

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2013-0061
(Replaces Monitoring and Reporting Program No. R1-2007-0052)

For
Chevron Environmental Management Company
Redwood Oil Company

Redwood Oil/Chevron Bulk Plant
258 Roseland Avenue
Santa Rosa
CASE NO. 1NSO252

Sonoma County

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code Section (CWC) 13267 (b) and requires monitoring of groundwater and submission of technical reports. Submittal of reports is required on a semi-annual basis. The objective of monitoring conducted under this monitoring program is to provide the Dischargers and the Regional Water Board with information concerning groundwater quality and contaminant trends at the site.

Under the authority of CWC section 13267, the Dischargers named above are required to comply with the following:

MONITORING

1. Prior to purging, the depth to groundwater shall be determined to at least 0.01 foot increments in all groundwater monitoring wells during April and October of each year. The data generated from the elevation readings must be referenced to the same elevation datum used for the electronic GeoTracker survey values.
2. Measurements for free product (Light Non-Aqueous Phase Liquid (LNAPL)) thickness shall be collected from each groundwater monitoring well, prior to sample collection. If detected, the thickness of floating product shall be measured to at least 0.01 foot increments. Floating product measurements, and the presence of sheen, shall be reported in each groundwater monitoring report.
3. In conjunction with floating product measurements, replacement and/or adjustment of absorbent sock recovery systems in monitoring wells DHS-8, MW-2 and MW-10 shall occur monthly, or as needed.

4. Groundwater samples shall be collected for analysis in accordance with the following schedule:

Monitoring Well	Sampling Frequency	Sampling Periods
DHS-8	Semiannually	April and October
MW-2	Semiannually	April and October
MW-3	Semiannually	April and October
MW-4	Semiannually	April and October
MW-5	Semiannually	April and October
MW-6	Semiannually	April and October
MW-7	Semiannually	April and October
MW-9	Semiannually	April and October
MW-10	Semiannually	April and October
MW-12	Semiannually	April and October
MW-13A	Semiannually	April and October
MW-14	Annually	October
MW-15*	Annually	October
MW-16A	Annually	October

*Groundwater elevation and LNAPL thickness measurements only.

5. The groundwater samples collected per Monitoring Item 4 above shall be analyzed for Total Petroleum Hydrocarbons (TPH)-gasoline, TPH-diesel using silica gel cleanup, benzene, toluene, ethylbenzene, total xylenes, and the fuel oxygenates methyl-tert-butyl ether (MTBE) and tertiary butyl alcohol (TBA).
6. All laboratory analyses shall be performed at a laboratory certified by the California Department of Public Health. Analytical methods for sample analyses shall achieve practical quantification reporting limits that are adequate for evaluating regulatory action levels for each constituent.

REPORTING

1. Groundwater monitoring reports shall be submitted to the Regional Water Board in accordance with the following schedule:

<u>Sample Month</u>	<u>Due Date</u>
April	July 31
October	January 31

2. A groundwater elevation contour map shall be included for each set of measurements and shall include the following:
 - a) location of the former facilities; i.e. underground storage tanks, dispenser area, former cardlock island, and ASTs;
 - b) location of the monitoring wells with elevation measurements shown for each well; and
 - c) groundwater flow pattern including the direction of the groundwater gradient.
3. A contamination isogram map shall be included for each significant pollutant detected during the monitoring events and shall include the following:
 - a) location of the facilities; and
 - b) location of the monitoring wells with groundwater contaminant concentrations shown for each well.
4. Current and previous analytical results shall be reported in tables which include the following:
 - a) sampling point;
 - b) date of sample collection;
 - c) constituents and analytical results;
 - d) quantification limits employed for non-detect analytical results; and
 - e) analytical method.
5. Each report shall contain copies of the well purging and sampling field logs; chain of custody documents showing the time and date of sample collection, and field sampling technician; LNAPL measurements and absorbent sock replacement logs; and signed laboratory sheets including quality control data and explanations of analytical anomalies, if any. These supporting documents may be included as appendices to the report.
6. Past monitoring well analytical results shall be incorporated with the current results, including results for destroyed wells.
7. Monitoring reports shall be prepared by or under the supervision of a California Registered Engineer or Geologist.
8. The monitoring reports, analytical data, and depth to water measurements shall also be submitted electronically to the State Water Resources Control Board's GeoTracker database as required by Title 23, Division 3, Chapter 30 of the California Code of Regulations.

Ordered by _____

Matthias St. John
Executive Officer

August 29, 2013