

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. CI -9023

FOR  
GOLDEN WEST REFINING COMPANY  
MARKETING AREA  
(SANTA FE SPRINGS, CALIFORNIA)

(FILE NO. 85-13)

Golden West Refining Company ("Discharger") shall implement this Monitoring and Reporting Program beginning on the date of issuance of the Waste Discharge Requirements.

I. REPORTING

The first monitoring report for groundwater and soil under this program is due on July 15, 2006. Subsequent progress and monitoring reports shall be submitted according to the dates in the following schedule:

<u>Monitoring Period</u>	<u>Report Due</u>	<u>Reporting Period</u>
January - March	April 15	Quarterly
April - June	July 15	Quarterly
July - September	October 15	Quarterly
October - December	January 15	Quarterly
January - June	July 15	Semi-annually
July - December	January 15	Semi-annually
January - December	January 15	Annually

II. GROUND WATER MONITORING

The Discharger shall maintain an adequate network of groundwater monitoring wells (acceptable to the Executive Officer) which are perforated in the perched and Artesia ground water aquifers, and are located at appropriate upgradient, source areas and downgradient locations, both onsite and offsite, as needed to determine the full extent of water quality impact.

The following shall constitute the groundwater monitoring program for the above referenced ground water monitoring network including, but not limited to, existing groundwater monitoring wells A-6R, A-8, A-5A, A-18A, AO-14, AO-19 and AO-20:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Water Elevation	Feet-relative to sea level to 0.01 of a foot	---	Semi-annually
pH	pH units	grab	Semi-annually
Turbidity	NTU	grab	Semi-annually
Total dissolved solids	mg/l	grab	Semi-annually
Total petroleum hydrocarbons (TPH) (EPA Method 8015M HC Scan)	mg/l	grab	Semi-annually
Volatile Organic Compounds (EPA Method 8260B)	µg/l	grab	Semi-annually
Semi-volatile Organics and PAHs (EPA Method 8270C)	µg/l	grab	Semi-annually
CAM Metals	mg/l	grab	Semi-annually
Oxygenates (TAB, DIPE, TAME, ETBE, MTBE) (EPA Method 8260B)	µg/l	grab	Semi-annually

### III. LAND TREATMENT FACILITY SOIL MONITORING

A soil sampling grid shall be established for the land treatment units (LTUs) and the sampling locations shall be located where representative soil samples can be obtained. Soil samples shall be collected and analyzed for the following Parameters:

<u>Parameter</u>	<u>Unit</u>	<u>Frequency</u>
Bacteria Plate Count	Colonies/gm	Quarterly
Soil Moisture content	%	Quarterly
Total Petroleum Hydrocarbons (EPA Method 8015-C <sub>4</sub> to C <sub>32</sub> Hydrocarbon Scan)	mg/kg	Quarterly
Volatile Organic Compounds and MTBE (EPA Method 8260B)	µg/kg	Once per 500 cubic yard
Semi-Volatile Organic Compounds and PAHs (EPA Method 8270C)	µg/kg	Once per 500 cubic yard
CAM Metals	mg/kg and mg/l <sup>1</sup>	Once per 500 cubic yard

<sup>1</sup> If the analytical results are greater than ten times the soluble threshold limit value (STLC), established in Title 22 of the California Code of Regulations, then Golden West Refining Company shall analyze the California Assessment Manual Waste Extraction Test (CAM-WET) leachate using the appropriate EPA testing methods and compare with the STLC values to classify that the soils are hazardous and/or non-hazardous.

IV. GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

- A. All sampling, sample preservation, and analysis shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedure for Analysis of Pollutants," promulgated by the United States Environmental Protection Agency.
- B. All chemical and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program (ELAP) for each analytical testing method to be used. No changes shall be made in sampling points without prior approval of the Executive Officer.
- C. The Discharger shall maintain all sampling and analytical results, including strip charts, date, exact location, and time of sampling, date analysis were performed, name of analyst, analytical techniques used, and results of all analyses. Such result shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board.
- D. All verification sampling require 72 hours written and verbal notice to the Regional Board in order for staff to participate in the sampling. Final verification samples shall be collected from each 500 cubic yards of soil in the land treatment unit at the end of treatment and just prior to removal and reuse. In the event the land treatment of a lift is completed prior to the due date of the first monitoring report, then final verification samples for the lift shall be collected and analyzed in lieu of the sampling frequency of this Order.

V. SPECIFIC REPORTING REQUIREMENTS

- A. The following technical reports shall be filed with the Regional Board:
  - 1. A supplemental site assessment report and if warranted, a modified Remedial Action Plan, shall be submitted to this Regional Board prior to initiating any construction activities at the Marketing Area.
  - 2. The fourth quarter report of each year, beginning in 2006, shall also serve as an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the year. In addition, The Discharger shall discuss the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with the waste discharge requirements.
  - 3. A "Contamination Removal Report", shall be submitted for each development zone within 30 days of removal of contaminated soil, verifying that all contaminated soil has been removed for land treatment or off-site disposal. The report must include all soil verification data that documents the nature and extent of removed soil, and nature and extent of contaminated soils to remain in place.

4. A "Land Treatment Completion Report" shall be submitted for each development zone within 30 days of completing land treatment, verifying that biodegradation is complete for the land treatment. The report shall include all data collected to date verifying that cleanup levels have been met.
  5. A "Final Land Treatment Closure Report" shall be submitted within 30 days of completing all treatment in the land treatment units. This report shall include all analyses of soil samples underlying the treatment cells which document that all contaminants that pose a threat to water quality have been successfully remediated.
- B. All technical reports submitted shall contain the following minimum information:
1. Quantity of waste material treated during the reporting period.
  2. Analytical results, from:
    - a. Land treatment zone soil sampling,
    - b. Soil monitoring in the excavated areas, and
    - c. Data collected during the reporting period verifying that cleanup levels have been met as each lift is removed.
  3. Estimated time until completion of the next lift in each Land Treatment Unit and final disposition of any soils removed from the treatment cells during the reporting period.
  4. A statement certifying that storm water runoff was prevented from entering the land treatment area, other than rainfall directly on the LTUs, and that no wastes or waste constituent was released from the land treatment area during rainfall events.
- C. All technical reports prepared for submittal to the Regional Board shall be signed by either a California registered Civil Engineer, a registered geologist, or certified engineering geologist.
- D. 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 to determine compliance with waste discharge requirements and, where applicable, shall include receiving ground water observations. In addition, quarterly monitoring reports shall describe the facility name, location, and location at the facility where any contaminated soil originated (including a site map), verify that all contaminated soil has been removed for land treatment or document the contaminants remaining, and include all soil verification data supporting the nature and extent of removed soil and nature and extent of contaminated soils to remain in place. In addition, the report shall state the volume of contaminated soils placed into each treatment cell.

