

California Regional Water Quality Control Board
North Coast Region

Monitoring and Reporting Program Order No. R1-2011-0076
(Replaces Monitoring and Reporting Program Order No. R1-2011-0023)

FOR

Colvin Oil Company
Case No. 1TDN043
317 Highway 101, South
Crescent City, CA

Del Norte 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. Reports are required on a quarterly basis. The objective of monitoring conducted under this monitoring program is to provide the Discharger and the Regional Water Board with information concerning groundwater quality, natural attenuation processes, and contaminant trends at the Site.

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

MONITORING

1. The presence of floating product shall be evaluated in all monitoring wells quarterly. If detected, the thickness shall be measured to at least 0.01 foot increments quarterly. If free product is present, then it shall be bailed from the well(s).
2. The depth to groundwater in all monitoring wells shall be determined to at least 0.01 foot increments quarterly. The results of each quarter's elevation measurement shall be reported in tabular form indicating the surveyed elevations of each well reference point, depth to groundwater from the reference point, and the actual groundwater elevation. The data generated from the elevation readings must be referenced to mean sea level.
3. Eight groundwater monitoring wells (MW-4, MW-5, MW-6, MW-10, MW-11, MW-12, MW-13 and MW-14 now exist on-Site. These wells will be sampled quarterly for one complete hydrologic cycle. Field and laboratory testing will occur at each well. In-situ field testing parameters using calibrated equipment will include; temperature, specific conductance, pH, and dissolved oxygen. Laboratory testing of collected groundwater samples will be at a State-certified laboratory as indicated below.

Well ID	TPHG	TPHD	TPHMO	BTEX	Fuel Oxygenates	Phytane and Prystane
MW-4	X	X	X	X	X	
MW-5	X	X	X	X	X	
MW-6	X	X	X	X	X	X
MW-10	X	X	X	X	X	
MW-11	X	X	X	X	X	
MW-12	X	X	X	X	X	
MW-13	X	X	X	X	X	
MW-14	X	X	X	X	X	

Total Petroleum Hydrocarbons (TPH) as diesel (TPHD) using USEPA Test Method 8015M, TPH as motor oil (TPHMO) using US EPA Test Method 8015M, TPH as gasoline (TPHG) using USEPA Test Method 8015M, benzene-toluene-ethylbenzene- xylenes (BTEX) using US EPA Test Method 8260B, and fuel oxygenates (MTBE, DIPE, TAME, ETBE, TBA) using US EPA method 8260B. In addition, MW-6 will also be analyzed for phytane and pristane using US EPA Test Method 8270SIM. Same-scaled chromatograms will be provided for all analyses.

4. Chemical test results will be graphed for all monitoring efforts in an effort to show trends versus time. The graphs will be provided in each monitoring report.
5. All investigation-derived waste (IDW), including free product, will be controlled and disposed of in a fashion consistent with California laws and regulations. Documentation regarding IDW disposal shall accompany each quarterly monitoring report.
6. All implemented work shall be done under the direct supervision of a California-licensed Registered Civil Engineer or Professional Geologist with demonstrated experience in the implementation of monitoring and reporting programs required by the California Regional Water Board.

REPORTING

A groundwater elevation contour map shall be submitted for each quarterly set of measurements and include the facility, groundwater flow pattern including the direction of the groundwater gradient, and the location of the wells measured. Quarterly monitoring reports, including gradient data and sampling data, shall be submitted to this office in accordance with the following schedule:

<u>Reporting Period</u>	<u>Due Date</u>
First Quarter	October 30
Second Quarter	January 30
Third Quarter	April 30
Fourth Quarter	July 30

All data and reports shall be electronically submitted in the proper format to the State Water Resources Control Board's GeoTracker database.

Ordered by _____

Catherine Kuhlman
Executive Officer

June 29, 2011