

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

**MONITORING AND REPORTING PROGRAM ORDER
NO. R5-2023-XXXX**

FOR

THOMAS ALEXANDER
CALIFORNIA CONCENTRATES COMPANY
SAN JOAQUIN COUNTY

This Monitoring and Reporting Program (MRP) for the California Concentrate Company (Discharger) is issued pursuant to Water Code section 13267. A glossary of terms used in this MRP is included on the last page.

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. All analyses shall be performed in accordance with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements*, 1 March 1991 ed. (SPRRs). 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.
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP.

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

1. Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA);
2. Test Methods for Evaluating Solid Waste (EPA);
3. Methods for Chemical Analysis of Water and Wastes (EPA);
4. Methods for Determination of Inorganic Substances in Environmental Samples (EPA); Standard Methods for the Examination of Water and Wastewater (APHA/AWWA/WEF); and

5. 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.

Source Water Monitoring

Samples of source water shall be collected from each source of water used for processing. At a minimum, the Discharger shall sample the source water prior to the start of the processing season and analyze the samples for the parameters listed in the table below. Data shall be reported in the corresponding Semi-Annual Monitoring Report. At a minimum, standard mineral analysis will include dissolved iron, dissolved manganese, dissolved arsenic, total alkalinity (including alkalinity series), hardness, chloride, sodium, and potassium.

Table 1. Source Water Monitoring

Constituent	Units	Sample Type	Sampling and Reporting Frequency
Electrical Conductivity	µmhos/cm	Grab	Every three years
Total Dissolved Solids	mg/L	Grab	Every three years
Nitrate as Nitrogen	mg/L	Grab	Every three years
Standard Minerals	mg/L	Grab	Every three years

Precipitation Monitoring

Precipitation data obtained from the nearest National Weather Service rain gauge is acceptable.

Table 2. Precipitation Monitoring

Constituent	Units	Measurement	Measurement Frequency	Reporting Frequency
Precipitation	0.1 inch	Rain Gauge	Daily	Semi-Annually

Flow Monitoring

Wastewater flows shall be measured at the flow meter location shown on Attachment C of **WDRs Order No. R5-2023-XXXX**.

Table 3. Flow Monitoring

Flow Source	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow Meter	Gallons	Meter	Daily (total daily flow)	Semi-Annually

Treatment and Percolation Pond Monitoring

The Discharger shall monitor the treatment and percolation ponds in accordance with the following. Sampling and monitoring shall be conducted from permanent locations that will provide reasonable samples and observations of the ponds. Freeboard shall be measured vertically from the water surface to the lowest elevation of pond berms (or spillway/overflow pipe invert) and shall be measured to the nearest 0.10 feet. Samples shall be collected at a depth of one foot, opposite the inlet. If any pond is dry, the monitoring report shall so state. DO, pH, and ORP monitoring are only required for the treatment ponds when wastewater is present. Pond monitoring shall include, at a minimum, the following:

Table 4. Pond Monitoring

Constituent/Parameter	Units	Sample Type	Monitoring Frequency	Reporting Frequency
Presence/Absence of Water	--	Observation	Weekly	Quarterly
Freeboard	0.1 feet	Measurement	Weekly	Quarterly
Odors	--	Observation	Weekly	Quarterly
Berm Condition (see Note 1)	--	Observation	Weekly	Quarterly
Dissolved Oxygen	mg/L	Grab	Weekly	Quarterly
pH	pH units	Grab	Weekly	Quarterly
ORP	mV	Grab	Weekly	Quarterly

Note 1: Berm monitoring includes the berms around the treatment ponds and the upper and lower berms surrounding the percolation ponds.

Wastewater Effluent Monitoring

Wastewater samples shall be collected from the treatment pond T-2 (or the last pond in the treatment system prior to discharging to the percolation ponds) and shall be considered representative of wastewater quality that is discharged to the percolation ponds. Samples shall be collected from the opposite end of the wastewater inlet.

Sampling is only required when wastewater is discharged to the treatment ponds. If no discharges occur, the monitoring report so shall state. At a minimum, standard mineral analysis will include dissolved iron, dissolved manganese, dissolved arsenic, total alkalinity (including alkalinity series), hardness, chloride, sodium, and potassium.

Table 5. Effluent Monitoring

Constituents	Units	Sample Type	Sample Frequency	Reporting Frequency
Electrical Conductivity	µmhos/cm	Grab	Monthly	Quarterly
BOD ₅	mg/L	Grab	Monthly	Quarterly
FDS	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly
TKN	mg/L	Grab	Monthly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Monthly	Quarterly
ORP	mV	Grab	Monthly	Quarterly
Sulfate	mg/L	Grab	Monthly	Quarterly
Standard Minerals	mg/L	Grab	Monthly	Quarterly
Chromium	mg/L	Grab	Monthly	Quarterly
Nickel	mg/L	Grab	Monthly	Quarterly

Groundwater Monitoring

The Discharger shall maintain the groundwater monitoring well network. If a groundwater monitoring well is dry 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 explaining why a replacement well is not necessary.

Prior to construction of any additional groundwater monitoring wells, the Discharger shall submit plans and specifications to the Central Valley Water Board for review and approval. Once installed, all new monitoring wells shall be appropriately incorporated into monitoring conducted under this MRP and shall be monitored on a quarterly basis. The groundwater monitoring program applies to groundwater monitoring wells MW-3, MW-4, and MW-5 and any wells subsequently installed under approval of the Central Valley Water Board.

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. Samples shall be collected and analyzed using standard EPA methods. Groundwater monitoring shall include, at a minimum, the parameters and constituents listed in the table below.

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. Samples shall be filtered with a 0.45-micron filter prior to sample preservation for standard mineral analysis and will include, at a minimum, dissolved iron, dissolved manganese, dissolved arsenic, total alkalinity (including alkalinity series), hardness, chloride, sodium, and potassium.

Table 6. Groundwater Monitoring

Constituent/ Parameter	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Depth to Groundwater	0.01 feet	Measurement	Quarterly	Semi-Annually
Groundwater Elevation	feet	Calculated	Quarterly	Semi-Annually
Gradient	feet/feet	Calculated	Quarterly	Semi-Annually
Gradient Direction	degrees	Calculated	Quarterly	Semi-Annually
pH	--	Grab	Quarterly	Semi-Annually
EC	µmhos/cm	Grab	Quarterly	Semi-Annually
TDS	mg/L	Grab	Quarterly	Semi-Annually
Total Nitrogen	mg/L	Grab	Quarterly	Semi-Annually
Nitrate Nitrogen	mg/L	Grab	Quarterly	Semi-Annually
TKN	mg/L	Grab	Quarterly	Semi-Annually
Total Organic Carbon	mg/L	Grab	Quarterly	Semi-Annually
Sulfate	mg/L	Grab	Quarterly	Semi-Annually
Standard Minerals	mg/L	Grab	Quarterly	Semi-Annually
Total Chromium	mg/L	Grab	Quarterly	Semi-Annually
Nickel	mg/L	Grab	Quarterly	Semi-Annually

Solids Monitoring

The Discharger shall monitor volumes of residual solids generated and disposed of and reported in the corresponding Semi-Annual Monitoring Report:

1. Estimated Volume of Solids Generated. Solids may include pomace, seeds, stems, screenings, and sump solids, or other material.
2. Volume Disposed of Off-site. Describe the disposal method (e.g. animal feed, land application, off-site composting, landfill, etc.); the amount disposed (tons); and the name of the hauling company. The volume of pond sediments shall be reported when sediments are removed to maintain adequate capacity in the pond.

Reporting

All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to centralvalleysacramento@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
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670

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:

Attention: Non-15 Compliance and Enforcement Section
California Concentrates Company
San Joaquin County
CIWQS Place ID: 227789

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, 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 to the Central Valley Water Board.

As required by the Business and Professions Code sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a Registered Professional Engineer or Professional Geologist and signed by the registered professional.

A. Quarterly Monitoring Reports

Daily, weekly, and monthly monitoring data shall be reported in the quarterly monitoring report. Quarterly reports shall be submitted to the Central Valley Water Board on the **1st day of the third month following the monitoring period** (i.e., the January - March report is due by 1 June). At a minimum, the report shall include:

1. Results of treatment and percolation pond monitoring and Mokelumne River levee monitoring.

2. Results of effluent monitoring in tabular format for month during the reported quarter.
4. A comparison of monitoring data to the effluent limitations and discharge specifications and an explanation of any violation of those requirements.
5. A calibration log verifying calibration of all handheld monitoring instruments and devices used to comply with the prescribed monitoring program.
6. Copies of the laboratory analytical data reports shall be submitted to the Central Valley Water Board.

B. Semi-Annual Monitoring Reports

The Semi-Annual Monitoring Report shall be submitted to the Central Valley Water Board by the **1st day of the third month following the monitoring** period (i.e., the January - June report is due by 1 September) and shall include the following:

1. Results of flow monitoring in tabular format for each month during the reported quarter, including calculated values for the total flow and average daily flow for each month and total annual flow to date.
2. Results of precipitation monitoring.
3. Source water monitoring.
4. A comparison of monitoring data to the flow limitations and an explanation of any violation of those requirements.
5. Results of groundwater monitoring in tabular format.
6. Report results of solids monitoring.
7. A narrative description of all preparatory, monitoring, sampling, handling, and analytical testing for groundwater monitoring.
8. 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. Low or no-purge sampling methods are acceptable if described in an approved Sampling and Analysis Plan.
9. Summary data tables of historical and current water table elevations and analytical results, comparison with previous flow direction and gradient data, and discussion of seasonal trends if any.
10. 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).
11. An evaluation of the groundwater quality beneath the site and determination of compliance with **WDRs Order No. R5-2023-XXXX and the Salt Control Program**.

12. Copies of the laboratory analytical data reports shall be maintained by the Discharger and submitted to the Central Valley Water Board.

Additional Reporting

1. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the **WDRs Order No. R5-2023-XXXX**.
2. Monitoring equipment maintenance and calibration records, as described in Section C.4 of the SPRRs, shall be maintained by the Discharger and provided upon request by the Central Valley Water Board.
3. A discussion of the following:
 - a. Waste constituent reduction efforts implemented in accordance with any required workplan.
 - b. Other treatment or control measures implemented during the calendar year either voluntarily or pursuant to the WDRs, this MRP, or any other Order.
 - c. Based on monitoring data, an evaluation of the effectiveness of the treatment or control measures implemented to date.
4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring network or reporting program.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or Facility modifications. If the submitting Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the submitting Discharger, or its authorized agent, as described in the Section B.3 of the SPRRs (General Reporting Requirements).

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CALIFORNIA CONCENTRATES COMPANY
SAN JOAQUIN COUNTY

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I, PATRICK PULUPA, Executive Officer, do hereby certify the forgoing is a full, true and correct copy of the Monitoring and Reporting Program R5-2023-XXXX issued by the California Regional Water Quality Control Board, Central Valley Region, on XX June 2023.

PATRICK PULUPA, Executive Officer

Glossary

BOD ₅	Five-day biochemical oxygen demand
EC	Electrical conductivity at 25° C
FDS	Fixed dissolved solids
TKN	Total Kjeldahl nitrogen
TDS	Total dissolved solids
Daily	Every day except weekends or holidays
Weekly	Once per week
Monthly	Once per calendar month
Quarterly	Once per calendar quarter
Semi-Annually	Twice per year
µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
mg/L	milligrams per liter
gpd	Gallons per day
mgd	Million gallons per day
MRP	Monitoring and Reporting Program
SPRR	Standard Provisions and Reporting Requirements