

California Regional Water Quality Control Board  
North Coast Region

Monitoring and Reporting Program NO. R1-2005-0108

For

Cross Petroleum  
and  
Perry Pahlmeyer

1240 South Main Street  
Yreka, California

Siskiyou 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 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 each monitoring well semiannually. If detected, the thickness shall be measured to at least 0.01 foot increments semiannually.
2. The depth to groundwater in each monitoring well shall be determined to at least 0.01 foot increments semiannually. The results of each event's elevation 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 schedule. The analysis shall be performed at a certified laboratory for Total Petroleum Hydrocarbons as gasoline (TPH-G), Total Petroleum Hydrocarbons as diesel (TPH-D), benzene, toluene, ethylbenzene, xylene (collectively as BTEX), volatile organic compounds (VOC) by EPA Method 624/8260, and fuel oxygenates to include methyl tert butyl ether (collectively OXY).

| WELL | SEASONAL HIGH GROUNDWATER    | SEASONAL LOW GROUNDWATER     |
|------|------------------------------|------------------------------|
| MW-1 | VOC                          |                              |
| MW-2 | TPH-G, TPH-D, BTEX, OXY, VOC | TPH-G, TPH-D, BTEX, OXY, VOC |
| MW-3 | VOC, OXY                     |                              |
| MW-6 | TPH-G, TPH-D, BTEX, OXY, VOC | TPH-G, TPH-D, BTEX, OXY, VOC |
| MW-7 | VOC                          |                              |
| MW-8 | TPH-G, TPH-D, BTEX, OXY, VOC | TPH-G, TPH-D, BTEX, OXY, VOC |

- The monitoring wells used to monitor the ozone remediation system (MW-1, MW-2, MW-4, and MW-7) shall also be sampled prior to the beginning of ozone injection, each month after ozone injection begins for the first two quarters, and quarterly thereafter. Groundwater samples shall be analyzed for the following parameters: dissolved oxygen, oxygen reduction potential (ORP), temperature, pH, bromide, bromate, dissolved hexavalent chromium, dissolved vanadium, dissolved selenium, and dissolved molybdenum. The dissolved oxygen, ORP, temperature, and pH shall be measured in the field. The laboratory reporting limit for hexavalent chromium shall be no higher than 5 ug/l and the laboratory reporting limit for bromate shall be no higher than 10 ug/l.
- All newly installed monitoring wells well be sampled quarterly for the contaminants applicable to the area of well installation.

### REPORTING

A groundwater elevation contour map shall be submitted for each 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. Semiannual 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> |
|--|-----------------|
| January, February, March, April, May, June           | July 30         |
| July, August, September, October, November, December | January 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 E. Kuhlman  
 Executive Officer

November 3, 2005