

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2010-0021
(REPLACES MONITORING AND REPORTING PROGRAM NO. R1-2005-0091)

FOR

UNOCAL BULK PLANT #0848

102 WASHINGTON STREET
WEAVERVILLE, CALIFORNIA

TRINITY COUNTY

MONITORING

1. Prior to purging and sampling, the depth to groundwater shall be determined to at least 0.01 foot increments in all groundwater monitoring wells semi-annually, during the first and third quarters of each year. The data generated from the elevation readings must be referenced to mean sea level.
2. Groundwater samples shall be collected for analysis from monitoring wells MW-1 through 10, and MW-12 through MW-19. The samples shall be analyzed for total petroleum hydrocarbons as gasoline (TPH-g), petroleum hydrocarbons as diesel (TPH-d), benzene, toluene, ethylbenzene, and xylenes (BTEX), and fuel oxygenate compounds methyl tertiary-butyl ether, tert-butyl alcohol, di-isopropyl ether, ethyl tert-butyl ether, and tert-amyl methyl ether. Water quality parameters temperature, pH, conductivity, dissolved oxygen, and oxidation/reduction potential shall also be measured. Groundwater from monitoring wells MW-4, MW-5, MW-7, MW-8, and MW-14 shall also be analyzed for total petroleum hydrocarbons as motor oil (TPH-mo).
3. Monitoring wells listed in the table below shall also be sampled to monitor the effects of ozone remediation system. The laboratory reporting limit for hexavalent chromium should be no higher than 5 µg/L and the laboratory reporting limit for bromate should be no higher than 10 µg/L.

Constituent	Monitoring Location
Bromide	MW-2, MW-5, MW-13, MW-14, MW-18
Bromate	MW-2, MW-5, MW-13, MW-14, MW-18
Vanadium	MW-12
Hexavalent Chromium	MW-2, MW-14, MW-19

4. All laboratory analyses shall be performed at a laboratory certified by the California Department of Health Services.

REPORTING

1. Semi-annual monitoring reports shall be submitted to this office in accordance with the following schedule:

<u>Reporting Period</u>	<u>Due Date</u>
January, February, March	May 1
July, August, September	November 1

2. A groundwater elevation contour map shall be included for each set of measurements and shall include the following:
 - a) location of onsite facilities;
 - b) location of the monitoring wells;
 - c) location of the former underground tanks; and
 - d) 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;
 - b) location of the monitoring wells; and
 - c) location of the former underground tanks.

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; and
 - d) quantification limits employed for non-detect analytical results.

5. Current and previous remedial system operation and maintenance activities shall be reported in the monitoring reports.

6. Each report shall contain copies of the well purging and sampling field logs; chain of custody documents showing the time and date of collection and person collecting; 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.

7. Monitoring data and reports shall also be submitted electronically to the State Water Resources Control Board's GeoTracker database.

Ordered by _____
Catherine Kuhlman
Executive Officer

February 04, 2010