California Regional Water Quality Control Board
North Coast Region

Monitoring and Reporting Program Order No. R1-2009-0007

for

SHELL OIL PRODUCTS US

2575 Corby Avenue

APN 043-053-032

Santa Rosa, CA

Sonoma County

This Monitoring and Reporting Program Order (Order) is issued pursuant to California Water Code Section (CWC) 13267(b) and requires monitoring of groundwater and submission of technical reports. This Order replaces all previously issued groundwater monitoring directives issued for the site. The objective of monitoring conducted under this Order is to provide the Discharger and the Regional Water Board with information concerning groundwater quality and contaminant trends at the site.

All monitoring and reporting activities shall be conducted by or under the supervision of a California Registered Engineer or Geologist. Under the authority of CWC section 13267, the Discharger named above is required to comply with the following:

MONITORING

1. The depth to groundwater shall be determined quarterly to the nearest 0.01 foot increment in all monitoring wells at the site. Groundwater elevations shall be measured prior to well purging. The data generated from the elevation readings must be referenced to the same elevation datum used for the electronic GeoTracker survey values.

2. Monitoring wells MW- 1R, MW-6R, MW-7, MW-11, MW-13, and MW-20 through MW-28 shall be sampled and analyzed monthly for the first six months, and then quarterly thereafter, for the following constituents of concern:

    a. Total Petroleum Hydrocarbons measured as gasoline (TPH-G);
    b. Methyl tertiary butyl ether (MTBE); and
    c. Tert-butyl alcohol (TBA).

3. Monitoring wells MW-8, MW-21, and MW-22 shall be sampled and analyzed quarterly for MTBE and TBA only.

4. Monitoring wells MW-12 and MW-29 shall be sampled and analyzed quarterly for TPH-G, MTBE and TBA.

5. Monitoring wells MW-4, MW-17, MW-19, V-11, V-13, V-14 shall be sampled and analyzed annually, during the first calendar quarter, for MTBE and TBA only.

6. All chemical analyses must be performed by a laboratory certified by the State of California Department of Health Services for those analyses.

7. Analytical methods for sample analyses shall achieve practical quantification reporting limits that are adequate for evaluating regulatory action levels for each constituent. A table of common laboratory reporting limits for the constituents of concern is incorporated in this Order as Attachment A.

REPORTING

1. Laboratory reports for monthly samples collected during the first six months on monitoring shall be submitted in electronic data format to the State Water Resources Control Board's Geographic Environmental Information Management System database (GeoTracker)[1] within forty-five days of the sample collection.

2. Quarterly monitoring reports shall be submitted in paper format to the North Coast Regional Water Quality Control Board at 5550 Skylane Boulevard, Suite A, Santa Rosa, California, 95403 according to the following schedule:

Quarter	Reporting Period	Required Submittal Date
First Quarter	January, February, March	April 30
Second Quarter	April, May, June	July 31
Third Quarter	July, August, September	October 31
Fourth Quarter	October, November, December	January 31

3. Groundwater monitoring reports for each quarterly monitoring event shall include the following elements:
    a. A narrative description of the work conducted.
    b. A groundwater elevation map for each water-bearing.
    c. A contaminant distribution map showing analytical resuslts for TPH-G, MTBE, and TBA at the respective sample locations. The contaminant distribution data may be presented on the groundwater elevation maps for that sampling event.

[1] Information on GeoTracker submittal requirements can be found at http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml

d. Analytical data tables presenting both current and historical analytical results;

e. Copies of the well purging and sampling field logs; chain of custody documents; and signed laboratory reports including quality control data and explanations of analytical anomalies, if any. These supporting documents may be included as appendices to the report.

4. Laboratory data, copies of monitoring reports, and depth to groundwater measurements shall also be submitted electronically to Geotracker database.

Ordered by _____
Catherine Kuhlman
Executive Officer

January 13, 2009

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Table of Water Quality Objectives

For Selected Petroleum Related Constituents in Groundwater

Updated 11-13-08

CHEMICAL	COMMON MINIMUM DETECTION LEVEL	WATER QUALITY OBJECTIVE [1]	WATER QUALITY OBJECTIVE CITATION
Petroleum Hydrocarbons (as gasoline)	50.0 µg/l	5 µg/l	Taste and Odor Threshold is 5 ug/l, but the common detection limit is 50 µg/l
Petroleum Hydrocarbons (as diesel)	50.0 µg/l	100 µg/l	USEPA Health Advisory
Petroleum Hydrocarbons (as motor oil)	50.0 µg/l	< 50.0 µg/l	Federal and State Anti-Degradation Policy and SWRCB Resolution No. 68-16
Benzene	0.5 µg/l	0.15 µg/l	California Public Health Goal (Cal/EPA, OEHHA)
Toluene	0.5 µg/l	42 µg/l	Taste and Odor Threshold
Ethyl benzene	0.5 µg/l	3.2 µg/l	Cal/EPA Cancer Potency Factor as a drinking water level
Xylenes	0.5 µg/l	17 µg/l	Taste and Odor Threshold
Methyl tertiary butyl ether	0.5 µg/l	5 µg/l	Secondary MCL (taste & odor or welfare-based)
Tert-butyl alcohol	10 µg/l	12 µg/l	California Notification Levels (Department of Health Services)

[1] The California Water Code, and regulations and policies developed there under require cleanup and abatement of discharges and threatened discharges of waste to the extent feasible. Cleanup and abatement activities are to provide attainment of background levels of water quality or the highest water quality that is reasonable if background levels of water quality cannot be restored**. Alternative cleanup levels less stringent than background concentration shall be permitted only if the discharger demonstrates that: it is not feasible to attain background levels**; the alternative cleanup levels are consistent with the maximum benefit to the people of the State; alternative cleanup levels will not unreasonably affect present and anticipated beneficial uses of such water; and they will not result in water quality lower than prescribed in the Basin Plan and Policies adopted by the State and Regional Water Boards.