

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2022-0821

FOR

H&R FACILITIES, LLC
SANGER CITRUS PROCESSING FACILITY,
FRESNO COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code section 13267. H&R Facilities, LLC (Discharger) is constructing a new citrus processing facility (Facility) at 730 N Oliver Ave, Sanger, CA (36° 44' 51.02" and -119° 29' 28.99"). This MRP describes requirements for monitoring the discharge of process water for a citrus processing and equipment cleaning operations to an onsite lined pond and subsequent irrigation on land application areas (LAA) owned by the Discharger. 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.

On 6 June 2022, the Discharger submitted a revised Report of Waste Discharge for the proposed Facility. Process wastewater generated from the Facility will include citrus processing water and equipment wash water, which will flow to the process water pond and be comingled with supplemental irrigation water prior to discharge to the 40-acre land application area which will be used to grow citrus. Storm water and defrost condensate will be directed into the onsite storm water pond. The Central Valley Water Board is currently drafting a general order for fruit and vegetable packing facilities. Once adopted, this discharge would likely fit under the proposed general order. In the interim (i.e., until enrollment under the proposed general order or issuance of individual waste discharge requirements), this MRP is issued to the Facility to collect additional data to fully characterize the discharge and ensure the protection of underlying groundwater.

Section 13267, subsection (b)(1) of the California Water Code states:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

Section 13268 of the California Water Code states, in part:

"(a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying and information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).. . ."

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

Pursuant to Section 13267 of the California Water Code, the Discharger shall implement this MRP and shall submit the required monitoring reports described herein.

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

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. 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 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
PND-001	Onsite lined process wastewater pond.
SW-001	Source water supply for the Facility.
LAA-001	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. POND MONITORING (PND-001)

The Discharger shall monitor the water in the onsite pond at PND-001 when water is present. If the pond is dry the monitoring report shall so state. Sampling and

monitoring will be conducted from a location that will provide a representative sample (i.e., opposite the inlet to the pond). Freeboard shall be measured vertically from the water surface to the lowest elevation of pond berm (or spillway/overflow pipe invert) and shall be measured to the nearest 0.1 feet. Time of collection of samples shall be recorded. Monitoring shall include, at a minimum, the parameters and constituents specified below:

Table 2 – Pond Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Flow (see 1 below)	gpd	Meter	Daily
Freeboard	Feet (± 0.1)	Measurement	Monthly
Odors	--	Observation	Weekly
Berm condition	--	Observation	Weekly
Dissolved Oxygen	mg/L	Grab (See 1 below)	Monthly
pH	s.u.	Grab	Monthly
EC	μ mhos/cm	Grab	Monthly
BOD	mg/L	Grab	Monthly
TDS	mg/L	Grab	Monthly
FDS	mg/L	Grab	Monthly
Nitrate as N	mg/L	Grab	Quarterly
Ammonia as N	mg/L	Grab	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly
Total Nitrogen	mg/L	Grab	Quarterly
General Minerals	various	Grab	Annually (See 3 below)

1. The Discharger shall meter the wastewater flow to the lined pond.
2. DO shall be monitored between 8:00 am and 10:00 am. Sample shall be taken opposite the pond inlet approximately one foot below the pond surface. If there is less than one foot of water in the pond, no sample shall be collected, and the reason noted in the applicable monitoring report.
3. During the first quarter of each year, between January and March.

The Discharge shall also inspect the condition of the pond on a monthly basis and record visual observations in a bound logbook or electronic records system. Notations shall include observations of whether weeds are developing in the water or along the bank, the presence of grease, dead algae, vegetation, scum, or debris accumulating in the pond, color of the water (e.g., dark green, yellow, brown, black, etc.), condition

of the berms, odors, and whether burrowing animals or insects are present. A summary of these entries shall be included in the subsequent monitoring report.

B. SOURCE WATER SUPPLY MONITORING (SW-001)

Samples shall be representative of the source water supplied to the Facility. If the source water is from more than one source, the results shall be presented as a flow-weighted average of all sources. At a minimum, source water shall be monitored as specified below:

Table 3 – Source Water Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
EC	µmhos/cm	Grab	Quarterly (see 1 below)
TDS	mg/L	Grab	Annually
Nitrate as N	mg/L	Grab	Annually
General Minerals	mg/L	Grab	Once (see 2 below)

1. The Discharger shall sample the onsite source water well quarterly for EC during the Facility’s first year of operation. After four quarters of monitoring, the EC monitoring frequency can be reduced to annually.
2. The Discharger shall sample the onsite source water well once during the Facility’s first year of operation. If the Discharger adds additional supply wells for the Facility, the Discharger shall sample the new supply well once during the first year of operation of the supply well.

C. LAND APPLICATION MONITORING

The Discharger shall inspect the 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 or electronic records system and included as part of the annual monitoring report. In addition, the Discharger shall perform calculations for the LAA each day when wastewater is applied. The data shall be collected and presented in a graphical (map) and/or tabular format. If wastewater/supplemental irrigation water is not applied during a reporting period, the monitoring report shall so state. LAA monitoring shall include the following:

Table 4 – Land Application Area Monitoring

Constituent/Parameter	Units	Sample Type	Frequency
Fields Irrigated	Acres	n/a	Daily

Constituent/Parameter	Units	Sample Type	Frequency
Irrigation Flow (see 1 below)	Mgd	Metered	Daily
Irrigation Loading (see 1 below)	Inches/day	Calculated	Daily
Precipitation	Inches	Rain Gage (see 2 below)	Daily
BOD Loading (see 3 below)			
Cycle average loading rate (see 4 below)	lbs/acre- day	Calculated	Cycle
Nitrogen Loading (see 3 below)			
From wastewater	lbs/acre	Calculated	1/Year
From fertilizer	lbs/acre	Calculated	1/Year
Salt Loading (see 3 below)			
From wastewater	lbs/acre	Calculated	1/Year
From fertilizer	lbs/acre	Calculated	1/Year

1. Requires a meter reading, a pump run time meter, or other approved method.
2. National Weather Service or CIMIS data from nearest weather station is acceptable.
3. BOD, nitrogen, salt, and potassium loading shall be calculated as specified in section III of this MRP
4. A cycle average is calculated by taking the pounds of BOD 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), see section III of the MRP for the calculation.

D. SOLIDS DISPOSAL MONITORING

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 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 50 MB 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: H&R Facilities, LLC Sanger Citrus Processing Facility
Order: MRP R5-2022-0821
County: Fresno
Place ID: 881042

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 spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

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

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

All monitoring reports that involve planning, investigation, evaluation or design, or other work requiring interpretation and proper application of engineering or geologic sciences,

shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1.

A. QUARTERLY MONITORING REPORTS

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

1. Results of **Pond Monitoring** as specified in Section II.A.
2. Results of **Source Water Monitoring** as specified in Section II.B. 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 **Land Application Area Monitoring** as specified in Section II.C.
 - a. Summary of the inspection activities conducted by the Discharger.
 - b. Calculate the cycle average BOD loading rate for the LAA. The mass of BOD₅ applied to each discrete irrigation area within the LAA on a cycle average basis shall be calculated using the following formula:

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

- Where:
- | | | |
|-------|---|---|
| M | = | Mass of BOD ₅ applied to an LAA in lbs/ac/day |
| C | = | Concentration of BOD ₅ in mg/L based on the average concentration for the month |
| V | = | Total volume of wastewater applied to 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) |
| 8.345 | = | Unit Conversion factor. |

B. FOURTH QUARTER MONITORING REPORT

In addition to the above the Discharger shall submit the following additional information as part of the Fourth Quarter Monitoring Report due on **1st February** of each year.

1. Calibration records for all flow meters used to demonstrate compliance with the flow limits proposed in the RWD.
2. Names, title, and contact information for persons to contact regarding the Facility for emergency and routine situations.
3. Results of **Pond Monitoring** as specified in Section II.A, including:
 - a. Calculation of the maximum daily flow, average daily flow, and cumulative annual flow for the processing season.
 - b. The total and average daily volume of process wash water discharged to the pond for the year/season.
4. Results of **Source Water Monitoring** as specified in Section II.B. 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. Results of **Land Application Area Monitoring** as specified in Section II.C, including:
 - a. Summary of the inspection activities conducted by the Discharger.
 - b. Calculate the total mass loading for total nitrogen and salts (FDS) for each field within the LAA. 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 or FDS applied to an LAA in lbs/ac/year
	C	=	Concentration of total nitrogen or FDS for the month <i>i</i> in mg/L
	V _{<i>i</i>}	=	Volume of wastewater applied to the LAA during calendar month <i>i</i> in million gallons
	A	=	Area of the LAA (i.e., field) irrigated in acres
	<i>l</i>	=	The number of the month (e.g., January = 1, February = 2, etc.)
	M _{<i>x</i>}	=	Nitrogen or Salt mass from other sources (e.g., fertilizer and compost) in pounds
	8.345	=	Unit Conversion factor

6. Results of **Solids Disposal Monitoring** as specified in Section II.D.
7. A comparison of monitoring data to the process wastewater pond flow limitations proposed in the RWD (500,000 gallons per month, and 4.3 million gallons per year) and an explanation for any exceedances.
8. Copies of all laboratories analytical report(s) and chain of custody form(s) for in-house and contracted laboratory analyses.
9. A discussion of annual chemical usage at the Facility (e.g., chemical name, purpose, and quantity used).
10. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
11. A discussion of any changes in processing that might affect waste characterization and/or discharge flow rates.
12. Tabular and graphical summaries of all data collected during the year.
13. A discussion of compliance and corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the MRP.
14. A calibration log verifying calibration of all hand-held monitoring instruments and devices used to comply with the prescribed monitoring program.

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.

The Discharger shall begin implementation of the above monitoring program starting on **1 October 2022**. Until the Facility is constructed and discharges commence, the Discharger shall submit quarterly updates on the status of the Facility in lieu of the Quarterly Monitoring Reports required in Section III. of this MRP.

Ordered by: Original Signed by Scott J. Hatton for:
PATRICK PULUPA, Executive Officer
9/28/2022
(Date)

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
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	Every day except weekends or holidays.
Twice Weekly	Twice per week on non-consecutive days.
Weekly	Once per week.
Twice Monthly	Twice per month during non-consecutive weeks.
Monthly	Once per calendar month.
Quarterly	Once per calendar quarter.
Semiannually	Once every six calendar months (i.e., two times per year) during non-consecutive quarters.
Annually	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
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).