

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2026-00XX
FOR
BOUNDARY BEND OLIVES, INC., BOUNDARY BEND ASSETS, INC.,
SUE SCHWARZGRUBER, SUZANNE HORSLEY, C MONDAVI AND FAMILY,
AND THE DEFTY FAM TRUST
POMACE LAND APPLICATION SITES
YOLO COUNTY

This Monitoring and Reporting Program Order (MRP) for Boundary Bend Olives, Inc., Boundary Bend Assets, Inc., Boundary Bend Assets, Inc., Sue Schwarzgruber, Suzanne Horsley, C Mondavi and Family, and the Defty Fam Trust, through its trustee Spencer Defty (collectively referred to herein as the Discharger) is issued pursuant to Water Code section 13267. This MRP establishes monitoring and reporting requirements associated with waste discharges regulated under Waste Discharge Requirements Order R5-2026-00xx (WDRs Order). Each of the Findings set forth in the WDRs Order, including those requiring the submittal of reports, are hereby incorporated as part of this MRP.

Boundary Bend Olives, Inc. owns and operates the Boundary Bend Olives, Inc. Facility located at 455 Harter Avenue in Woodland. Process and domestic wastewater generated onsite is discharged to the City of Woodland Water Pollution Control Facility (WPCF) which is operated under WDRs Order R5-2026-0004 (NPDES Permit CA0077950). The raw pomace (consisting of olive skins, pulp, and pits) applied to the land application areas (LAAs) is subject to WDRs Order R5-2026-00xx. The LAAs consist of multiple parcels under separate ownership. Parcel owners include Boundary Bend Olives, Inc., Boundary Bend Assets, Inc., Sue Schwarzgruber, Suzanne Horsley, C Mondavi and Family, and the Defy Fam Trust, through its trustee Spencer Defty.

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. The measurements may be based on flow meter readings or pump run time estimate.

The method of measurement must be specified in the corresponding monitoring report. 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. The Central Valley Water Board shall approve any proposed changes to sampling locations prior to implementation of the proposed change.

The Discharger shall monitor the following locations to demonstrate compliance with the requirements of this MRP as shown in **Table 1** below.

Table 1 – Monitoring Location Designations

Monitoring Location	Monitoring Location Description
PWW-001	Flow meter located in the wastewater area, representative of process wastewater discharged into the sewer system.
RSW-001	Representative sample of the pomace waste collected from the above-ground hopper prior to discharge to the land application areas.
LAA BB1	Land Application Area Monitoring at Boundary Bend 1 (APN 054-020-014)
LAA BB2	Land Application Area Monitoring at Boundary Bend 2 (APNs 054-230-009, 054-230-021, 054-230-022, 054-230-024, 055-210-012, 055-210-009, 049-010-005, 049-010-014, 049-010-015, 049-010-017, 049-010-018, 049-010-019, 049-010-020, 049-010-021, 025-010-043, and 025-010-044)
LAA BB3	Land Application Area Monitoring at Boundary Bend 3 (APNs 061-170-005, 061-170-004, 061-180-008, 048-150-007, 048-160-002)
LAA BB4	Land Application Area Monitoring at Boundary Bend 4 (APNs 061-060-003 and 054-050-010)
LAA Defty	Land Application Area Monitoring at the Defty Property (APNs 025-450-019, 025-450-020, 025-450-021, and 025-450-022)

Monitoring Location	Monitoring Location Description
LAA Mondavi	Land Application Area Monitoring at the Mondavi Property (APNs 054-130-007, 054-130-008, 054-140-006, 054-190-016, 054-190-017, 054-200-003, 054-200-012, and 054-200-013)
LAA NW1	Land Application Areas Monitoring at Northwest 1 (APNs 061-120-006 and 061-120-008).
LAA NW2	Land Application Areas Monitoring at Northwest 2 (APNs 054-190-001, 054-190-012, 054-220-001, 054-220-002, 054-220-003, 054-220-004, 054-220-013, 054-220-014, 054-230-015, 054-220-016, and 054-220-017).
LAA SW	Land Application Areas Monitoring at Southwest (APNs 047-140-047 and 049-220-006).
MW-01, etc	Any future groundwater monitoring wells added to the groundwater monitoring well network to determine impacts within the LAAs.
SOIL-01, etc	Soil monitoring

C. SAMPLING AND SAMPLE ANALYSIS

All samples and measurements 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 process wastewater, pomace, soil, 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, 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 at the manufacturer's recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP.

All analyses shall be performed in accordance with the Standard Provisions and Reporting Requirements for Waste Discharge Requirements, 1 March 1991 ed. ([1 March 1991 SPRRs](#))

[https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/sd_provisions/wdr-mar1991.pdf].

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 U.S. Environmental Protection Agency or the State Water Resources Control Board's Environmental 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 concentrations that implement applicable water quality objectives/limits for the constituents to be analyzed.

II. SPECIFIC MONITORING REQUIREMENTS

A. COMMODITY AND PROCESS WASTEWATER MONITORING (PWW-001)

1. Total amount of olives in tons processed each month during the calendar year shall be monitored and reported in the Annual Report.
2. Process wastewater discharged into the sewer system shall be monitored for the following parameters and reported in the Annual Report:

Table 2. Process Water Monitoring

Parameter	Units	Sample Type	Monitoring Frequency
Total flow rate	gallons	meter	1/Month (see note 1 below)

Table 2 Notes:

1. Report the total monthly flow for each month from August through December during the processing season, and indicate whether olives were processed in each month.

B. POMACE MONITORING

1. Pomace (RSW-001) samples shall be collected from the hoppers prior to application to the LAAs. Samples shall be collected during the processing season (September through December) and at any time pomace is discharged to the LAAs. Monitoring shall be reported in the Annual Report. Analysis shall be in accordance with Waste Extraction Test (WET) (see Cal. Code Regs., tit. 22, § 66700) using de-ionized (DI) water extraction for the constituents specified in **Table 3**.

Table 3. Pomace Monitoring

Parameter/ Constituent	Units	Sample Type	Monitoring Frequency
Total pomace generated	tons	N/A	Bi-weekly (see note 1 below)
Moisture content	Percent weight	Grab	Bi-weekly (see note 1 below)
pH	Std units	Grab	Bi-weekly (see note 1 below)
BOD ₅	mg/L	Grab	Bi-weekly (see note 1 below)
EC	µmhos/cm	Grab	Bi-weekly (see note 1 below)
FDS	mg/L	Grab	Bi-weekly (see note 1 below)
Total nitrogen	mg/L	Grab	Bi-weekly (see note 1 below)
Nitrate as N	mg/L	Grab	Bi-weekly (see note 1 below)
TKN	mg/L	Grab	Bi-weekly (see note 1 below)
Iron	mg/L	Grab	1/Year (see note 2 below)
Manganese	mg/L	Grab	1/Year (see note 2 below)

Parameter/ Constituent	Units	Sample Type	Monitoring Frequency
General Minerals (see note 3 below)	mg/L	Grab	1/Year (see note 2 below)

Table 3 Notes:

1. Samples shall be collected every two weeks during the processing season (September through December) and whenever pomace is applied to the LAAs.
2. Samples shall be collected once annually in October during the processing season.
3. See the Glossary at the end of this MRP for the definition of General Minerals.

C. LAND APPLICATION AREA MONITORING

The Discharger shall monitor the LAAs during pomace application events in accordance with the following:

1. Each discrete LAA shall be identified by both name and assessor's parcel number (APN). The Discharger shall provide a map showing the locations of all LAAs, with APN indicated, where pomace was applied during the monitoring period.
2. Each parcel shall be inspected at least once per day, both prior to and during application events. Any evidence of erosion, field saturation runoff, or the presence of nuisance conditions (i.e., flies, ponding, etc.) shall be documented and included in the Annual Report.
3. The Discharger shall perform the routine monitoring and loading calculations outlined in **Table 4** for each parcel during pomace application events. Mass loading shall be determined by using the average concentrations (mg/L) of BOD₅, FDS, and Total Nitrogen applied per actual acreage applied on each parcel. Mass loading shall be calculated as specified in Section III of this MRP.
4. All monitoring shall be reported in the Annual Report.

Table 4. Land Application Area Monitoring

Parameter	Units	Sample Type	Monitoring Frequency
Precipitation/Rainfall	inches	Observation	Daily
Pomace applied	tons	N/A	Daily
Parcel (APN) applied with pomace	acres	N/A	Daily

Parameter	Units	Sample Type	Monitoring Frequency
Pomace application rate for each parcel (APN)	in/day	Calculated	Daily
Total pomace loading for each parcel (APN)	tons/ac/day	Calculated	Daily
BOD₅ mass loading (for each parcel)			
Daily Loading from pomace:	lb/ac/day	Calculated	Daily (see note 1 below)
FDS mass loading (for each parcel)			
Daily Loading from pomace:	lb/ac/day	Calculated	Daily (see note 1 below)
Total nitrogen mass loading (for each parcel)			
Daily loading from pomace:	lb/ac/day	Calculated	Daily (see note 2 below)
Daily loading from supplemental nitrogen:	lb/ac/day	Calculated	Daily (see note 3 below)
Field Conditions			
Erosion:	N/A	Observation	Daily
Discharge Runoff:	N/A	Observation	Daily
Nuisance Odors/Vectors:	N/A	Observation	Daily

Table 4 Notes:

1. BOD and FDS mass loading shall be calculated using the daily applied volume of pomace, actual acreage receiving pomace for each parcel, and most recent BOD and FDS concentration results.
2. Total nitrogen loading rate shall be calculated using the daily applied volume of pomace, actual acreage receiving pomace for each parcel, and most recent total nitrogen results.
3. Total nitrogen loading rate for any supplemental nitrogen (including commercial fertilizers, manure from cattle, etc.) shall be calculated using the actual load and actual acreage for each parcel receiving pomace.

D. SOIL MONITORING

The Discharger shall establish pre-discharge soil characteristics within each of the nine discrete LAAs (BB1, BB2, BB3, BB4, Defty, Mondavi, NW1, NW2, and SW) as follows. At a minimum, three soil samples shall be collected from each

parcel within each LAAs. For parcels 300 acres or larger, additional soil samples shall be collected at a rate of one sample location per 100 acres. Soil sampling locations shall be evenly distributed across each parcel. The Discharger shall provide a map identifying the sample locations (e.g., latitude and longitude). Grab soil samples shall be collected at a depth between 1 to 2 feet below the interval of disturbed soil from ground surface. Each 6-inch sample shall be thoroughly mixed to create a composite sample representative of the depth interval. All sampling results shall be reported in the Annual Report. Analysis shall be performed on the extract obtained for the Waste Extraction Test method using distilled water as the extractant. Samples shall be analyzed for the parameters shown in **Table 5** below.

Table 5. Soil Monitoring

Parameter/Constituent	Units	Monitoring Frequency
Soil Classification (USCS and USDA)	Field observation	1/Year (see note 1 below)
Soil pH	Std. units	1/Year (see note 1 below)
Moisture content	Percent moisture	1/Year (see note 1 below)
Cation exchange capacity	meq/100 grams	1/Year (see note 1 below)
TDS	mg/kg, mg/L	1/Year (see note 1 below)
Total nitrogen	mg/kg, mg/L	1/Year (see note 1 below)
Nitrate as N	mg/kg, mg/L	1/Year (see note 1 below)
Iron	mg/kg, mg/L	1/Year (see note 1 below)
Manganese	mg/kg, mg/L	1/Year (see note 1 below)

Table 5 Note:

1. Post-discharge soil samples shall be conducted annually following any harvest-season application. Sampling must occur in the calendar year after an application to any discrete LAA and completed by 1 July, prior to the next harvest season or before any subsequent application.

Post-discharge soil sampling shall be conducted annually following any harvest-season application. Sampling shall occur in the calendar year after an application

to any discrete LAA and shall be collected by **1 July** prior to the next harvest season or before any subsequent application. All sampling results shall be submitted in the Annual Report.

Upon cessation of land application activities within an LAA, the Discharger shall collect a final post-discharge soil sample to document site conditions following the last land application event.

E. POMACE DISPOSAL MONITORING

The Discharger shall maintain detailed records for disposal and/or recycling of pomace removed from the Facility. The record should include information on quantity and method of disposal (i.e., livestock feed, composting, etc.) and receipts (if applicable). A summary of the information shall be included in the Annual Report.

F. GROUNDWATER MONITORING

1. Prior to construction of any new groundwater monitoring wells, the Discharger shall submit a *Groundwater Monitoring Well Installation Workplan* to the Central Valley Water Board in accordance with Provisions I.1.g and I.1.h of this WDRs. Once installed, all new monitoring wells shall be appropriately incorporated into monitoring conducted under this MRP.
2. If a groundwater monitoring well is dry or has insufficient water for sampling for more than four consecutive sampling events or is damaged, the Discharger shall submit to the Central Valley Water Board a workplan and proposed time schedule for its replacement, and the well shall be replaced following approval of the workplan. Alternatively, the Discharger shall submit a report with supporting evidence that a replacement well is not needed.
3. Prior to sampling, depth to groundwater measurements shall be measured in each monitoring well to the nearest 0.01 feet. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction. Groundwater elevation shall be determined based on depth-to-water measurements using a surveyed measuring point elevation on the well and a surveyed reference elevation.
4. Sampling activities shall be conducted in accordance with the Discharger's Sampling and Analysis Plan. Samples shall be collected and analyzed using standard EPA methods.
5. Sampling results shall be reported in the Quarterly Reports.

6. Groundwater monitoring shall include, at a minimum, the parameters and constituents listed in **Table 6** below.

Table 6 – Groundwater Monitoring

Parameter/ Constituent	Units	Type of Sample	Sampling Frequency
Depth to Groundwater	0.01 feet	Measurement	1/Quarter
Groundwater Elevation	feet	Calculated	1/Quarter
Gradient	feet/feet	Calculated	1/Quarter
Gradient Direction	degrees	Calculated	1/Quarter
EC	µmhos/cm	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter
Nitrate as N	mg/L	Grab	1/Quarter
TKN	mg/L	Grab	1/Quarter
Potassium	mg/L	Grab	1/Quarter
TOC	mg/L	Grab	1/Quarter
General Minerals (see note 1 and 2 below)	mg/L	Grab	1/Year

Table 6 Notes:

1. See the Glossary at the end of this MRP for the definition of General Minerals.
2. 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.
7. If monitoring consistently shows no significant variation in a constituent concentration or parameter after at least eight consecutive groundwater monitoring events, the Discharger may request this MRP be revised to reduce monitoring frequency, constituent analyses, or monitoring parameters. The proposal must include adequate technical justification for a reduction in monitoring frequency. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Water Board adopts, or the Executive Officer issues, a revised MRP.

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. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any correspondence used to transmit documents to this office:

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 **WDR100047517** 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 the following penalty of perjury statement and shall be signed 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:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., pomace, 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 MRP shall be reported in the next scheduled monitoring report.

Laboratory analysis reports shall be included in the monitoring reports. All laboratory reports must 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 under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. MONITORING PERIOD AND REPORT DUE DATES

Monitoring reports are due as described in the table below.

Table 7. Monitoring Period and Reporting Summary

Monitoring Report	Monitoring Period	Reporting Due Date
First Quarter	1 January to 31 March	1 May
Second Quarter	1 April to 30 June	1 August
Third Quarter	1 July to 30 September	1 November
Fourth Quarter	1 October to 31 December	1 February
Annual	1 January to 31 December	1 February

B. QUARTERLY MONITORING REPORT

Quarterly monitoring data shall be prepared and submitted to the Central Valley Water Board by the **1st day of the second month after the quarter** (see **Table 7** above). Each Quarterly Monitoring Report, at a minimum, shall include the following:

1. Results of the **Groundwater Monitoring** as specified in Section II.F.
 - a. A narrative description of all preparatory, monitoring, sampling, handling, and analytical testing for groundwater monitoring.
 - b. A field log for each well documenting depth to groundwater; method of purging, parameters measured before, during, and after purging; sample preparation (e.g., filtering); and sample preservation.
 - c. Data in tabular format during the reported quarter.
 - d. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any.
 - e. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).
 - f. A scaled map showing relevant structures and features of the Facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to an appropriate datum (e.g., NGVD).
2. Copies of the laboratory analytical data reports shall be included in the monitoring reports. All laboratory reports must be retained by the Discharger for a minimum of three years.

C. ANNUAL MONITORING REPORTS

Annual Monitoring Reports shall be prepared and submitted to the Central Valley Water Board by **1st February each year**. The Annual Monitoring Report shall include the following:

1. Results of the **Commodity and Process Wastewater Monitoring** in tabular format for each month during the calendar year and as specified in Section II.A.
2. Results of the **Pomace Monitoring** in tabular format as specified in Section II.B.
3. Results of the **Land Application Area Monitoring** in tabular format for each month during the calendar year and as specified in Section II.C, including:
 - a. A site map of the LAAs showing predominant features, and LAAs acreage where pomace was applied.
 - b. Total monthly precipitation.
 - c. A summary of each LAA parcel inspection activities.
 - d. Pomace application rate (in/day) to each LAA parcel for each month of the reporting period.
 - e. Volume of pomace applied to each LAA parcel for each month of the reporting period.
 - f. Daily BOD₅ loading rate applied to each parcel shall be calculated using the following formula and compared to the maximum daily BOD loading rate.

$$M = \frac{X (CV)}{A}$$

Where:

- | | | |
|---|---|--|
| M | = | Mass of BOD ₅ for a given parcel, in pounds per acre per day (lb/ac/day). |
| C | = | Concentration of BOD ₅ based on the average WET-soluble concentration and converted to mg/kg for the solid waste portion for the month. |

- V = Total volume of pomace applied to each parcel per day, in pounds (lb).
A = Actual acreage of each parcel receiving pomace, in acres (ac).
X = 1.0×10^{-6} , unit conversion factor

- g. Daily total nitrogen and FDS loading rate applied to each parcel shall be calculated using the following formula:

$$M = \frac{X (CV)}{A}$$

Where:

- M = Mass of total nitrogen and FDS for a given parcel, in pounds per acre per day (lb/ac/day).
C = Concentration of total nitrogen and FDS based on the average WET- soluble concentration and converted to mg/kg for the solid waste portion for the month.
V = Total volume of pomace applied to each parcel per day, in millions of gallons (MG).
A = Actual acreage of each parcel receiving pomace, in acres (ac).
X = 1.0×10^{-6} , unit conversion factor

- h. Total nitrogen and FDS loading rate applied to each LAA parcel on a monthly and annual basis shall be calculated using the following formula. The annual total nitrogen applied shall be compared to published crop demand for the crops actually grown. The annual FDS loading shall be compared to the Salinity Loading Trigger value.

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

Where:

- M = Mass of total nitrogen or FDS applied to each LAA in pounds per acre per year (lb/ac/yr).
- C₁ = Concentration of total nitrogen or FDS based on the average WET- soluble concentration, converted to mg/kg of the solid waste portion for the month *i*.
- V_i = Volume of wastewater applied to each LAA parcel during the calendar month *i* in MG.
- A = Actual acreage of each parcel applied with pomace, in acres
- i* = The number of the month (e.g., January = 1, February = 2, etc.)
- X = 1.0 x 10⁻⁶, unit conversion factor

- i. Total annual supplemental nitrogen (including commercial fertilizers, manure from cattle, etc.) shall be calculated using the actual load and actual acreage for each parcel receiving pomace during the calendar year.
 - j. Type of crop(s) grown, planting and harvest dates, and the quantified nitrogen and FDS uptakes (as estimated by technical references or defined by representative plant tissue analysis).
4. Results of the **Soils Monitoring** in tabular format as specified in Section II.D and an evaluation of soil monitoring data collected over the reporting period.
 5. Results of the **Pomace Disposal Monitoring** as specified in Section II.E.
 6. A summary of any changes in processing that might affect waste characterization and/or mass loading rates.
 7. Copies of the laboratory analytical data reports shall be included in the monitoring reports. All laboratory reports must be retained by the Discharger for a minimum of three years.
 8. Additional Reporting
 - a. A comparison of monitoring data to mass loading limitations and discharge specifications and an explanation of any violation of those requirements

- b. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the WDRs.
- c. Monitoring equipment maintenance and calibration records, as described in Section C.4 of the 1 March 1991 SPRRs, shall be maintained by the Discharger and provided upon request by the Central Valley Water Board. Calibration records shall verify calibration of all handheld monitoring instruments and devices used to comply with the prescribed monitoring program.
- d. A discussion of the following:
 - i. Waste constituent reduction efforts implemented in accordance with any required workplan.
 - ii. Other treatment or control measures implemented during the calendar year either voluntarily or pursuant to the WDRs, this MRP, or any other Order.
 - iii. Based on monitoring data, an evaluation of the effectiveness of the treatment or control measures implemented to date.
- e. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring network or reporting program.

Enforcement

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 \$1,000 per violation, per day, depending on the violation, pursuant to the Water Code section 13268, 13350, and 13385. The Central Valley Water Board reserves the right to take any enforcement actions authorized by law.

Administrative Review

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board (State Water Board) to review in accordance the action in accordance with California Water Code section 13320, and California Code of Regulations, title 23, section 2050 et seq. The State Water Board must receive the petition by 5:00 p.m. on the 30th day after the date of this Order, except that if the 30th day falls on a Saturday, Sunday or State Holiday, the petition must be received by the State Water 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 on the Water Boards Public Notice web page

(http://www.waterboards.ca.gov/public_notices/petitions/water_quality).

The Discharger shall implement the above monitoring program starting [1 month following adoption of Order].

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of the Monitoring and Reporting Program adopted by the California Regional Water Quality Control Board, Central Valley Region on XX Month 2026.

PATRICK PULUPA, Executive Officer

GLOSSARY

APN	Assessor's Parcel Number
BOD ₅	Five-day Biochemical Oxygen Demand
CaCO ₃	Calcium Carbonate
CIMIS	California Irrigation Management Information System
DO	Dissolved Oxygen
EC	Electrical conductivity at 25° C
EPA	Environmental Protection Agency
ELAP	State Water Resources Control Board's Environmental Laboratory Accreditation Program
FDS	Fixed Dissolved Solids
LAA[s]	Land Application Area[s]
MRP	Monitoring and Reporting Program
MW	Monitoring Well
MCL	Maximum Contaminant Level per Title 22
N	Nitrogen
PWW	Process wastewater
TKN	Total Kjeldahl Nitrogen
TDS	Total Dissolved Solids
TOC	Total Organic Carbon
<u>Frequency</u>	
Daily, 1/Day	Once per day except weekends or holidays
Weekly, 1/Week	Once per week
Bi-Weekly	Once every two weeks
Monthly, 1/Month	Once per month
Quarterly, 1/Quarter	Once per quarter
Annual, 1/Year	Once per year
Semi-annual	Once every six calendar months (i.e., two times per year) during non-consecutive quarters
<u>Units</u>	
gpd	gallons per day
in/day	inch/day

µg/L	micrograms per liter
µmhos/cm	micromhos per centimeter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MG[D]	million gallons [per day]
MGY	million gallons per year
lb/ac/day	pounds per acre per day
lb/ac/mo	pounds per acre per month
lb/ac/yr	pounds per acre per year

General Minerals Analysis shall include total alkalinity (as CaCO₃), bicarbonate (as CaCO₃), carbonate (as CaCO₃), hardness (as CaCO₃), dissolved arsenic, boron, calcium, chloride, dissolved iron, magnesium, dissolved manganese, nitrate as N, phosphate, potassium, sulfate, and verification that the analysis is complete (i.e., cation/anion balance)