California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2010-0087
(Replaces Monitoring and Reporting Program No. R1-2001-0203)

FOR

CHEVRON USA
MARINE TERMINAL
3400 CHRISTIE STREET
EUREKA, CALIFORNIA

Humboldt County

This Monitoring and Reporting Program 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 semiannual basis. The objective of monitoring conducted under this monitoring program is to provide the Dischargers and the Regional Water Board with information concerning groundwater quality and contaminant trends at the site.

Under the authority of CWC section 13267, the Dischargers named above are required to comply with the following:

MONITORING ELEMENTS

This monitoring and reporting program order R1-2010-0087 contains three monitoring elements that are linked to different reporting components and schedules. Listed below are the monitoring elements and their reporting requirements for the Chevron USA Marine Terminal in Eureka, California.

ABOVEGROUND TANK LEAK DETECTION MONITORING

The terminal operators shall inspect the exterior sides, fittings, and concrete pad of each tank every month for visible leaks, seeps, or stains. The interior of each double bottom drainpipe shall also be inspected. Inspection observations shall be recorded for each tank and its associated piping. When maintenance, testing, or repairs of tanks and/or piping occur, copies of recorded documentation shall be provided within 30 days of completing such tank activities.

STORM WATER MONITORING

The terminal manager shall record dates during which storm water is discharged to Humboldt Bay from the treatment system. This system is composed of an oil-water separator, paper filters, and granular activated carbon filters. Facility operators shall collect storm water samples during the first hour of discharge from the first storm event of the wet season (October 1- May 30) and at least one other storm event in the wet

season. Sampling of stored or contained storm water shall occur at the time when the stored or contained storm water has been treated and is then released to Humboldt Bay. In addition to sample collection, visual observations are also required during daylight hours throughout the wet season and during discharge events. These observations shall be recorded and must be reported with the sampling data.

The samples shall be analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-G); Total Petroleum Hydrocarbons as diesel (TPH-D); benzene, toluene, ethylbenzene, xylene (collectively BTEX); all fuel oxygenates; ethanol; oil and grease (O&G); pH; total suspended solids (TDS); and specific conductance. Silica gel cleanup of samples shall not be implemented. The analyses shall be performed at a State-certified laboratory for all constituents using United States Environmental Protection Agency (USEPA) test methods. This includes field testing for pH with additional sample collected for laboratory confirmation, if needed, because of an anomalous field test result.

If an initial sample from any sampling event indicates the presence of TPH-G, TPH-D, BTEX, fuel oxygenates, O&G, or ethanol at concentrations greater than the testing laboratory's reporting limits, then a resample and analysis shall occur. The resample needs to occur as soon as feasible to confirm or nullify the results from the initial sample.

GROUNDWATER MONITORING

1. The depth to groundwater in all monitoring wells and piezometers shall be determined to at least 0.01 foot increments semiannually concomitant with high and low groundwater levels. The depth to groundwater shall be determined with respect to sea level at the dock. Depth to groundwater shall be collected from all measurement points using an approach that minimizes the effects of existing tidal influence on groundwater level measurements. Elevations shall be reported in tabular form indicating the surveyed elevation of each well or piezometer reference point, depth to groundwater from referenced point, and the actual groundwater elevation.
2. Contour maps shall be developed showing groundwater table elevations at each monitoring well or piezometer along with the determination of the groundwater gradient magnitude(s), both lateral and vertical.
3. The detection and thickness of separate phase product in any monitoring wells and piezometers shall be determined during each sampling event.
4. TPH-D analysis shall be done with and without silica gel cleanup.
5. All monitoring wells shall be sampled according to the following schedule. The analyses shall be performed at a State-certified laboratory for all constituents using USEPA approved methodology.

MONITORING WELL IDENTIFICATIONS	SAMPLING FREQUENCY	CONSTITUENTS of CONCERN TO SAMPLE AND ANALYZE
MW-3	Annual	TPH-D
MW-4	Annual	TPH-D
MW-5	Semi-Annual	TPH-D
MW-6	Semi-Annual	TPH-D
MW-7	Semi-Annual	TPH-D, TPH-G, BTEX, MtBE
MW-8	Annual	TPH-D
MW-9	Annual	TPH-D
MW-10A	Semi-Annual	TPH-D
MW-11A	Semi-Annual	TPH-D
MW-12A	Semi-Annual	TPH-D
MW-13	Semi-Annual	TPH-D
MW-15	Semi-Annual	TPH-D
MW-16	Annual	TPH-D
MW-17	Semi-Annual	TPH-D
MW-18	Annual	TPH-D
MW-19	Semi-Annual	TPH-D
MW-20	Annual	TPH-D
MW-21	Semi-Annual	TPH-D, TPH-G, BTEX, MtBE
MW-22	Semi-Annual	TPH-D, TPH-G, BTEX, MtBE
MW-23	Semi-Annual	TPHD
MW-24	Semi-Annual	TPHD
P-1	Semi-Annual	TPH-D
All New Wells	Quarterly	TPH-D, TPH-G, BTEX, MtBE

REPORTING

All periodic monitoring reports shall include all field and laboratory documentation. The field and laboratory analyses data shall be summarized and submitted in tabular format so that the dates, the tested constituent(s), the person collecting the sample(s), the test method reporting limit, and the test result concentrations are readily discernable.

Aboveground leak detection monitoring reports are compiled monthly and shall be submitted quarterly consistent with the schedule shown below. In the event that periodic maintenance, testing, or repairs of any tanks and/or lines occur, the facility operators will immediately notify us in writing if indications of a release has occurred. Subsequent to the written release notification, all relevant written documentation shall be provided by the facility operators to us within 30 days of completing such aboveground tank and/or piping activities.

Facility operators are required to provide storm water monitoring reports on an annual basis to the State Water Resources Control Board (State Water Board). The storm

water discharge log for the preceding wet weather season and the annual report required under Section B16 of State Water Board, National Pollutant Discharge Elimination System General Permit CAS000001 shall be submitted by July 1 of each year. In addition, because the winter season is defined as occurring from October 1-May 30, quarterly reporting to the Regional Water Board is required consistent with the schedule listed below. In the event that a storm water sample has reported concentration greater than the testing laboratory's reporting limit and re-sampling is required then the facility operators shall report laboratory results as soon as possible to the Regional Water Board

Groundwater monitoring reports will be submitted semi-annually unless new wells are installed. The semi-annual events will be representative of high and/or low groundwater elevations at the facility. If new wells are installed then quarterly reports are required. Each groundwater monitoring report shall include: (1) a groundwater elevation contour map for each sampling event. The map shall include the facility, groundwater flow pattern(s) including the direction of the groundwater gradient(s), and the location of the wells measured. (2) field and laboratory measurement and analyses data. Resultant measurement data shall be submitted in tabular format so that the dates, the constituent(s), the person(s) collecting the sample(s), the test method reporting limit(s), and the resultant test method concentrations are readily discernable.

Reporting Period	**Due Date**
January, February, March	April 30
April, May, June	July 30
July, August, September	October 30
October, November, December	January 30

Ordered by _____

Catherine E. Kuhlman
Executive Officer

September 30, 2010