CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2022-0053

FOR

CALIFIA FARMS LLC, NORTH KERN WATER STORAGE DISTRICT,
PARAMOUNT RANCH L.P.
CALIFIA FARMS BAKERSFIELD FACILITY
KERN 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 R5-2022-0053 (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.

Califia Farms, LLC (hereafter Califia) operates the Califia Farms Bakersfield Facility (Facility). Paramount Ranch L.P. owns the Facility property. The North Kern Water Storage District (hereafter District) owns and operates the Lerdo Canal and the Rosedale Spreading Basin. Discharge of process wastewater from the Facility into the District's Lerdo Canal and Rosedale Spreading Basin is subject to the WDRs Order. Califia, the District, and Paramount Ranch L.P. are collectively referred to as Discharger(s) 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
EFF-001	Location where a representative sample of the effluent can be obtained prior to discharge to the Lerdo Canal and/or the Rosedale Spreading Basin.
PND-001	Oxidation ditch.
LC-001	Lerdo Canal 500 feet upstream of the Facility's discharge point.
LC-002	Lerdo Canal at the Zerker Road Bridge approximately a quarter mile downstream of the Facility's discharge point.
SW-001	Source water monitoring
Solids	Solids Monitoring

C. SAMPLING AND SAMPLE ANALYSIS

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

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

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

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

 Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA);

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

Approved editions shall be those that are 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. EFFLUENT MONITORING (EFF-001)

The Discharger shall monitor its discharge of its process wastewater (effluent) at Monitoring Location EFF-001 (prior to discharge to the Lerdo Canal and/or the Rosedale Basin). Samples shall be representative of the volume and nature of the discharge. Time of collection of all samples shall be recorded. Effluent monitoring shall include at least the following:

Table 2 - Effluent Monitoring (EFF-001)

Constituent/Parameter	Units	Sample Type	Frequency
Flow	mgd	Metered	Continuous
рН	s.u.	Grab	1/Week
EC	µmhos/cm	24-hour composite	1/Week
TDS	mg/L	24-hour composite	1/Month
FDS	mg/L	24-hour composite	1/Month
BOD₅	mg/L	24-hour composite	1/Month
Nitrate (as N)	mg/L	24-hour composite	1/Month
TKN	mg/L	24-hour composite	1/Month
Total Nitrogen	mg/L	Calculation or Grab	1/Month
Chloride	mg/L	24-hour composite	1/Quarter

Constituent/Parameter	Units	Sample Type	Frequency
Boron	mg/L	24-hour composite	1/Quarter
General Minerals	mg/L or μg/L	24-hour composite	1/Year

B. POND MONITORING (PND-001)

The Discharger shall monitor the oxidation ditch at Monitoring Location PND-001. Freeboard shall be visually monitored vertically from the surface of the water to the lowest elevation of the berm to maintain the required freeboard. Samples for dissolved oxygen shall be collected at a depth of one foot below the surface of the water opposite the inlet. At a minimum, the pond shall be monitored as specified in Table 3 below:

Table 2 - Oxidation Ditch Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Freeboard	Nearest inch	Observation	1/Week
Odors		Observation	1/Week (see 1 below)
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 pond at least daily (excluding weekends and holidays) for DO and pH until the odor issue has been resolved.

C. LERDO CANAL MONITORING (LC-001 AND LC-002)

The Discharger shall monitor the quality of the water in the Lerdo Canal by collecting samples upstream of the Facility's discharge point (LC-001) and downstream of the Facility's Discharge Point (LC-002) for, at a minimum, the constituents listed in Table 4 below when actively discharging wastewater to the Lerdo Canal. Time of collection of all samples shall be recorded.

Table 4. Lerdo Canal Monitoring (LC-001 and LC-002)

Constituent/Parameter	Units	Sample Type	Frequency
EC	µmhos/cm	Grab	1/Quarter
TDS	mg/L	Grab	1/Quarter

Constituent/Parameter	Units	Sample Type	Frequency
TKN	mg/L	Grab	1/Quarter
Total Nitrogen	mg/L	Grab	1/Quarter
Dissolved Oxygen	mg/L	Grab	1/Quarter
General Minerals	mg/L or μg/L	Grab	1/Quarter

D. SOURCE WATER MONITORING (SW-001)

The source water for Facility operations shall be monitored. Samples shall be representative of the source water supplied to the Facility before treatment. 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 (SW-001)

Constituent/Parameter	Units	Sample Type	Frequency
EC	µmhos/cm	Grab	1/Quarter
Total Nitrogen	mg/L	Grab	1/Quarter
FDS	mg/L	Grab	1/Quarter
General Minerals	mg/L or µg/L	Grab	1/Year

E. 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). For solids applied to the land application areas, a map shall be provided identifying specific locations as well as any sample results used to evaluate agronomic loading. 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: Califia Farms Bakersfield Facility

Order: MRP R5-2022-0053

County: Kern Place ID: 766070

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

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

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

Monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated.

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

A. QUARTERLY MONITORING REPORTS

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

- 1. Results of the **Effluent Monitoring** as specified in Section II.A, including calculating the maximum daily and monthly average flow for each month.
- 2. Results of the **Pond Monitoring** as specified in Section II.B.
- 3. Results of the **Lerdo Canal Monitoring** as specified in Section II.C.
- 4. Results of the **Source Water Monitoring** as specified in Section II.D. 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).
- 5. Copies of all laboratory analytical reports.
- 6. A discussion of annual chemical usage at the Facility (e.g., chemical name, purpose, and quantity used).
- 7. A summary of any changes in processing that might affect waste characterization and/or discharge flow rates.

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

B. FOURTH QUARTER MONITORING REPORT

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

- Calculation of the annual averages for EC, chloride, and boron for Monitoring Location LC-002. Include a comparison of the annual average concentrations to the Salinity Action Levels specified in the WDRs. If any of the concentrations exceed the Salinity Action Levels, the Discharger shall submit the information required in Section D.2 of the WDRs.
- 2. Names, title, and contact information for persons to contact regarding the Facility for emergency and routine situations.
- 3. A summary of the handling and disposal of solids removed from the Facility during the calendar year as specified in Section II.E.

- 4. 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).
- 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.
- 6. Tabulated summary of all monitoring data collected over the year.

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

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

The Discharger shall implement the above monitoring program starting 1 September 2022.

I, PATRICK PULUPA, Executive Officer, do hereby certify the forgoing is a full, true and correct copy of the Monitoring and Reporting Program R5-2022-0053 issued by the California Regional Water Quality Control Board, Central Valley Region, on 11 August 2022.

PATRICK PULUPA, Executive	Officer

CALIFIA FARMS, LLC AND

NORTH KERN WATER STORAGE DISTRICT

CALIFIA FARMS BAKERSFIELD FACILITY

KERN COUNTY

IV. GLOSSARY

amsl Above mean sea level

BOD₅ Five-day biochemical oxygen demand

CaCO3 Calcium carbonate
DO Dissolved oxygen

EC Electrical conductivity at 25° C

FDS Fixed dissolved solids
TDS Total dissolved solids
TKN Total Kjeldahl nitrogen
TSS Total suspended solids

Continuous The specified parameter shall be measured by a meter continuously.

24-hr Composite Samples shall be a flow-proportioned composite consisting of at least eight

aliquots over a 24-hour period.

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/Quarter Once per quarter.

2/Year Once every six calendar months (i.e., two times per year) in non-consecutive

quarters unless otherwise specified.

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

MPN/100 mL Most probable number [of organisms] per 100 milliliters

s.u. Standard pH units

General Minerals Analysis shall include; alkalinity (as CaCO₃), bicarbonate (asCaCO₃),

boron, calcium, carbonate (as CaCO₃), chloride, iron, magnesium, manganese, nitrate as N, phosphate, potassium, sodium, sulfate, total dissolved solids, and verification that the analysis is complete (i.e.,

cation/anion balance).