year as specified in Section II.I.

10. A discussion of annual chemical usage at the Facility (e.g., chemical name, purpose, and quantity used).

11. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

12. Statement certifying when the flow meter and other monitoring instruments and devises were last calibrated, include identification of who performed the calibrations (SPRRs C.4).

13. A discussion of compliance and corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the WDRs Order.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350, and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Resources Control Board must receive the petition by 5:00 p.m., 30 days after the date of this MRP, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Resources Control Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided on request.

The Discharger shall implement the above monitoring program **starting 1 January 2026**.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of the Monitoring and Reporting Program R5-2025-XXXX issued by the California Regional Water Quality Control Board, Central Valley Region, on XX December 2025.

_____
PATRICK PULUPA, Executive Officer

IV. GLOSSARY

BOD_5	Five-day biochemical oxygen demand
CaCO3	Calcium carbonate
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
LAA	Land application area(s)
TDS	Total dissolved solids
TKN	Total Kjeldahl nitrogen
TSS	Total suspended solids
Continuous	The specified parameter shall be measured by a meter continuously.
1/Week	Once per week
1/Month	Once per month
2/Month	Twice per month in non-consecutive weeks
1/Quarter	Once per quarter
1/Year	Once per year
2/Year	Twice per year
mg/L	Milligrams per liter
mg/kg	Milligrams per kilogram
mgd	Million gallons per day
µmhos/cm	Micromhos per centimeter
µg/L	Micrograms per liter
s.u.	Standard pH units
General Minerals	Analysis shall include; alkalinity (as $CaCO_3$), bicarbonate (as $CaCO_3$), boron, calcium, carbonate (as $CaCO_3$), chloride, iron, magnesium, manganese, nitrate (as N), phosphate, potassium, sodium, sulfate, total dissolved solids, and verification that the analysis is complete (i.e., cation/anion balance).