

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

**MONITORING AND REPORTING PROGRAM NO. 6677  
for  
PETRO-DIAMOND TERMINAL COMPANY  
(CA0059358)**

**I. Reporting Requirements**

- A. Petro-Diamond Terminal Company (hereinafter Petro-Diamond or Discharger) shall implement this monitoring program on the effective date of this Order. All monitoring reports shall be submitted quarterly and must be received by the Regional Board by the dates in the following schedule. All monitoring reports should be addressed to the Regional Board, Attention: Information Technology Unit.

| <b>Reporting Period</b> | <b>Report Due</b> |
|-------------------------|-------------------|
| January-March           | April 15          |
| April-June              | July 15           |
| July-September          | October 15        |
| October-December        | January 15        |

If there is no discharge during any reporting period, the report shall so state.

- B. The Discharger shall submit an annual summary report (for both dry and wet weather discharges), containing a discussion of the previous year's effluent and receiving water monitoring data, as well as graphical and tabular summaries of the data. The data shall be submitted to the Regional Board on hard copy and on a 3 ½ " computer diskette. Submitted data must be IBM compatible, preferably using EXCEL software. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This annual report is to be received by the Regional by March 1 of each year following the calendar year of data collection.
- C. The Discharger shall inform the Regional Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

**II. Effluent Monitoring Requirements**

- A. Sampling station shall be established for each point of discharge and shall be located where representative samples of that effluent can be obtained.
- B. This Regional Board shall be notified in writing of any change in the sampling stations once established or in the methods for determining the quantities of pollutants in the individual waste streams.

- C. Pollutants shall be analyzed using the analytical methods described in 40 CFR 136; or, where no methods are specified for a given pollutant, by methods approved by this Regional Board or the State Board. All chemical, bacteriological, and toxicity analyses shall be completed by a laboratory certified by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Regional Board for that particular parameter. A copy of the laboratory certification shall be submitted with the annual summary report.

The monitoring reports shall specify the analytical method used, the Method Detection Limit (MDL), and the Minimum Level (ML) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported by one of the following methods, as appropriate:

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; or,
3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

Current MLs (Attachment A) 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*.

- D. Where possible, the MLs employed for effluent analyses shall be lower than the permit limits established for a given parameter. If the ML value is not below the effluent limitation, then the lowest ML value and its associated analytical method shall be selected for compliance purposes. 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.

The Regional Board, in consultation with the State Board Quality Assurance Program, shall establish an ML that is not contained in Attachment A to be included in the Discharger's permit in any of the following situations:

1. When the pollutant under consideration is not included in Attachment A;
2. When the Discharger and Regional Board agree to include in the permit a test method that is more sensitive than that specified in 40 CFR Part 136 (revised May 14, 1999);
3. When the Discharger agrees to use an ML that is lower than that listed in Attachment A;

4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment A, and proposes an appropriate ML for their matrix; or,
  5. When the Discharger uses a method whose quantification practices are not consistent with the definition of an ML. Examples of such methods are the USEPA-approved method 1613 for dioxins and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the Discharger, the Regional Board, and the State Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.
- E. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR 136.3. All QA/QC items must be run on the same dates the samples were actually analyzed, and the results shall be reported in the Regional Board format, when it becomes available, and submitted with the laboratory reports. Proper chain of custody procedures must be followed, and a copy of the chain of custody shall be submitted with the report.
- F. Annual effluent analyses shall be performed during the month of February. Results of annual analyses shall be reported in the appropriate quarterly monitoring report.

### III. Effluent Monitoring Program

- A. The following shall constitute the effluent monitoring program for the final effluent:

| Constituent            | Units    | Type of Sample | Sampling Frequency <sup>4/</sup> |
|------------------------|----------|----------------|----------------------------------|
| Flow                   | gal/day  | ----           | once per discharge event         |
| PH                     | pH units | Grab           | once per discharge event         |
| Temperature            | °F or °C | Grab           | once per discharge event         |
| Oil and Grease         | mg/L     | Grab           | once per discharge event         |
| BOD5 20° C             | mg/L     | Grab           | once per discharge event         |
| Total suspended solids | mg/L     | Grab           | once per discharge event         |
| Turbidity              | TU       | Grab           | once per discharge event         |
| Settleable solids      | ml/L     | Grab           | once per discharge event         |
| Sulfides               | mg/L     | Grab           | once per discharge event         |
| Phenols                | mg/L     | Grab           | once per discharge event         |
| Conductivity           | μmho/cm  | Grab           | once per discharge event         |
| Total organic carbon   | mg/L     | Grab           | once per discharge event         |
| Ammonia (as N)         | mg/L     | Grab           | once per discharge event         |
| Benzene                | μg/L     | Grab           | once per discharge event         |

| Constituent   | Units      | Type of Sample | Sampling Frequency <sup>4/</sup>  |
|---|------------|----------------|---|
| Toluene   | µg/L       | Grab           | once per discharge event  |
| Xylene  | µg/L       | Grab           | once per discharge event  |
| Ethylbenzene  | µg/L       | Grab           | once per discharge event  |
| Carbon tetrachloride  | µg/L       | Grab           | once per discharge event  |
| Tetrachloroethylene   | µg/L       | Grab           | once per discharge event  |
| Vinyl chloride  | µg/L       | Grab           | once per discharge event  |
| 1,4-Dichlorobenzene   | µg/L       | Grab           | once per discharge event  |
| 1,1-Dichloroethane  | µg/L       | Grab           | once per discharge event  |
| 1,2-Dichloroethane  | µg/L       | Grab           | once per discharge event  |
| 1,1-Dichloroethylene  | µg/L       | Grab           | once per discharge event  |
| Methyl tertiary butyl ether (MTBE)  | µg/L       | Grab           | once per discharge event  |
| Tertiary butyl alcohol (TBA))   | µg/L       | Grab           | once per discharge event  |
| Total Petroleum Hydrocarbons (both gasoline and diesel fractions) <sup>2/</sup> | µg/L       | Grab           | once per discharge event  |
| Arsenic   | µg/L       | Grab           | once per discharge event  |
| Cadmium   | µg/L       | Grab           | once per discharge event  |
| Chromium (VI)   | µg/L       | Grab           | once per discharge event  |
| Chromium (Total)  | µg/L       | Grab           | once per discharge event  |
| Copper  | µg/L       | Grab           | once per discharge event  |
| Lead  | µg/L       | Grab           | once per discharge event  |
| Mercury   | µg/L       | Grab           | once per discharge event  |
| Nickel  | µg/L       | Grab           | once per discharge event  |
| Selenium  | µg/L       | Grab           | once per discharge event  |
| Silver  | µg/L       | Grab           | once per discharge event  |
| Zinc  | µg/L       | Grab           | once per discharge event  |
| Remaining Priority Pollutants (see page T-14)                                   | µg/L       | Grab           | annually <sup>3/</sup><br>(1 <sup>st</sup> discharge of the wet season) |
| Toxicity-acute <sup>4/</sup>  | % survival | Grab           | annually<br>(1 <sup>st</sup> discharge of the wet season)               |

<sup>4/</sup> During periods of extended rainfall, no more than one sample per week need to be taken. Sampling shall be during the first hour of discharge. If, for safety reasons, a sample

cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included in the report.

- 2/. Analyses using USEPA Methods 418.1 and 8015 (Modified).
  - 3/. If a pollutant is detected then the minimum monitoring frequency shall increase to once per discharge event until at least three consecutive test results are not detected, after which the frequency of analysis shall revert to annually.
  - 4/. Refer to Item IV.
- B. Monitoring shall be conducted for all regulated pollutants at the NPDES discharge point during periods when a discharge occurs.

#### **IV. Toxicity Monitoring Requirements**

##### **A. Acute Toxicity Effluent Monitoring Program**

1. The Discharger shall conduct acute toxicity tests on 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*, Fourth Edition, August, 1993 (EPA/600/4-90/027F) or a more recent edition to ensure compliance in 100 % effluent.
2. 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 effluent. The method for topsmelt is found in USEPA's *Short-term Method 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).

##### **B. Quality Assurance**

1. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
2. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA/600/4-91/002 and EPA/600/R-95/136), then the Discharger must re-sample and re-test at the earliest time possible.
3. Control and dilution water should be receiving water or laboratory water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control using culture water shall be used.

C. Accelerated Monitoring

1. If toxicity exceeds the limitations (as defined in Order No. R4-2002-0150, Section I.B.3.a.), then the Discharger shall immediately implement accelerated testing, as specified at Section I.B.3.b. The Discharger shall ensure that they receive results of a failing toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 3 business days of receipt of the results. If the accelerated testing shows consistent toxicity, the Discharger shall immediately implement the Initial Investigation of the Toxicity Reduction Evaluation (TRE) Workplan.
2. If implementation of the initial investigation TRE workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger may discontinue the TIE.
3. The first step in the initial Investigation TRE Workplan for downstream receiving water toxicity can be a toxicity test protocol designed to determine if the effluent from Outfall 001 causes or contributes to the measured downstream chronic toxicity. If this first step TRE testing shows that the Outfall 001 effluent does not cause or contribute to downstream chronic toxicity, using EPA's Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, August 1995, (EPA/600/R-95/136). Then a report on this testing shall be submitted to the Board and the TRE will be considered to be completed. Routine testing in accordance with MRP No. 6810 shall be continued thereafter.

D. Steps in TRE and Toxicity Identification Evaluation (TIE)

1. Following a TRE trigger, the Discharger shall initiate a TRE in accordance with the facility's initial investigation TRE workplan. At a minimum, the Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. The Discharger shall expeditiously develop a more detailed TRE workplan for submittal to the Executive Officer within 30 days of the trigger, which will include, but not be limited to:
  - a. Further actions to investigate and identify the cause of toxicity;
  - b. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
  - c. Standards the Discharger will apply to consider the TRE complete and to return to normal sampling frequency; and,

- d. A schedule for these actions
2. The following is a stepwise approach in conducting the TRE:
    - a. Step 1 - Basic data collection. Data collected for the accelerated monitoring requirements may be used to conduct the TRE;
    - b. Step 2 - Evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals;
    - c. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE and employment of all reasonable efforts and using currently available TIE methodologies. The objective of the TIE is to identify the substance or combination of substances causing the observed toxicity;
    - d. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;
    - e. Step 5 evaluates in-plant treatment options; and,
    - f. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of implementation of these control measures may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing and review of the facility's TRE workplan, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring indicates there is no longer toxicity (or six consecutive chronic toxicity results are less than or equal to 1.0 TU<sub>c</sub>).

3. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the EPA acute and chronic manuals, EPA/600/6-91/005F (Phase I)/EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance.
4. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by Part I.B.4.a.2 and Part I.B.4.b.2 of this permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

5. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance, if appropriate.
6. The Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

E. Reporting

1. The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported as % survival with the discharge monitoring reports (DMR) for the month in which the test is conducted.

If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, then those results also shall be submitted with the DMR for the period in which the investigation occurred.

2. The full report shall be submitted by the end of the month in which the DMR is submitted.
3. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limit or chronic toxicity limit or trigger.
4. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be attached to the DMR. Routine reporting shall include, at a minimum, as applicable, for each test:
  - a. sample date(s);
  - b. test initiation date;
  - c. test species;
  - d. end point values for each dilution (e.g., number of young, growth rate, percent survival);
  - e. NOEC value(s) in percent effluent;
  - f. IC<sub>15</sub>, IC<sub>25</sub>, IC<sub>40</sub> and IC<sub>50</sub> values in percent effluent;
  - g. TU<sub>c</sub> values  $\left( TU_c = \frac{100}{NOEC} \right)$ ;
  - h. Mean percent mortality ( $\pm$ standard deviation) after 96 hours in 100% effluent (if applicable);
  - i. NOEC and LOEC values for reference toxicant test(s);



- j.  $C_{25}$  value for reference toxicant test(s);
  - k. Any applicable charts; and
  - l. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
5. The Discharger shall notify this Regional Board immediately of any toxicity exceedance and in writing 14 days after the receipt of the results of a monitoring limit or trigger. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

## V. Receiving Water Monitoring Requirements

The receiving water monitoring program shall consist of periodic surveys of Long Beach Inner Harbor and shall include studies of those physical-chemical characteristics of the receiving water that may be impacted by the discharge.

### A. Receiving Water Monitoring

1. Receiving Water Observations. General observations of the receiving water shall be made at each discharge point on a monthly basis and shall be reported in the quarterly monitoring report. If no discharge occurred during the observation period, this shall be reported.

Observations shall be descriptive where applicable, such that colors, approximate amounts, or types of materials are apparent. The following observations shall be made:

- a. Tidal stage, time, and date of monitoring
- b. Weather conditions
- c. Color of water
- d. Appearance of oil films or grease, or floatable materials
- e. Extent of visible turbidity or color patches
- f. Direction of tidal flow
- g. Description of odor, if any, of the receiving water
- h. Presence and activity of California Least Tern and California Brown Pelican.

## VI. Interim Monitoring

Pursuant to the California Water Code, Section 13267, the Discharger is required to submit data sufficient for : (1) determining if water quality-based effluent limitations for priority pollutants are required, and (2) to calculate effluent limitations, if required. In accordance with Section 13267 of the California Water Code, the Discharger shall conduct the following interim monitoring program for all priority pollutants until April 2004. As described in Section I.A of this Program, monitoring reports must be submitted quarterly. The Discharger shall ensure that at least one sample is collected in calendar year 2004, the results of which shall be reported in the first quarter report (due April 15).

- A. Effluent monitoring shall be conducted for all pollutants at the NPDES discharge point during periods when a discharge occurs.
- B. Receiving water monitoring stations shall be at 50 feet upstream from the discharge point.
- C. Monitoring frequency and type of sample of the effluent and the receiving water shall be collected and analyzed for all toxic pollutants listed below:

| Constituent                      | Units          | Type of Sample | Monitoring Frequency                   |
|----------------------------------|----------------|----------------|--|
| pH                               | Standard Units | grab           | once per discharge event <sup>1/</sup> |
| Hardness (as CaCO <sub>3</sub> ) | mg/L           | grab           | once per discharge event <sup>1/</sup> |
| PAHs                             | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Antimony                         | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Nickel                           | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Thallium                         | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Cyanide                          | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Acenaphthene                     | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Anthracene                       | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Benzo (a) Anthracene             | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Benzo (a) Pyrene                 | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Benzo (b) Fluoranthene           | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Benzo (k) Fluoranthene           | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Chrysene                         | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Dibenzo (a,h) Anthracene         | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Fluoranthene                     | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Fluorene                         | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Indeno (1,2,3-cd) Pyrene         | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Pyrene                           | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Aldrin                           | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| alpha-BHC                        | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| beta-BHC                         | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Chlordane                        | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Dieldrin                         | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| alpha-Endosulfan                 | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| beta-Endosulfan                  | µg/L           | grab           | Semiannually <sup>2/</sup>             |
| Heptachlor                       | µg/L           | grab           | Semiannually <sup>2/</sup>             |

| Constituent                | Units    | Type of Sample | Monitoring Frequency       |
|----------------------------|----------|----------------|----------------------------|
| Heptachlor Epoxide         | µg/L     | grab           | Semiannually <sup>21</sup> |
| 4,4-DDT                    | µg/L     | grab           | Semiannually <sup>21</sup> |
| 4,4-DDE                    | µg/L     | grab           | Semiannually <sup>21</sup> |
| 4,4-DDD                    | µg/L     | grab           | Semiannually <sup>21</sup> |
| Arochlor 1242              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Arochlor 1254              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Arochlor 1221              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Arochlor 1232              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Arochlor 1248              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Arochlor 1260              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Arochlor 1016              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Toxaphene                  | µg/L     | grab           | Semiannually <sup>21</sup> |
| Beryllium                  | µg/L     | grab           | Semiannually <sup>21</sup> |
| Asbestos                   | Fibers/L | grab           | Semiannually <sup>21</sup> |
| Acrolein                   | µg/L     | grab           | Semiannually <sup>21</sup> |
| Acrylonitrile              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Benzene                    | µg/L     | grab           | Semiannually <sup>21</sup> |
| Bromoform                  | µg/L     | grab           | Semiannually <sup>21</sup> |
| Carbon tetrachloride       | µg/L     | grab           | Semiannually <sup>21</sup> |
| Chlorobenzene              | µg/L     | grab           | Semiannually <sup>21</sup> |
| Chlorodibromomethane       | µg/L     | grab           | Semiannually <sup>21</sup> |
| Chloroethane               | µg/L     | grab           | Semiannually <sup>21</sup> |
| 2-Chloroethylvinyl ether   | µg/L     | grab           | Semiannually <sup>21</sup> |
| Chloroform                 | µg/L     | grab           | Semiannually <sup>21</sup> |
| Dichlorobromomethane       | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,1-Dichloroethane         | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,2-Dichloroethane         | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,1-Dichloroethylene       | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,2-Dichloropropane        | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,3-Dichloropropylene      | µg/L     | grab           | Semiannually <sup>21</sup> |
| Ethylbenzene               | µg/L     | grab           | Semiannually <sup>21</sup> |
| Methyl bromide             | µg/L     | grab           | Semiannually <sup>21</sup> |
| Methyl chloride            | µg/L     | grab           | Semiannually <sup>21</sup> |
| Methylene chloride         | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,1,2,2-Tetrachloroethane  | µg/L     | grab           | Semiannually <sup>21</sup> |
| Tetrachloroethylene        | µg/L     | grab           | Semiannually <sup>21</sup> |
| Toluene                    | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,2-Trans-dichloroethylene | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,1,1-Trichloroethane      | µg/L     | grab           | Semiannually <sup>21</sup> |
| 1,1,2-Trichloroethane      | µg/L     | grab           | Semiannually <sup>21</sup> |
| Trichloroethylene          | µg/L     | grab           | Semiannually <sup>21</sup> |
| Vinyl chloride             | µg/L     | grab           | Semiannually <sup>21</sup> |
| 2-Chlorophenol             | µg/L     | grab           | Semiannually <sup>21</sup> |
| 2,4-Dichlorophenol         | µg/L     | grab           | Semiannually <sup>21</sup> |
| 2,4-Dimethylphenol         | µg/L     | grab           | Semiannually <sup>21</sup> |
| 2-Methyl-4,6-Dinitrophenol | µg/L     | grab           | Semiannually <sup>21</sup> |
| 2,4-Dinitrophenol          | µg/L     | grab           | Semiannually <sup>21</sup> |
| 2-Nitrophenol              | µg/L     | grab           | Semiannually <sup>21</sup> |
| 4-Nitrophenol              | µg/L     | grab           | Semiannually <sup>21</sup> |

| Constituent                      | Units | Type of Sample | Monitoring Frequency       |
|----------------------------------|-------|----------------|----------------------------|
| 3-Methyl-4-Chlorophenol          | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Pentachlorophenol                | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 2,4,6-Trichlorophenol            | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Acenaphthylene                   | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Benzidine                        | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Benzo (g,h,i) Perylene           | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Bis (2-Chloroethoxy)<br>Methane  | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Bis (2-Chloroethyl) Ether        | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Bis (2-Chloroisopropyl)<br>Ether | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Bis (2-Ethylhexyl) Phthalate     | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 4-Bromophenyl Phenyl<br>Ether    | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Butylbenzyl Phthalate            | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 2-Chloronaphthalene              | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 4-Chlorophenyl Phenyl<br>Ether   | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 1,2-Dichlorobenzene              | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 1,3-Dichlorobenzene              | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 1,4-Dichlorobenzene              | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 3,3-Dichlorobenzidine            | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Diethyl Phthalate                | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Dimethyl Phthalate               | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Di-n-Butyl Phthalate             | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 2,4-Dinitrotoluene               | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 2,6-Dinitrotoluene               | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Di-n-Octyl Phthalate             | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 1,2-Diphenylhydrazine            | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Hexachlorobenzene                | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Hexachlorobutadiene              | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Hexachlorocyclopentadiene        | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Hexachloroethane                 | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Isophorone                       | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Napthalene                       | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Nitrobenzene                     | µg/L  | grab           | Semiannually <sup>2/</sup> |
| N-Nitrosodimethylamine           | µg/L  | grab           | Semiannually <sup>2/</sup> |
| N-Nitrosodi-n-Propylamine        | µg/L  | grab           | Semiannually <sup>2/</sup> |
| N-Nitrosodiphenylamine           | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Phenanthrene                     | µg/L  | grab           | Semiannually <sup>2/</sup> |
| 1,2,4-Trichlorobenzene           | µg/L  | grab           | Semiannually <sup>2/</sup> |
| gamma-BHC                        | µg/L  | grab           | Semiannually <sup>2/</sup> |
| delta-BHC                        | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Endosulfan Sulfate               | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Endrin                           | µg/L  | grab           | Semiannually <sup>2/</sup> |
| Endrin Aldehyde                  | µg/L  | grab           | Semiannually <sup>2/</sup> |

1/ During periods of extended rainfall, no more than one sample per week need to be taken. Sampling shall be during the first hour of discharge. If, for safety reasons, a sample cannot be obtained during the first hour of discharge, a sample shall be obtained at the first safe opportunity, and the reason for the delay shall be included

in the report.

- 2/ Sampling shall be done during the first hour of discharge. For the dry seasons, a sample cannot be obtained during this period, a sample shall be obtained at the next opportunity of sampling and the reason for the delay shall be included in the report to satisfy the semiannual monitoring requirement.

B. Monitoring for TCDD Equivalents –The Discharger shall conduct effluent/receiving water monitoring for the presence of the 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD or Dioxin) congeners. The monitoring shall be a grab sample with a minimum frequency of once during dry weather and once during wet weather for 1 year. The Discharger shall calculate Toxic Equivalence (TEQ) for each congener by multiplying its analytical concentration by the appropriate Toxicity Equivalence Factors (TEF). Compliance with the dioxin limitation shall be determined by the summation of the 17 individual TEQs.

| <b>Congeners</b>        | <b>TEF</b> |
|-------------------------|------------|
| 2,3,7,8-tetra CDD       | 1.0        |
| 1,2,3,7,8-penta CDD     | 1.0        |
| 1,2,3,4,7,8-hexa CDD    | 0.1        |
| 1,2,3,6,7,8-hexa CDD    | 0.1        |
| 1,2,3,7,8,9-hexa CDD    | 0.1        |
| 1,2,3,4,6,7,8-hepta CDD | 0.01       |
| Octa CDD                | 0.0001     |
| 2,3,7,8-tetra CDF       | 0.1        |
| 1,2,3,7,8-penta CDF     | 0.05       |
| 2,3,4,7,8-penta CDF     | 0.5        |
| 1,2,3,4,7,8-hexa CDF    | 0.1        |
| 1,2,3,6,7,8-hexa CDF    | 0.1        |
| 1,2,3,7,8,9-hexa CDF    | 0.1        |
| 2,3,4,6,7,8-hexa CDF    | 0.1        |
| 1,2,3,4,6,7,8-hepta CDF | 0.01       |
| 1,2,3,4,7,8,9-hepta CDF | 0.01       |
| Octa CDF                | 0.0001     |

Ordered by: \_\_\_\_\_

Dennis A. Dickerson  
Executive Officer

Date: September 26, 2002