

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM No. R1-2009-0016
(REPLACES MONITORING AND REPORTING PROGRAM No. R1-2008-0077)

FOR

UNOCAL EUREKA TERMINAL
TOSCO
TRC COMPANIES
And
MLRX2, LLC
1200 RAILROAD AVENUE
EUREKA

Humboldt County

This Monitoring and Reporting Program 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 semi-annual 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 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. The presence of floating product shall be evaluated in monitoring wells MW-3, MW-12, MW-26, MW-27, MW-28, and in extraction wells EW-2, EW-7, EW-9, EW-10, EW-11, and EW-12 monthly. All remaining monitoring wells shall be evaluated for floating product semiannually. If detected, the thickness shall be measured to at least 0.01 foot increments during each monitoring event.
2. The depth to groundwater in monitoring wells MW-1, MW-4, MW-6, MW-10, MW-11, MW-12, MW-13, MW-15, MW-17, MW-26, MW-32, and in extraction wells EW-3 and EW-5 shall be determined to at least 0.01 foot increments monthly. The depth to groundwater in all remaining monitoring wells shall be determined to at least 0.01 foot increments semiannually. The results of each elevation measurement shall be reported in tabular form indicating the surveyed elevations of each well reference point, depth to groundwater from reference point, and the actual groundwater elevation. The data generated from the elevation readings must be referenced to mean sea level.
3. Each monitoring well shall be sampled according to the following table. The analyses shall be performed as a certified laboratory for Total Petroleum Hydrocarbons as gasoline (TPH-G), Total Petroleum Hydrocarbons as diesel (TPH-D), benzene, toluene, ethylbenzene, xylene (collectively known as BTEX), oxygenates (MTBE), and halogenated volatile compounds (VOC).

WELL	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
MW-1	TPH-D	TPH-D	TPH-D	TPH-D
MW-2	TPH-D	TPH-D	TPH-D	TPH-D
MW-3	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-4	TPH-D, TPH-G, VOC		TPH-D, TPH-G, VOC	
MW-5	TPH-D, TPH-G	TPH-D, TPH-G	TPH-D, TPH-G	TPH-D, TPH-G
MW-6	THP-D	THP-D	THP-D	THP-D
MW-7	TPH-D, TPH-G	TPH-D, TPH-G	TPH-D, TPH-G	TPH-D, TPH-G
MW-13	TPH-D	THP-D	THP-D	THP-D
MW-15	TPH-G, BTEX, MTBE		TPH-G, BTEX, MTBE	
MW-16	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-17	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-19	TPH-D	THP-D	THP-D	THP-D
MW-20	TPH-D			
MW-22	TPH-D	THP-D	THP-D	THP-D
MW-24	TPH-D, TPH-G			
MW-25	TPH-D	THP-D	THP-D	THP-D
MW-26	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-27	TPH-D, TPH-G, BTEX, MTBE		TPH-D, TPH-G, BTEX, MTBE	
MW-28	TPH-D, TPH-G, BTEX, MTBE	TPH-D, TPH-G, BTEX, MTBE	TPH-D, TPH-G, BTEX, MTBE	TPH-D, TPH-G, BTEX, MTBE
MW-29	TPH-D, TPH-G, BTEX, MTBE, VOC		TPH-D, TPH-G, BTEX, MTBE, VOC	
MW-30	VOC		VOC	
MW-31	TPH-D, VOC		TPH-D, VOC	
MW-32	TPH-D, TPH-G, MTBE, VOC		TPH-D, TPH-G, MTBE, VOC	
MW-33	TPH-D			
MW-34	TPH-D, TPH-G, BTEX, MTBE		TPH-G, BTEX, MTBE	TPH-D, TPH-G, BTEX
EW-2	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX
EW-3	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX
EW-5	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX
EW-7	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX
EW-9	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX
EW-10	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX
EW-12	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX	TPH-D, TPH-G, BTEX

4. All monitoring wells will be sampled for Total Oil & Grease on a one time basis. All wells having detectable levels of oil & grease shall be resampled once every two years.
5. All new monitoring wells will be sampled quarterly for TPH-G, TPH-D, BTEX, MTBE, and VOCs.

REPORTING

A ground water elevation contour map for each transmissive zone shall be submitted for each monthly and semiannual set of measurements and include the facility, groundwater flow pattern including the direction of the groundwater gradient, and the location of the wells measured.

A map for each transmissive zone shall be submitted for each quarterly and semiannual set of measurements that indicates the boundary of the dissolved and separate phase hydrocarbon plumes. Individual maps will be submitted for TPH-G, TPH-D, BTEX, VOC, MTBE, and Total Oil & Grease.

Semiannual monitoring reports, including quarterly and semiannual 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>
January, February, March, April, May, June	August 15
July, August, September, October, November, December	February 15

Ordered by _____
Catherine E. Kuhlman
Executive Officer

February 13, 2009