CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2025-0020
FOR
DRY RANCH, LLC et al.
DRY RANCH PISTACHIO PROCESSING FACILITY
MADERA COUNTY

This Monitoring and Reporting Program (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 R5-2025-0020 (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.

Dry Ranch, LLC owns and operates the Dry Ranch Pistachio Processing Facility (Facility). The land where the Facility is located and the surrounding land application areas are owned by G & G Andrew Farms Tenants in Common, Creekside Farms Tenants in Common, Alkali Hollow Farms, Inc., and ATB Ranch, LP. The reuse of process wastewater from the Facility to the land application areas is subject to WDRs Order R5-2025-0020. Dry Ranch, LLC and those landowners identified above are referred to, collectively, as Discharger and are 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
PIT-001, PIT-002, and PIT-003	The three concrete pits used to store and blend wastewater prior to land application.
EFF-001	Location where a representative sample of the effluent can be obtained after screening but prior to blending with fresh irrigation water.
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	Existing approximate 1,500-acre land application area.
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 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.

If monitoring consistently shows no significant variation in a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency. This monitoring program shall remain in effect unless and until a revised MRP is issued.

II. SPECIFIC MONITORING REQUIREMENTS

A. PIT INSPECTION MONITORING (PIT-001, PIT-002, AND PIT-003)

The Discharger shall monitor the process wastewater tanks at Monitoring Location PIT-001, PIT-002, and PIT-003 when wastewater is present. PIT-001 and PIT-002 are the twin, wastewater collection pits, immediately following the parallel hulling operations. PIT-003 is the blending pit where screened wastewater is mixed with fresh irrigation water. Freeboard shall be measured to the nearest 0.1 foot vertically from the surface of the water to the lowest elevation

of the pit overflow. At a minimum, the concrete pits shall be monitored as specified in Table 2:

Table 2 - Pit Monitoring (PIT-001, PIT-002, AND PIT-003)

Constituent/Parameter	Units	Sample Type	Frequency
Freeboard	0.1 Feet	Measurement	1/Week
Odors	---	Observation	1/Week (see 1 below)
Solids Depth (see 2 below)	0.1 Feet	Observation	1/Year
Pit Liner 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 pit at least daily (excluding weekends and holidays) for DO, pH, and odors until the odor issue has been resolved.
2. Thickness of settled solids at the bottom of the pit.

B. EFFLUENT MONITORING (EFF-001)

Effluent samples shall be collected after treatment (i.e., screening) but prior to blending with irrigation water. Effluent samples shall be collected during the processing season and at any time wastewater is discharged from the Facility. Effluent monitoring shall include at least the following:

Table 3 - Effluent Monitoring

Constituent/Parameter (see 1 below)	Units	Sample Type	Frequency
Flow	mgd	Meter	Continuous
DO	mg/L	Grab	1/Week
pH	pH Units	Grab	1/Week
EC	µmhos/cm	Grab	1/Week
BOD_5	mg/L	Grab	2/Month
FDS	mg/L	Grab	2/Month
Potassium	mg/L	Grab	2/Month
Nitrate (as N)	mg/L	Grab	2/Month
TKN	mg/L	Grab	2/Month
Total Nitrogen	mg/L	Grab	2/Month
TDS	mg/L	Grab	1/Year
General Minerals (see 2 below)	mg/L	Grab	1/Year (see 1 & 3 below)

1. 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.
2. See the Glossary for the definition of General Minerals.
3. Samples shall be collected once per year in September during the processing season.

C. 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 4 - Source Water Monitoring (SW-001)

Constituent/Parameter	Units	Sample Type	Frequency
Flow	mgd	Meter	Continuous
EC	µmhos/cm	Grab	1/Year (see 1 below)
Total Nitrogen	mg/L	Grab	1/Year (see 1 below)
TKN	mg/L	Grab	1/Year (see 1 below)
FDS	mg/L	Grab	1/Year (see 1 below)
TDS	mg/L	Grab	1/Year (see 1 below)
General Minerals	mg/L	Grab	1/year (see 1 below)
Arsenic	µg/L	Grab	1/year (see 1 below

1. Samples shall be collected once per year in September during the processing season.

D. IRRIGATION/BLENDING 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 LAAs. Samples of the supplemental irrigation water shall be collected once prior to the start of the

processing season each year. Irrigation monitoring shall include at least the following:

Table 4 - Irrigation Monitoring (IRG-001)

Constituent/Parameter	Units	Sample Type	Frequency
Flow	mgd	Meter	Continuous
EC	µmhos/cm	Grab	1/Year
FDS	mg/L	Grab	1/Year
Total nitrogen	mg/L	Grab	1/Year
Dissolved Iron	mg/L	Grab	1/Year
Dissolved Manganese	mg/L	Grab	1/Year

In addition, prior to the start of the pistachio processing season 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.

E. LAND APPLICATION AREA MONITORING (LAA-001)

The Discharger shall inspect the LAA-001 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 (blocks) 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 5 - Land Application Area Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Fields Irrigated (Block Numbers)	acres	n/a	Daily
Wastewater Flow for each block (see 1 below)	gallons	n/a	Daily
Wastewater Application Loading for each block	inches	calculated	Daily
Supplemental Irrigation Flow for each block (see 1 below)	mgd	Metered	Daily

Constituent/Parameter	Units	Sample Type	Frequency
Supplemental Irrigation Application Loading for each block (see 1 below)	inches/day	Calculated	Daily
Precipitation	inches	Rain gauge (see 2 below)	Daily
Total Hydraulic Flow for each block (see 3 below)	mgd	calculated	Daily
Total Hydraulic Load for each block(see 3 below)	inches	calculated	Daily
BOD_5 Loading (for each block) (see 4 and 5 below)			
Daily Loading	lbs/acre	Calculated	Daily
Cycle average loading rate (see 4 below)	lbs/acre-day	Calculated	Cycle
Nitrogen Loading (for each block) (see 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
FDS Loading (for each block) (see 4 below)			
From wastewater	lbs/acre	Calculated	1/Year
From supplemental irrigation water	lbs/acre	Calculated	1/Year
Field Conditions			
Nuisance Odor/Vectors	--	Observation	Weekly
Discharge Runoff	--	Observation	Weekly

1. Wastewater flow is the metered flow of SW-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_5, nitrogen, and salt loading for each irrigation block shall be calculated as specified in section III of this MRP.

5. A cycle average is calculated by taking the pounds of BOD_5 added to an irrigation block 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.

F. SOLIDS MONITORING (SOLIDS)

The Discharger shall maintain detailed records for disposal and/or recycling of residual solids removed during the hulling operations. 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 Annual Report.

III. REPORTING REQUIREMENTS

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to*: centralvalleyfresno@waterboards.ca.gov*. Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
Region 5 – Fresno Office
1685 “E” St.
Fresno, California 93706

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or transmittal sheet:

Program:	Non-15
Facility:	Dry Ranch Pistachio Plant
Order:	MRP R5-2025-0020
County:	Madera
Place ID:	874742

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. 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 **Pit Inspection Monitoring** as specified in Section II.A,

2. Results of **Effluent Monitoring** as specified in Section II.B, including:

    a. Calculation of the maximum daily flow, monthly average daily flow, and cumulative annual flow for the processing season.

    b. 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.

3. Results of **Source Water Monitoring (SW-001)** as specified in Section II.C. 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 System Monitoring (IRG-001)** as specified in Section II.D, including:

   a. A map showing the location and identification of the various irrigation areas (blocks) as well as the irrigation lines used to carry and transport wastewater to the various irrigation areas.

5. Results of **Land Application Area** monitoring as specified in Section II.E, including:

   a. 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. Nitrogen, potassium and salt content of compost must be determined.

   b. Summary of the inspection activities conducted by the Discharger.

   c. Calculate the cycle average BOD loading rate for the LAA.

      The mass of BOD_5 applied to each discrete irrigation area/block 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 an LAA in lbs/ac/day
- C = Concentration of BOD_5 in mg/L based on the average concentration for the Week
- 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.

d. Calculate the total mass loading for total nitrogen, and salts (FDS) for each field within the LAA.

The mass of total nitrogen, FDS, and potassium applied to each LAA field/block 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 = Average concentration of total nitrogen/FDS (irrigation and wastewater) 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

6. Results of **Solids Monitoring (SOLIDS)** as specified in Section II.F.

7. Names, title, and contact information for persons to contact regarding the Facility for emergency and routine situations.

8. 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).

9. Calibration records for all flow meters used to demonstrate compliance with the flow limits proposed in the RWD.

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

11. A comparison of monitoring data to the flow limitations specified in WDRs Order R5-2025-0020 and an explanation of any violations.

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

13. A summary of the handling and disposal of solids removed during the hulling operations within the calendar year.

14. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.

15. The types of crop(s) grown, planting and harvest dates, the quantified nitrogen and fixed dissolved solids uptakes including potassium (as estimated by technical references or, preferable, defined by representative plant tissue analysis), and a summary of the quantified cycle average BOD_5 loading rate for each block over time

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

17. 17. 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.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

> *"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."*

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.

This MRP replaces MRP R5-2021-0811 that was issued to the Discharger on 6 August 2021. The Discharger shall begin implementation of the above monitoring program **starting 1 May 2025.**

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of the Monitoring and Reporting Program R5-2025-0020 issued by the California Regional Water Quality Control Board, Central Valley Region, on 25 April 2025

Ordered by: Patrick Pulupa Date: 2025.05.20 14:58:43 -07'00'
Water Boards

PATRICK PULUPA, Executive Officer

IV. GLOSSARY

BOD_5	Five-day biochemical oxygen demand
$CaCO_3$	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 $CaCO_3$), bicarbonate (as$CaCO_3$), boron, calcium, carbonate (as $CaCO_3$), chloride, iron, magnesium, manganese, nitrate as N, phosphate, potassium, sodium, sulfate, and verification that the analysis is complete (i.e., cation/anion balance).