

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
MONITORING AND REPORTING PROGRAM NO. CI-9769  
FOR  
AMIN'S OIL (FORMER SHELL STATION)

2603 NORMANDIES AVENUE SOUTH, LOS ANGELES, CA  
ENROLLMENT UNDER REGIONAL BOARD

ORDER NO. R4-2007-0019

SERIES NO. 180

I. REPORTING REQUIREMENTS

- A. Shell Oil Products US (hereinafter Discharger) shall implement this monitoring program on the effective date of Regional Board Order No. R4-2007-0019. The first monitoring report under this program, for July - December 2011, shall be received at the Regional Board by **January 15, 2012**. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

<u>Reporting Period</u>	<u>Sampling Period</u>	<u>Report Due Date</u>
January - June	April - June	July 15 <sup>th</sup>
July - December	October - December	January 15 <sup>th</sup>

If the remediation work is not started until after January 1, 2012, then the first report is due by **July 15, 2012**.

- B. If there is no discharge or injection during any reporting period, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.
- C. By March 1 of each year, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall explain the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements (WDR).
- D. Laboratory analyses - all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Public Health Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal certification is obtained from ELAP.
- E. The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a

particular ML is not attainable and obtains approval for a higher ML from the Regional Board Executive Officer (Executive Officer). The Discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC) procedures upon request by the Regional Board.

- F. Groundwater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. All QA/QC samples must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Regional Board staff.
- G. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Public Health, and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.
- H. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs. This section shall be located at the front of the report and shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limitations.
- I. The Discharger shall maintain all sampling and analytical results: date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- J. If the Discharger performs analyses on any groundwater samples more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the report.
- K. In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.
- L. The Discharger should not implement any changes to the Monitoring and Reporting Program prior to receiving Executive Officer's written approval.

## II. DISCHARGE MONITORING REQUIREMENTS

The semi-annual reports shall contain the following information regarding the injection activities.

1. Location map showing injection points used for the injection activities.

2. Written and tabular summary defining:
  - Depth of injection points;
  - Quantity of hydrogen peroxide injected at each injection point;
  - Days on which the injection system was in operation; and
  - Total amount of hydrogen peroxide injected at the site.
3. Semi-annual visual inspection at each injection well shall be conducted to evaluate the well casing integrity after each injection. The semi-annual report shall include a summary of the visual inspection.
4. To avoid groundwater monitoring network reduction, data bias, and well screen clogging or alteration, no groundwater monitoring wells shall be used as injection points during the proposed hydrogen peroxide injection. Separate injection points/wells must be used at the Site for the proposed hydrogen peroxide injection.

III. GROUNDWATER MONITORING PROGRAM

A groundwater-monitoring program shall be designed to detect and evaluate impacts associated with the injection activities. The monitoring well network must include MW-4 (or MW-5, MW-6, or MW-11) and MW-15 as upgradient wells; MW-2 and MW-10 as source area wells; and MW-8 and MW-13 (or the new monitoring well proposed further downgradient to the northwest) as downgradient wells. A baseline monitoring and sampling shall be conducted prior to the proposed injections. Baseline monitoring will establish the initial conditions with respect to the contaminant levels. These sampling stations shall not be changed and any proposed change of monitoring locations shall be identified and approved by the Executive Officer.

The Discharger shall conduct baseline sampling from all wells within two weeks prior to the proposed injection, shall conduct monitoring approximately two weeks after the pilot test, and during full-scale implementation shall perform monitoring at the frequencies specified below for all the monitoring wells in the monitoring network for the following constituents:

<u>CONSTITUENT</u>	<u>UNITS</u> <sup>1</sup>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
pH <sup>2</sup>	pH units	grab	Semi-annually
Temperature <sup>2</sup>	°F	grab	Semi-annually
Oxidation-reduction potential <sup>2</sup>	Milivolts	grab	Semi-annually
Specific conductivity <sup>2</sup>	µmhos/cm	grab	Semi-annually
Ferrous iron	µg/L	grab	Semi-annually
Dissolved Oxygen <sup>2</sup>	µg/L	grab	Semi-annually
Total Petroleum Hydrocarbons (as gasoline)	µg/L	grab	Semi-annually
Benzene	µg/L	grab	Semi-annually
Ethylbenzene	µg/L	grab	Semi-annually

<u>CONSTITUENT</u>	<u>UNITS</u> <sup>1</sup>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
Total xylenes	µg/L	grab	Semi-annually
MTBE	µg/L	grab	Semi-annually
TBA	µg/L	grab	Semi-annually
TAME	µg/L	grab	Semi-annually
DIPE	µg/L	grab	Semi-annually
ETBE	µg/L	grab	Semi-annually
Ethanol	µg/L	grab	Semi-annually
Methane	µg/L	grab	Semi-annually
Formaldehyde	µg/L	grab	Semi-annually
Acetates	µg/L	grab	Semi-annually
Total organic carbon	µg/L	grab	Semi-annually
Total dissolved solids	mg/l	grab	Semi-annually
Arsenic	mg/L	grab	Semi-annually
Bromide	mg/L	grab	Semi-annually
Sulfate	mg/L	grab	Semi-annually
Chloride	mg/L	grab	Semi-annually
Boron	mg/L	grab	Semi-annually
Sodium	mg/L	grab	Semi-annually
Carbon dioxide	mg/L	grab	Semi-annually
Manganese	µg/L	grab	Semi-annually
Total iron	µg/L	grab	Semi-annually
Alkalinity	µg/L	grab	Semi-annually
Total chromium <sup>3</sup>	µg/L	grab	Semi-annually
Hexavalent Chromium <sup>3</sup>	µg/L	grab	Semi-annually

<sup>1</sup> mg/L: milligrams per liter; µg/L: micrograms per liter; µmhos/cm: microohms per centimeter; °F: degree Fahrenheit.

<sup>2</sup> Field instrument may be used to measure this parameter.

<sup>3</sup> The Discharger is required to monitor for total chromium and chromium six in the baseline, post-pilot study monitoring event, and second semi-annual sampling. If detected at any of these sampling events, then total chromium and chromium six must be monitored semi-annually thereafter.

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

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification;
- c. Semi-annual 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. ELECTRONIC SUBMITTAL OF INFORMATION

The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP, including groundwater monitoring data, discharge location data, and pdf monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100001819.

VI. 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)"

VII. PUBLIC DOCUMENTS

These records and reports are public documents and shall be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region, upon request by interested parties.

Ordered by: Samuel Unger  
Samuel Unger, P.E.  
Executive Officer

Date: November 7, 2011