

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. CI-8703
FOR
SHELL OIL PRODUCTS US
FORMER SHELL SERVICE STATION #204-4530-1201
ORDER NO. R4-2002-0030: SERIES NO. 045
(UST ID# R-05560)**

I. REPORTING REQUIREMENTS

- A. The Discharger shall implement this monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2002-0030.
- B. The Discharger shall inform the Regional Board within 24 hours in the event that any discharge exceeds the discharge limits. Written confirmation shall follow within one week and shall include corrective actions taken.
- C. The Discharger shall submit the summary reports detailing the results of the remediation every other month. The first monthly report is due to this Regional Board two months after the end of remediation.
- D. Fourteen months after the end of the remediation, the Discharger shall submit a final summary report to the Regional Board to report the comprehensive findings observed during the remediation and post-remediation monitoring period.
- E. The Discharger shall comply with requirements contained in Section G of Order No. R4-2002-0030 "*Monitoring and Reporting Requirements*" in addition to the aforementioned requirements.

II. OXYGEN RELEASE COMPOUND (ORC) MONITORING REQUIREMENTS

The summary reports shall contain the following information regarding injection activities:

1. Location Map showing injection point(s) of the ORC used during the reporting period.
2. Boring log of each injection point or vertical cross-section diagram of injection point(s) indicating the placement of the ORC during the reporting period.
3. Written supplemental summary including, but not limited to:
 - Depth of injection point(s);
 - Quantity of ORC injected at each point; and
 - Total amount of ORC injected.
 - Calculation of mass reduction due to ORC based on the contaminant concentration changes prior and after injection.

III. GROUNDWATER MONITORING PROGRAM

A groundwater monitoring program shall be designed to detect and evaluate impacts associated with the ORC injection activities. One upgradient well MW-22 and five downgradient wells Nos. MW-11, MW-25, MW-26, MW-27, and MW-28 shall be sampled and analyzed every other month. The following shall constitute the monitoring program:

<u>CONSTITUENT</u>	<u>UNITS</u>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
Total Petroleum Hydrocarbon as Gasoline (EPA Method 8015M)	µg/l	Grab	Quarterly
BTEX, MTBE and other oxygenates (EPA Method 8260B)	µg/l	Grab	Quarterly
Total Organic Carbon (EPA Method 9060 Modified)	µg/l	Grab	Quarterly
Total Dissolved Solids	mg/l	Grab	Quarterly
Biochemical Oxygen Demand	mg/l	Grab	Quarterly
Chemical Oxygen Demand	mg/l		Quarterly
PH	pH units	Grab	Quarterly
Oxidation-Reduction Potential	Millivolts	Grab	Quarterly
Groundwater depth	Feet, below ground surface (bgs)	In situ	Quarterly
Dissolved Oxygen	µg/l	Grab	Quarterly
Major Anions (chloride, sulfate, nitrate, nitrite, and sulfide)	µg/l	Grab	Quarterly
Major Cations (Calcium, magnesium, potassium, sodium)	mg/l	Grab	Quarterly
Carbon Dioxide	µg/l	Grab	Quarterly

All groundwater monitoring reports must include, at minimum, the following:

- a. Well identification, date and time of sampling;

- b. Sampler identification, and laboratory identification;
- c. Observation of groundwater levels, recorded to 0.01 feet mean sea level and groundwater flow direction.

IV. MONITORING FREQUENCIES

Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted to a less frequent basis or parameters and locations dropped by the Executive Officer if the Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

V. CERTIFICATION STATEMENT

Each report shall contain the following completed declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on the _____ day of _____ at _____.

_____(Signature)

_____(Title)"

Ordered by: _____
Dennis A. Dickerson
Executive Officer

Date: January 30, 2004