

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

**MONITORING AND REPORTING PROGRAM NO. CI-8320  
FOR  
ARCO/UNOCAL JOINT PROJECT  
(ARCO/UNOCAL HAWTHORNE COMMINGLED PLUME)**

**(NPDES NO. CAG834001)**

**I. REPORTING REQUIREMENTS**

- A. The discharger shall implement this monitoring program on the effective date of this permit. The discharger shall submit monitoring reports to the Regional Board by the dates in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15
Annual Summary Report	March 15

- B. The first monitoring report under this Program is due by January 15, 2001. The annual summary report, shall contain a discussion of the previous year's effluent monitoring data, as well as graphical and tabular summaries of the data. If there is no discharge during any reporting period, the report shall so state.
- C. All monitoring reports shall include the discharge limitations in the Order, tabulated analytical data, the chain of custody form, and the laboratory report (including but not limited to date and time of sampling, date of analyses, method of analysis and detection limits).
- D. Before commencing a new discharge, a representative sample of the effluent shall be collected and analyzed, and test results must meet all discharge limitations in Part E of Order No. 97-046.

**II. SAMPLE COLLECTION REQUIREMENTS**

- A. Daily samples shall be collected each day.
- B. Weekly samples shall be collected on a representative day of each week.
- C. Monthly samples shall be collected on a representative day of each month.
- D. Quarterly samples shall be collected in February, May, August, and November.
- E. Semi-annual samples shall be collected in May and November.
- F. Annual samples shall be collected in November.

**III. EFFLUENT MONITORING REQUIREMENTS**

- A. Sampling station(s) shall be established at the discharge point and shall be located where representative samples of the effluent can be obtained. Provisions shall be made to enable visual inspections before discharge. In the event of presence of oil sheen, debris, and/or other objectionable materials or odors, discharge shall not commence until compliance with the requirements is demonstrated. All visual observations shall be included in the monitoring report.
- B. If monitoring result indicate an exceedance of a limit contained in Order 97-046, the discharge shall be terminated and shall only be resumed after remedial measures have been implemented and full compliance with the requirements has been ascertained.
- C. In addition, as applicable, following an effluent limit exceedance, the discharger shall implement the following accelerated monitoring program:
  - 1. Monthly monitoring shall be increased to weekly monitoring,
  - 2. Quarterly monitoring shall be increased to monthly monitoring , and
  - 3. Semi-annually monitoring shall be increased to quarterly.

If three consecutive accelerated monitoring events demonstrate full compliance with effluent limits, the discharger may return to the regular monitoring frequency, with the approval of the Executive Officer of the Regional Board.

- D. The following shall constitute the discharge monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Flow	gal/day	totalizer	continuously
pH	pH units	grab	monthly
Temperature	°F	grab	monthly
Total Suspended Solids	mg/L	grab	monthly
Turbidity	NTU	grab	monthly
BOD <sub>5</sub> 20°C	mg/L	grab	monthly
Settleable Solids	ml/L	grab	monthly
Sulfides	mg/L	grab	monthly
Total Petroleum Hydrocarbons	µg/L	grab	monthly <sup>1</sup>
Benzene	µg/L	grab	monthly <sup>1</sup>
Toluene	µg/L	grab	monthly <sup>1</sup>
Ethylbenzene	µg/L	grab	monthly <sup>1</sup>
Xylenes	µg/L	grab	monthly <sup>1</sup>
Ethylene Dibromide	µg/L	grab	monthly <sup>1</sup>
Lead	µg/L	grab	monthly <sup>1</sup>
Tertiary Butyl Alcohol (TBA)	µg/L	grab	monthly <sup>1</sup>

<sup>1</sup> Samples shall be collected weekly for the first one month of operation and monthly thereafter, if no exceedance is observed.

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Di-isopropyl Ether (DIPE)	µg/L	grab	monthly <sup>1</sup>
Tertiary Amyl Methyl Ether (TAME)	µg/L	grab	monthly <sup>1</sup>
Ethyl Tertiary Butyl Ether (ETBE)	µg/L	grab	monthly <sup>1</sup>
Methyl Tertiary Butyl Ether (MTBE)	µg/L	grab	monthly <sup>1</sup>
Acute Toxicity	% survival	grab	annually
Remaining EPA Priority Pollutants (See attached)	µg/L	grab	annually

IV. EFFLUENT TOXICITY TESTING

- A. The discharger shall conduct acute toxicity testing tests on 100% effluent grab samples by methods specified in 40 CFR Part 136 which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms*, August 1993, (EPA/600/4-90/027F) or a more recent edition. Submission of bioassay results should include the information noted on pages 71-74 of the "methods".
- B. The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish discharges. The method for topsmelt is found in USEPA's *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, First Edition, August 1995, (EPA/600/R-95/136).
- C. If the results of the toxicity test yields a survival of less than 90%, then the frequency of analyses shall increase to monthly until at least three test results have been obtained and full compliance with effluent limitations has been demonstrated, after which the frequency of analyses shall revert to annually. Results of toxicity tests shall be included in the first monitoring report following sampling

V. GENERAL PROVISIONS FOR REPORTING

- A. The discharger shall inform this Regional Board 24 hours before the start of the discharge.
- B. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer. A copy of the laboratory certification shall be provided with the first monitoring report and each time a new and/or renewal is obtained from ELAP.
- C. Samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136.3. Proper chain of custody procedures must be followed and a copy shall be submitted with the report.

- D. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL) and the Minimum Level (ML<sup>2</sup>) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported with one of the following methods, as the case may be:
1. An actual numerical value for sample results greater than or equal to the ML; or
  2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML. The estimated<sup>3</sup> chemical concentration of the sample shall also be reported; or
  3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

The ML employed for an effluent analysis shall be lower than the permit limit 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 Executive Officer. At least once a year, the discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control procedures.

## VI. NOTIFICATION

- A. The discharger shall notify the Executive Officer in writing prior to discharge of any chemical which may be toxic to aquatic life. Such notification shall include:
1. Name and general composition of the chemical,
  2. Frequency of use,
  3. Quantities to be used,
  4. Proposed discharge concentrations and,
  5. EPA registration number, if applicable.

No discharge of such chemical shall be made prior to obtaining the Executive Officer's approval.

- B. The discharger shall notify the Regional Board via telephone and/or fax within 24 hours of noticing an exceedance above the effluent limits in Order No. 97-046. The discharger shall provide to the Regional Board within 14 days of observing the exceedance a detailed statement of the actions

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<sup>2</sup> The minimum levels are those published by the State Water Resources Control Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, March 2, 2000, see attached Appendix A.

<sup>3</sup> Estimated chemical concentration is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

undertaken or proposed that will bring the discharge into full compliance with the requirements and submit a timetable for correction.

VII. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if the discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

Ordered by: \_\_\_\_\_  
Dennis A. Dickerson  
Executive Officer

Date: October 11, 2001

/RM