

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. _____
NPDES NO. CA0081311

FOR
VALLEY WASTE DISPOSAL COMPANY
AND
CAWELO WATER DISTRICT
KERN FRONT NO. 2 TREATMENT PLANT – RESERVOIR B
KERN COUNTY

The Discharger shall not implement any changes to this Program unless and until the Regional Water Board or Executive Officer issues a revised Monitoring and Reporting Program. Changes to sampling locations shall be established with concurrence of the Regional Water Board staff, and a description of the sampling stations shall be attached with said concurrence to the Discharger's copy of this Order.

Sample collection, storage, and analyses shall be performed according to 40 CFR Part 136 or other methods approved and specified by the Executive Officer of the Regional Water Board. All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. 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, Provisions for Monitoring.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DHS. The director of the laboratory whose name appears on the certification or his or her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work, including appropriate quality assurance/quality control procedures in his or her laboratory, and shall sign all reports of such work submitted to the Regional Water Board.

For California Toxics Rule (CTR) constituents (priority pollutants), the Discharger shall report sample results as required by the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of the California (State Implementations Plan or SIP) Section 2.4. The Discharger's laboratory must meet minimum levels in the SIP Appendix 4.

EFFLUENT MONITORING

Effluent samples shall be representative of the volume and nature of the discharge. Time of collection of the samples shall be recorded.

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents

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listed below, after which the frequencies of analysis given in the schedule shall apply for the duration of each such intermittent discharge. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

If results of monitoring a pollutant appear to violate monthly average limitations, the frequency of sampling should be increased to daily until compliance is verified. If effluent monitoring detects a pollutant at concentrations greater than a daily maximum limitation, the Discharger should resample and reanalyze the discharge immediately after receiving knowledge of the exceedance. If the Discharger does not increase monitoring frequency for instances of apparent violation, compliance with Daily Maximum and Monthly Average limitations will be determined with available monitoring data in accordance with Provision F.8.

DISCHARGE 001

Effluent samples shall be collected downstream from the treatment system and prior to discharge to Reservoir B. Effluent monitoring for Discharge 001 shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Recorded	Continuous ¹
Conductivity (EC) @ 25°C	µmhos/cm	Recorded	Continuous ^{2,3}
Boron	mg/L	Grab	Weekly
Chloride	mg/L	Grab	Weekly
Oil and Grease	mg/L	Grab	Monthly
Total Suspended Solids	mg/L	Grab	Monthly
pH	pH units	Grab	Monthly
Standard Minerals ⁴	mg/L	Grab	Monthly

¹ Continuous flow monitoring systems shall be operational by no later than the date specified in the time schedule of Provision F.7. Until that time, grab samples shall be collected and analyzed at least daily.

² Continuous EC monitoring systems shall be operational by no later than the date specified in the time schedule of Provision F.7. Until that time, grab samples shall be collected and analyzed at least weekly. In the event of monitoring system malfunction, grab samples shall be collected and analyzed daily.

³ Annual average EC shall be reported in the annual report.

⁴ Includes TDS, Sulfate, Nitrate, Bicarbonate Alkalinity, Carbonate Alkalinity, Calcium, Magnesium, Potassium, Sodium, Hardness, Silica, Iron, Ammonia, and Phosphate.

DISCHARGE 002

Effluent samples shall be collected immediately downstream of the Reservoir B outfall structure. Effluent monitoring for Discharge 002 shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Computed	Daily
Conductivity (EC) @ 25°C	µmhos/cm	Grab	Weekly
Boron	mg/L	Grab	Weekly
Chloride	mg/L	Grab	Weekly
Standard Minerals ¹	mg/L	Grab	Monthly

¹ Includes TDS, Sulfate, Nitrate, Bicarbonate Alkalinity, Carbonate Alkalinity, Calcium, Magnesium, Potassium, Sodium, Hardness, Silica, Iron, Ammonia, and Phosphate.

DISCHARGE 003

Effluent samples shall be collected from the outfall structure from the Distribution Canal, prior to entry into Poso Creek. Effluent monitoring for Discharge 003 shall include at least the following:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Computed	Daily
Conductivity (EC) @ 25°C	µmhos/cm	Grab	Weekly
Boron	mg/L	Grab	Weekly
Chloride	mg/L	Grab	Weekly
Oil and Grease	mg/L	Grab	Monthly
Total Suspended Solids	mg/L	Grab	Monthly
Antimony	µg/L	Grab	Monthly ¹
Arsenic	µg/L	Grab	Monthly
Temperature	°C (°F)	Grab	Monthly
Turbidity	NTU	Grab	Monthly
PH	pH units	Grab	Monthly
Standard Minerals ²	mg/L	Grab	Monthly
Acute Toxicity	See Below		Twice per year

¹ If after twelve consecutive months of monitoring, the sample test results are ND (below MDL, PQL, or DLR, whichever is the lowest, and the detection limit is at or below the SIP required ML, and upon approval of the Executive Officer, the monitoring frequency may be reduced or eliminated.

² Includes TDS, Sulfate, Nitrate, Bicarbonate Alkalinity, Carbonate Alkalinity, Calcium, Magnesium, Potassium, Sodium, Hardness, Silica, Iron, Ammonia, and Phosphate.

Acute Toxicity:

All bioassays shall be performed according to *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition*, October 2002 (or latest edition) using *Pimephales promelas* with no pH adjustment, with exceptions granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP).

THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity monitoring shall be conducted to determine whether the effluent is contributing toxicity to the receiving water. The testing shall be conducted as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition, October 2002, EPA-821-R-02-013* (or latest edition). Chronic toxicity samples shall be collected at the outfall of Discharge 003 prior to its entering Poso Creek. Twenty-four hour composite samples shall be representative of the volume and quality of the discharge. Time of sample collection shall be recorded. Dilution and control waters shall be from Poso Creek from an area unaffected by the discharge in the receiving waters. Standard dilution water can be used if the receiving water source exhibits toxicity and is approved by the Executive Officer. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results. Both the reference toxicant and effluent test must meet all test acceptability criteria as specified in the chronic manual. If the test acceptability criteria are not achieved, then the Discharger must re-sample and re-test within 14 days. Chronic toxicity monitoring shall include the following:

Species: *Pimphales promelas, Ceriodaphnia dubia and Selenastrum capricornutum*

Frequency: *Twice per year*

Dilution Series:

	Dilutions (%)					Controls	
	100	75	50	25	12.5	Creek Water	Lab Water
% Effluent	100	75	50	25	12.5	0	0
% Dilution Water*	0	25	50	75	87.5	100	0
% Lab Water	0	0	0	0	0	0	100

* Dilution water shall be from Poso Creek. The dilution series and dilution water may be altered upon approval of Regional Water Board staff.

PRIORITY POLLUTANT MONITORING

The State Water Resources Control Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP). **The SIP states that the Regional Water Boards will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.** Accordingly, the Regional Water Board is requiring, as part of this Monitoring and Reporting Program, that the Discharger conduct **effluent monitoring at Discharge 003 and receiving water monitoring at Poso Creek** for priority pollutants **at least annually**. If another discharger (i.e. Chevron) conducts priority pollutant monitoring which is identical to, or exceeds the priority pollutant monitoring requirements specified herein, the Discharger may, at its discretion, submit results of such monitoring in lieu of separate monitoring. The list of priority pollutants and required minimum levels (MLs) (or criterion quantitation limits) is included in **Attachment D**. The Discharger must analyze **pH and hardness** at the same time as priority pollutants.

All analyses shall be performed at a laboratory certified by the California Department of Health Services. The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each constituent. The MDL should be as close as practicable to the USEPA MDL determined by the procedure found in 40 CFR Part 136. The results of analytical determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory.
- b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
- c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration." Numerical estimates of data quality may be by percent accuracy (+ or – a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

Sample results that are less than the laboratory's MDL shall be reported as "Not Detected" or ND.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Samples shall be collected at approximately the same time as the collection of effluent samples. Receiving water monitoring shall include at least the following and be performed at the sample stations associated with the approved discharge point in use:

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<u>Sampling Station</u>	<u>Description</u>
R-1	At Lerdo Canal/Cawelo Pump Station B
R-2	Poso Creek – State Highway 65 gauging station
R-3	Poso Creek, 100 feet west of State Highway 99

If the discharge is intermittent rather than continuous, then on the first day of each such intermittent discharge, the Discharger shall monitor and record data for all of the constituents listed below, after which the frequencies of analysis in the schedule shall apply for the duration of each such intermittent discharge. Monitoring at Stations R-2 and R-3 is not required unless discharge is occurring from Discharge 003 and measurable flow is passing or anticipated to pass through Station R-3. If another discharger (i.e., Chevron) conducts receiving water monitoring which is identical to, or exceeds the receiving water monitoring requirements specified herein, the Discharger may, at its discretion, submit results of such monitoring in lieu of separate monitoring.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Flow	mgd	Computed	Daily
EC	µmhos/cm	Grab	Weekly
Boron	mg/L	Grab	Weekly
Chloride	mg/L	Grab	Weekly
pH	standard units	Grab	Weekly
Temperature	°C (°F)	Grab	Monthly
Turbidity	NTU	Grab	Monthly
Standard Minerals	mg/L	Grab	Monthly

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions, in the wetlands and all sampling locations. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter
- b. Discoloration
- c. Bottom deposits
- d. Aquatic life
- e. Visible films, sheens or coatings
- f. Fungi, slimes, or objectionable growths
- g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

REPORTING

Monitoring results shall be submitted to the Regional Water Board by the **first day of the second calendar month following sample collection**. Quarterly and annual monitoring reports shall be submitted by the **first day of second month following each calendar quarter or year** respectively. Reports shall be submitted whether or not there is a discharge. Failure to submit reports will result in the assessment of mandatory minimum penalties pursuant to CWC Section 13385. Pursuant to CWC Section 13385.1, any monitoring report submitted more than 30 days late is subject to a Mandatory Minimum Penalty.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. **The data shall be summarized in such a manner that indicates clearly whether the discharge complies with waste discharge requirements.**

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

By **1 February** of each year, the Discharger shall submit a written report to the Executive Officer containing the following:

- The names and general responsibilities of all persons employed to operate the produced water treatment systems.
- The names and telephone numbers of persons to contact regarding the facility for emergency and routine situations.
- A statement certifying when the flow meters and other monitoring instruments and devices were last calibrated, including identification of who performed the calibration (Standard Provision C.6).
- A statement certifying whether the current operation and maintenance manual, and contingency plan, reflect the WTRS as currently constructed and operated, and the dates when these documents were last revised and last reviewed for adequacy.

The Discharger may also be requested to submit an annual report to the Regional Water Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the compliance record. If violations have occurred, the report shall also discuss the corrective

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actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

(Date)

GEA/WDH: 6/5/07