

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

**[TENTATIVE] MONITORING AND REPORTING PROGRAM ORDER R5-2025-XXXX**  
FOR  
TREEHOUSE CALIFORNIA ALMONDS, LLC  
EARLIMART ALMOND PROCESSING FACILITY  
TULARE COUNTY

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

Treehouse California Almonds, LLC (Discharger) owns and operates the Earlimart Almond Processing Facility (Facility) and the adjacent land application area (LAA). The reuse of process wastewater from the Facility on the LAA is subject to the WDRs Order, and the Discharger 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) adopts, or the Executive Officer 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-001             | Location where a representative sample of the influent process wastewater may be collected from the wet well and prior to discharge to Anaerobic Pond No. 1. |
| EFF-001             | Location where a representative sample of the treated effluent may be collected from the effluent storage pond.                                              |
| POND                | Anaerobic Ponds No. 1 and 2 (ATP-001 and ATP-002)<br>Activated sludge aeration basin (ASA-001)<br>Effluent storage pond (ESP-001)                            |
| SW-001              | Source water monitoring                                                                                                                                      |
| IRG-001             | Location where a representative sample of the irrigation water may be obtained prior to blending with wastewater.                                            |
| LAA-001             | 66-acre land application area.                                                                                                                               |
| SOIL-001, 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, plant tissue, 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, or at least annually;
3. The instruments are serviced and/or calibrated by the manufacturer at the recommended frequency, or at least annually; 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 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-001)**

The Discharger shall monitor the influent wastewater from the wet well after screening but before discharge into Anaerobic Pond No. 1. Samples shall be representative of the volume and nature of the discharge. Time of collection of all samples shall be recorded. The wet well shall be inspected visually to verify that there are no obstructions, and wastewater is flowing freely. At a minimum, the influent wet well shall be monitored as specified in Table 2:

**Table 2 – Influent Monitoring**

| Constituent/Parameter          | Units | Sample Type                  | Frequency  |
|--------------------------------|-------|------------------------------|------------|
| Flow                           | MGD   | Metered                      | Continuous |
| BOD <sub>5</sub>               | mg/L  | Grab                         | 1/month    |
| Freeboard at Influent Wet well | --    | Observation<br>(see 2 below) | 1/Week     |
| Concrete Condition             | --    | Observation                  | 1/Year     |

1. If offensive odors are detected by or brought to the attention of the Discharger, the Discharger shall monitor the potential source wet well at least daily (excluding weekends and holidays) for pH, and odors until the odor issue has been resolved.
2. Visual verification that the wet well is not obstructed and is flowing freely.

**B. EFFLUENT MONITORING (EFF-001)**

The Discharger shall monitor the quality of its treated effluent at the effluent storage pond after all treatment and prior to blending with fresh irrigation water. Effluent samples shall be representative of the volume and nature of the discharge and collected when wastewater is discharged from the Facility. Time of collection of all samples shall be recorded. Effluent monitoring shall include at least the following:

**Table 3 – Effluent Monitoring**

| Constituent/Parameter          | Units    | Sample Type | Frequency               |
|--------------------------------|----------|-------------|-------------------------|
| Flow                           | mgd      | Meter       | Continuous              |
| BOD <sub>5</sub>               | mg/L     | Grab        | 1/Month                 |
| pH                             | S.U.     | Grab        | 1/Month                 |
| EC                             | µmhos/cm | Grab        | 1/Month                 |
| FDS                            | mg/L     | Grab        | 1/Month                 |
| Potassium                      | mg/L     | Grab        | 1/Month                 |
| Nitrate (as N)                 | mg/L     | Grab        | 1/Month                 |
| Nitrite (as N)                 | mg/L     | Grab        | 1/Month                 |
| TKN                            | mg/L     | Grab        | 1/Month                 |
| Total Nitrogen                 | mg/L     | Grab        | 1/Month                 |
| TDS                            | mg/L     | Grab        | 1/Month                 |
| General Minerals (see 1 below) | mg/L     | Grab        | 1/Year<br>(see 2 below) |

1. See the Glossary for the definition of General Minerals.
2. Samples shall be collected once per year.

### C. POND MONITORING (ATP-001, ATP-002, ASA-001, AND ESP-001)

The Discharger shall monitor the lined anaerobic, aeration, and storage ponds when wastewater is present. Freeboard shall be measured to the nearest 0.1 foot vertically from the surface of the water to the lowest elevation of the berm. Water quality samples shall be collected at a depth of one foot below the surface of the water opposite the inlet. The Discharger shall operate and maintain leachate collection and removal system (LCRS) under each effluent storage pond in accordance with the Facility's Operation and Maintenance Plan that was included in the RWD. At a minimum, the ponds shall be monitored as specified in Table 4.

**Table 4 – Pond Monitoring**

| Constituent/Parameter            | Units                 | Sample Type | Frequency                                              |
|----------------------------------|-----------------------|-------------|--------------------------------------------------------|
| DO (see 1 below)                 | mg/L                  | Grab        | 2/Month<br>(see 1 and 2 below)                         |
| pH                               | s.u.                  | Grab        | 2/Month<br>(see 1 and 2 below)                         |
| Freeboard                        | Nearest 0.5 Foot      | Observation | 1/Week                                                 |
| Odors                            | ---                   | Observation | 1/Week<br>(see 2 below)                                |
| Solids Depth<br>(see 3 below)    | Nearest 1 Foot        | Observation | 1/Year in October                                      |
| Liner Condition<br>(see 4 below) | ---                   | Observation | 1/Year                                                 |
| Leachate Flow<br>(see 5 below)   | Gallons               | Calculate   | 2/Year (or as specified<br>in an approved O&M<br>Plan) |
| Leachate Rate<br>(See 6 below)   | Gallons Per<br>Minute | Calculate   | 1/Year (or as specified<br>in an approved O&M<br>Plan) |

1. Samples for DO and pH shall be collected between 8:00 am and 10:00 a.m. when there is more than one foot of water in the pond. If there is insufficient water in the pond no sample shall be collected, and the Discharger shall report that in the appropriate monitoring report. DO monitoring is not required in the anaerobic treatment ponds (ATP-001 and ATP-002)
2. If offensive odors are detected by or brought to the attention of the Discharger, the Discharger shall monitor the potential source pond at least daily for DO, pH, and odors until the odor issue has been resolved and the DO in the pond is greater than 1.0 mg/L.
3. Thickness of settled solids at the bottom of the pond(s)
4. The Discharger shall conduct the pond liner monitoring detailed in the Operation and Maintenance (O&M) Plan.
5. The Discharger shall inspect the LCRS sump(s) for presence of leachate, in accordance with the O&M Plan. The total flow in each sump shall be recorded.

6. The Discharger shall notify Central Valley Water Board staff within seven days if the rate of fluid generation in any LCRS sump exceeds the Action Leakage Rate of 0.3 gallons per minute for the anaerobic and aerobic ponds and 1.2 gallons per minute for the Effluent Storage Pond specified in Discharge Specification F.4 of the WDRs.

#### **D. SOURCE WATER MONITORING (SW-001)**

The source water used for Facility operations shall be monitored. 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. Source water monitoring shall include at least the following:

**Table 5 – Source Water Monitoring**

| <b>Constituent/Parameter</b> | <b>Units</b> | <b>Sample Type</b> | <b>Frequency</b>        |
|------------------------------|--------------|--------------------|-------------------------|
| Flow                         | mgd          | Meter              | Continuous              |
| EC                           | µmhos/cm     | Grab               | 1/Year<br>(see 1 below) |
| Nitrate (as N)               | mg/L         | Grab               | 1/Year<br>(see 1 below) |
| FDS                          | mg/L         | Grab               | 1/Year<br>(see 1 below) |

1. Samples shall be collected once per year.

#### **E. IRRIGATION WATER MONITORING (IRG-001)**

The Discharger shall collect samples of the irrigation water used to blend with effluent and irrigate the various fields within the available LAA. If the irrigation water is from more than one source, samples will be provided from each source. Irrigation monitoring shall include at least the following:

**Table 6 – Irrigation Water Monitoring**

| <b>Constituent/Parameter</b> | <b>Units</b> | <b>Sample Type</b> | <b>Frequency</b> |
|------------------------------|--------------|--------------------|------------------|
| Flow                         | mgd          | Meter              | Continuous       |
| EC                           | µmhos/cm     | Grab               | 1/Year           |
| FDS                          | mg/L         | Grab               | 1/Year           |
| Nitrate (as N)               | mg/L         | Grab               | 1/Year           |

In addition, the Discharger shall conduct an annual inspection of its irrigation system. The inspection shall note all irrigation lines and connections to fields that will be used for

application of wastewater. The results of the inspection as well as a map documenting the various irrigation lines and fields used for transportation or storage of wastewater shall be included in the Annual Report.

#### F. LAND APPLICATION AREA MONITORING (LAA-001)

The Discharger shall inspect the land application area (LAA) at least once daily prior to and during irrigation events. Evidence of erosion, field saturation, runoff, or the presence of nuisance conditions (i.e., flies, ponding, etc.) shall be noted in the Facility's logbook and included as part of the annual monitoring report. In addition, the Discharger shall perform the following routine monitoring and loading calculations for each discrete irrigation area (field) within the LAA each day when wastewater is applied. The Discharger prepare a map that identifies discrete fields for consistent irrigation and constituent load monitoring. Monitoring data shall be collected and presented in graphical (map) and/or tabular format and shall include the following:

**Table 7 – Land Application Area Monitoring**

| Constituent/Parameter                                                    | Units        | Sample Type              | Frequency |
|--------------------------------------------------------------------------|--------------|--------------------------|-----------|
| Fields Irrigated (Field Numbers)                                         | acres        | n/a                      | Daily     |
| Wastewater Flow for each field (see 1 below)                             | gallons      | n/a                      | Daily     |
| Wastewater Application Loading for each field                            | inches       | Calculated               | Daily     |
| Supplemental Irrigation Flow for each field (see 1 below)                | mgd          | Metered                  | Daily     |
| Supplemental Irrigation Application Loading for each field (see 1 below) | inches/day   | Calculated               | Daily     |
| Precipitation                                                            | inches       | Rain gauge (see 2 below) | Daily     |
| Total Hydraulic Flow for each field                                      | mgd          | Calculated               | Daily     |
| Total Hydraulic Load for each field                                      | inches       | Calculated               | Daily     |
| <b>BOD<sub>5</sub> Loading (for each field)</b><br>(see 3, 4, 5 below)   |              |                          |           |
| Daily Loading                                                            | lbs/acre     | Calculated               | Daily     |
| Cycle average loading rate (see 4 below)                                 | lbs/acre-day | Calculated               | Cycle     |

| Constituent/Parameter                                           | Units         | Sample Type | Frequency |
|-----------------------------------------------------------------|---------------|-------------|-----------|
| <b>Nitrogen Loading (for each field)</b><br>(see 3 and 4 below) |               |             |           |
| From wastewater                                                 | lbs/acre/year | Calculated  | 1/Year    |
| From fertilizer/compost                                         | lbs/acre/year | Calculated  | 1/Year    |
| From supplemental irrigation water                              | lbs/acre/year | Calculated  | 1/year    |
| From screened solids                                            | lbs/acre/year | Calculated  | 1/year    |
| <b>FDS Loading (for each field)</b><br>(see 3 and 4 below)      |               |             |           |
| From wastewater                                                 | lbs/acre      | Calculated  | 1/Year    |
| From supplemental irrigation water                              | lbs/acre      | Calculated  | 1/Year    |
| From screened solids                                            | lbs/acre      | Calculated  | 1/Year    |
| <b>Field Conditions</b>                                         |               |             |           |
| Nuisance Odor/Vectors                                           | --            | Observation | Weekly    |
| Discharge Runoff                                                | --            | Observation | Weekly    |

1. Treated wastewater flow to the LAA is the metered flow of EFF-001. Supplemental irrigation water flow is the metered flow of IRG-001.
2. National Weather Service or CIMIS data from the nearest weather station is acceptable.
3. Combined loading from wastewater, irrigation water, and precipitation.
4. BOD<sub>5</sub>, nitrogen, and salt loading shall be calculated as specified in section III of this MRP.
5. A cycle average is calculated by taking the pounds of BOD<sub>5</sub> added to the LAA in a given period divided by the sum of the total days wastewater was applied plus the number of days of rest (no application of wastewater or supplemental irrigation water). See section III of the MRP for the calculation.

#### **G. SOIL MONITORING (SOIL-001, ETC.)**

The Discharger shall establish representative sampling locations within each discrete field, and at least one background location (i.e., that historically has not received process wastewater). 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. The samples shall be collected from the ground surface (depths of 0.5 feet or 6 inches), 2-, 4-, and 6-feet below ground surface. At least 60 days prior to the first sampling event, the Discharger shall submit to the Central Valley Water Board a soil

monitoring protocol proposing the number and locations of soil samples within each field. All samples shall be analyzed for the constituents and frequencies specified in the following table:

**Table 8 – Soil Monitoring**

| Constituent/Parameter                  | Units   | Sample Type | Frequency             |
|----------------------------------------|---------|-------------|-----------------------|
| Standard Fertility Assay (see note 1)  | Various | Composite   | 2/Year                |
| Organic Matter                         | Percent | Composite   | Once<br>(see 2 below) |
| Nitrate-nitrogen (NO <sub>3</sub> -N)  | mg/kg   | Composite   | 2/Year                |
| Ammonium-nitrogen (NH <sub>4</sub> -N) | mg/kg   | Composite   | 2/Year                |
| Total Kjeldahl Nitrogen (TKN)          | mg/kg   | Composite   | 2/year                |
| USDA NRCS Soil Texture by feel         | n/a     | Grab        | Once<br>(see 2 below) |

1. See glossary for definition of Standard Fertility Assay
2. To be analyzed once, during the first sampling event

#### **H. SOLIDS MONITORING (SOLIDS)**

The Discharger shall maintain detailed records for disposal and/or recycling of residual solids removed from the Facility. The record should include information on quantity, storage, 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 Quarterly and Annual Reports.

### **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 WDR100036950** at the [Geotracker](https://geotracker.waterboards.ca.gov/esi/login.asp) 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) ([https://www.waterboards.ca.gov/ust/electronic\\_submittal/index.html](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) ([https://www.waterboards.ca.gov/ust/electronic\\_submittal/docs/geotracker\\_esi\\_rp\\_beginners\\_guide\\_revisedoct2019.pdf](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](mailto: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. All field calibration logs and equipment maintenance records shall be retained onsite for a minimum of three years and made available upon request.

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 first (1<sup>st</sup>) day of the second month after the quarter** (i.e. the 1<sup>st</sup> quarter [January – March] quarterly report is due 1<sup>st</sup> May). Each Quarterly Report shall include the following:

1. Results of the **Influent Monitoring** as specified in Section II.A.
2. Results of the **Effluent Monitoring** as specified in Section II.B, including:
  - a. Calculation of the maximum daily and monthly average flow for each month of the quarter.
3. Results of **Pond Monitoring** as specified in Section II.C.
4. Results of **Land Application Area Monitoring** as specified in Section II.F.
  - a. A summary of LAA inspection activities conducted by the Discharger
  - b. Calculation of the hydraulic load for wastewater and fresh irrigation water to the land application area in gallons and/or acre-inches, by field.
  - c. Calculate the cycle average BOD loading rate for the LAA.

The mass of BOD applied to each discrete irrigation area/field 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<sub>5</sub> applied to an LAA in lbs/ac/day  
 $C$  = Concentration of BOD<sub>5</sub> in mg/L based on the three-sample rolling average concentration using the three most recent sampling event results (i.e. the current and previous two months sampling results)  
 $V$  = Total volume of wastewater applied to discrete LAA fields during the irrigation cycle, in millions of gallons  
 $A$  = Area of the LAA irrigated in acres  
 $T$  = Irrigation cycle length in days (from the first day wastewater is applied to the last day of the drying time [prior to subsequent application of process wastewater or supplemental irrigation water])  
8.345 = Unit conversion factor

#### 5. 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 shall be prepared and submitted to the Central Valley Water Board by **1<sup>st</sup> February each year**, and shall include the following:

1. Total annual effluent flow and the average monthly flows for each month of the year expressed as millions of gallons per day.
2. Results **Source Water Monitoring (SW-001)**, as specified in Section II.D, for the year. 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).
3. Results of **Irrigation Water Monitoring (IRG-001)** as specified in Section II.E, including:
  - a. A map showing the locations of the irrigation lines used to carry and transport wastewater to the various fields.

4. Results of **Soil Monitoring** (SOIL-001, etc.), as specified in Section II.G.
5. **For the LAA**, a chronological log of dates of fertilizer/compost application, residual solids application, irrigation, precipitation, and runoff control operations. Nitrogen and salt loading calculations shall also be included.
  - a. The mass of total nitrogen and FDS applied to each LAA field shall be calculated using the following formula and compared to published crop demand for the crops actually 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 the LAA in lbs/ac/yr                                                                                                                        |
|        | $C_i$ | = | Flow-weighted average concentration (as a three-sample rolling average) of total nitrogen/FDS (irrigation, wastewater, and screened solids [as applicable]) for the month in mg/L |
|        | $V_i$ | = | Total volume of irrigation and wastewater applied to the LAA during the month, in million gallons                                                                                 |
|        | $A$   | = | Area of the LAA (i.e., field) irrigated in acres                                                                                                                                  |
|        | $I$   | = | The number of the month (e.g., January = 1, February = 2, etc.)                                                                                                                   |
|        | $M_x$ | = | Total nitrogen/FDS mass from other sources (e.g., fertilizer and compost) in pounds                                                                                               |
|        | 8.345 | = | Unit conversion factor                                                                                                                                                            |

- b. An evaluation of soil monitoring data collected over the reporting period as specified in Section II.G, including estimated concentrations in the upper six feet of LAA soils of Nitrate-N, Ammonia-N and TKN in units of lbs/acre.
6. The types of crop(s) grown, planting and harvest dates, and the quantified nitrogen and FDS uptakes (as estimated by technical references or, preferably, defined by representative plant tissue analysis).
7. Calculation of the annual average FDS for Monitoring Location EFF-001. Include a comparison of the annual weighted average FDS concentration to the Performance-Based Effluent Limit specified in the WDRs.

8. Tabular and graphical summaries of all data collected during the year.
9. A comparison of monitoring data to the flow limitations proposed in the RWD and an explanation of any violations.
10. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.
11. A discussion of annual chemical usage at the Facility (e.g., chemical name, purpose, and quantity used).
12. Statement certifying when the flow meter(s) and other monitoring instruments and devices were last calibrated, include identification of who performed the calibrations (SPRRs C.4).
13. Names, title, and contact information for persons to contact regarding the Facility for emergency and routine situations.
14. A summary of handling and disposal of solids removed from the Facility during the calendar year, as specified in Section II.H.
15. 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](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)) or will be provided on request.

The Discharger shall begin implementation of 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 12 December 2025

Ordered by:

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PATRICK PULUPA, Executive Officer

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(Date)

#### IV. GLOSSARY

|                          |                                                                                                                                                                                                                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BOD <sub>5</sub>         | Five-day biochemical oxygen demand                                                                                                                                                                                                                                                                                          |
| CaCO <sub>3</sub>        | Calcium carbonate                                                                                                                                                                                                                                                                                                           |
| DO                       | Dissolved oxygen                                                                                                                                                                                                                                                                                                            |
| EC                       | Electrical conductivity at 25° C                                                                                                                                                                                                                                                                                            |
| FDS                      | Fixed dissolved solids                                                                                                                                                                                                                                                                                                      |
| TDS                      | Total dissolved solids                                                                                                                                                                                                                                                                                                      |
| TKN                      | Total Kjeldahl nitrogen                                                                                                                                                                                                                                                                                                     |
| Continuous               | The specified parameter shall be measured and logged by a meter continuously.                                                                                                                                                                                                                                               |
| Daily                    | Once per day                                                                                                                                                                                                                                                                                                                |
| 1/Week                   | Once per week                                                                                                                                                                                                                                                                                                               |
| 2/Week                   | Twice per week on non-consecutive days                                                                                                                                                                                                                                                                                      |
| 1/Month                  | Once per month                                                                                                                                                                                                                                                                                                              |
| 2/Month                  | Twice per month in non-consecutive weeks                                                                                                                                                                                                                                                                                    |
| 1/Year                   | Once per year                                                                                                                                                                                                                                                                                                               |
| mg/L                     | Milligrams per liter                                                                                                                                                                                                                                                                                                        |
| mg/kg                    | Milligrams per kilogram                                                                                                                                                                                                                                                                                                     |
| mL/L                     | Milliliters [of solids] per liter                                                                                                                                                                                                                                                                                           |
| µg/L                     | Micrograms per liter                                                                                                                                                                                                                                                                                                        |
| µmhos/cm                 | Micromhos per centimeter                                                                                                                                                                                                                                                                                                    |
| gpd                      | Gallons per day                                                                                                                                                                                                                                                                                                             |
| mgd                      | Million gallons per day                                                                                                                                                                                                                                                                                                     |
| General Minerals         | Analysis shall include; alkalinity (as CaCO <sub>3</sub> ), bicarbonate (as CaCO <sub>3</sub> ), boron, calcium, carbonate (as CaCO <sub>3</sub> ), chloride, iron, magnesium, manganese, nitrate as N, phosphate, potassium, sodium, sulfate, and verification that the analysis is complete (i.e., cation/anion balance). |
| Standard Fertility Assay | Saturation percentage, pH, EC, Ca, Mg, Na, ESP, B, Gypsum requirement or lime requirement (buffer pH), PO <sub>4</sub> -P, K, Zn, Cl                                                                                                                                                                                        |