CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2006-0805 CALIFORNIA WATER CODE SECTION 13267 FOR

LEONARD D. ROBINSON, RIVER CITY PETROLEUM INCORPORATED, AND DOUGLAS OIL COMPANY, 510 WASHINGTON BLVD, ROSEVILLE, PLACER COUNTY

This site consists of an operating retail gasoline station, located at 510 Washington Blvd, Roseville, Placer County, Placer County assessor parcel number 011-103-013-000. Leonard D. Robinson, River City Petroleum Inc, and Douglas Oil Company, hereafter collectively referred to as Dischargers, owned and/or operated this property at a time when the site's former underground storage tank (UST) system caused or permitted waste to be discharged to waters of the state that impaired the beneficial uses of groundwater. The site is currently owned by Leonard D. Robinson, and the site's underground storage tank (UST) system, consisting of three 10,000-gallon USTs and three dispenser islands, is operated by Santokh Hira and Karnail Hira. The unauthorized release/s that occurred from the site's former UST system has impacted both soil and groundwater with gasoline related constituents, additives, and oxygenates. Although multiple efforts to reduce source area concentrations have been performed, elevated concentrations of petroleum hydrocarbon constituents persist in groundwater beneath the site at levels that exceed the numerical limits selected to implement the Water Quality Objective's listed in the Basin Plan.

This Monitoring and Reporting Program (MRP) is issued pursuant to Section 13267 of the California Water Code and is necessary to delineate groundwater pollutant plumes and determine whether remediation efforts are effective. Existing data and information about the site show the presence of various chemicals, including gasoline related constituents, additives, and oxygenates, emanating from the property under the control of the Dischargers. The Dischargers shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Discharger shall submit plans and specifications to the Regional Board Staff for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

GROUNDWATER MONITORING

As shown on Figure 1, there are currently 29 groundwater monitoring and extraction wells associated with the site. The groundwater monitoring program for the 29 wells and any wells installed subsequent to the issuance of this MRP, shall follow the schedule below.

Monitoring wells with free phase petroleum product or a visible sheen shall be monitored, the thickness of product recorded, and the volume of extracted free phase

product and groundwater documented in the corresponding quarterly monitoring report. Sample collection and analysis shall follow standard EPA protocol.

SAMPLING FREQUENCY ¹				
Frequency	Quarterly	Semi-annually ²	Annually ³	
Wells	MW-2, MW-4, MW-5, MW-8, MW-10, MW-18S, MW-19S, MW-19D, MW-22, EW-2, EW-5	MW-3, MW-6, MW-7, MW-16D, MW-18D, EW-1, EW-3, EW-6	MW-9, MW-11, MW-12, MW-13, MW-16S, MW-17S, MW-17D, MW-14, MW-15, EW-4	

All wells shall be monitored quarterly for water levels and the presence and thickness of free product.

³ Wells shall be sampled annually during first quarter.

Constituent Analysis				
Constituents	EPA Analytical Method	Maximum Practical Quantitation Limit (μg/l) ⁴		
Depth to Groundwater				
Total Petroleum Hydrocarbons	8015M	50		
Benzene	8020 or 8260B	0.5		
Toluene	8020 or 8260B	0.5		
Ethylbenzene	8020 or 8260B	0.5		
Xylene	8020 or 8260B	0.5		
MTBE	8260B	0.5		
TBA	8260B	5		
1-2, DCA ⁵	8260B	0.5		
EDB ⁵	8260B	0.5		
TAME ⁵	8260B	0.5		
DIPE ⁵	8260B	0.5		
ETBE ⁵	8260B	0.5		
Ethanol ⁵	8260B	50		
Methanol ⁵	8260B	100		

⁴ For nondetectable results. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

REPORTING

When reporting the data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this Order. In addition, the Discharger shall notify the Regional Board within 48 hours of any unscheduled shutdown of any soil vapor and/or groundwater extraction system.

² Wells shall be sampled semi-annually during the first and third quarters.

⁵ If any of these constituents are detected above 5 μg/L, the constituent detected shall be analyzed in each subsequent sampling event at the frequency outlined in the Sampling Frequency table.

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As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.

The Discharger shall submit Quarterly reports to the Regional Board by the by the 15th day of the month following the end of the calendar quarter in which samples are collected; by **15 April**, **15 July**, **15 October**, **and 15 January** of each year until such time as the Executive Officer determines that the reports are no longer necessary. For each Quarterly report submitted, the Discharger must also upload into GeoTracker all corresponding analytical and site data required by Title 23, Division 3, Chapter 30 of the California Code of Regulations. This electronic data is to be submitted **in addition** to the customary hard copy report and shall be successfully uploaded to Geotracker **before** the hard copy report is submitted.

Each quarterly report shall include the following minimum information:

- (a) a description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated:
- (b) field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.;
- (c) groundwater contour maps for all groundwater zones, as applicable;
- (d) isocontour pollutant concentration maps for all groundwater zones, as applicable:
- (e) a table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom;
- (f) a table showing historical lateral and vertical (if applicable) flow directions and gradients;
- (g) cumulative data tables containing the water quality analytical results and depth to groundwater;
- (h) a copy of the laboratory analytical data report;
- (i) if applicable, the status of any ongoing remediation, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system; and

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 (j) if applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.

The fourth quarter monitoring report, due by **15 January** of each year, shall be an expanded report and shall include the following additional information:

- (a) both tabular and graphical summaries of all data obtained during the year;
- (b) groundwater contour maps and pollutant concentration maps containing all data obtained during the previous year;
- (c) a discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells;
- (d) an analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread;
- (e) a description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness;
- (f) an identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program; and
- (g) if desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
- (h) an evaluation of the effectiveness and progress of investigative and remedial efforts.

The results of any monitoring done more frequently than required at the locations specified in the MRP also shall be reported to the Regional Board. The Discharger shall implement the above monitoring program as of the date of the Order.

Ordered by:	
	PAMELA CREEDON, Executive Officer
	<u>24 July 2006</u>
	(Date)