

**State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. CI-8405  
for  
ATLANTIC RICHFIELD COMPANY  
(ARCO Service Station #6035)  
(NPDES NO. CAG834001)**

**I. REPORTING REQUIREMENTS**

- A. The discharger shall implement this monitoring program on the effective date of coverage under this permit. The discharger shall submit monitoring reports to this 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 July 15, 2002. 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 discharge limitations in the Order, tabulated analytical data, the chain of custody form, the analytical laboratory report (including, but not limited to, date and time of sampling, date of analyses, method of analysis, and detection limits), and discharge certification statement.
- D. Before commencing a new discharge, a representative sample of the effluent shall be collected and analyzed for toxicity and for all the constituents in E.1. and Attachment A 7.f. of Order No. 97-046, and test results must meet all applicable discharge limitations.

**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 for each point of discharge and shall be located where representative samples of that effluent can be obtained. Provisions shall be made to enable visual inspection 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 results indicate an exceedance of a limit contained in Order No. 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, then, the discharger may return to regular monitoring frequency, with the approval of the Executive Officer of the Regional Board.

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

<b><u>Constituent</u></b>	<b><u>Unit</u></b>	<b><u>Type of Sample</u></b>	<b><u>Minimum Frequency of Analysis</u></b>
Total Waste Flow	gal/day	totalizer	continuously
Temperature	°F	grab	monthly
pH	pH units	grab	monthly
Total Suspended Solids	mg/L	grab	monthly
Turbidity	mg/L	grab	monthly
BOD <sub>5</sub> @ 20°	mg/L	grab	monthly
Settleable Solids	ml/L	grab	monthly
Sulfides	mg/L	grab	monthly
Total Dissolved Solids	mg/L	grab	monthly
Sulfate	mg/L	grab	monthly

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Chloride	mg/L	grab	monthly
Nitrogen	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>
Xylene	µg/L	grab	monthly <sup>(1)</sup>
Ethylene Dibromide	µg/L	grab	monthly <sup>(1)</sup>
Methyl Tertiary Butyl Ether (MTBE)	µg/L	grab	monthly <sup>(1)</sup>
Tertiary Butyl Alcohol (TBA)	µg/L	grab	monthly
Tertiary Amyl Methyl Ether (TAME)	µg/L	grab	monthly
Napthalene	µg/L	grab	monthly
Di-isopropyl Ether (DIPE)	µg/L	grab	monthly
Methanol	µg/L	grab	monthly
Ethanol	µg/L	grab	monthly
Acute Toxicity	% survival	grab	annually
EPA Priority Pollutants (See attached)	µg/L	grab	annually

#### IV. EFFLUENT TOXICITY TESTING

- A. The discharger shall conduct acute toxicity tests on 100% effluent grab samples by method specified in 40 CFR Part 136 which cites USEPA's *Method 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 EPA/600/4-90/027F document.
  
- 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).

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(1) Samples shall be collected weekly for the first month of operation and monthly thereafter if no exceedance is observed.

- 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 as specified in 40 CFR Part 136.3. All Quality Assurance/Quality Control (QA/QC) analyses should be performed on the same dates when samples are actually analyzed and documentation shall accompany the laboratory reports.
- D. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL) and the Minimum Level<sup>(2)</sup> (ML) 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 laboratory measured 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 chemical concentration<sup>(3)</sup> 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.

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(2) The minimum levels are those published by the State Water Quality Control Board in the Policy for the implementation of Toxic Standards for Inland Surface Water, Enclosed Bays, and Estuaries of California, March 2, 2000. See attached Appendix A.

(3) 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.

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 associated laboratory QA/QC procedures.

#### VI. NOTIFICATION

- A. The discharger shall notify the Executive Officer in writing prior to discharge of any chemical that 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 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 requests same and the request is backed by statistical trends of monitoring data submitted.

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

Date: May 15, 2002

Mr. Gordon Terhune  
Atlantic Richfield Company  
(ARCO Service Station #6035)

CI-8405

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