

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

**MONITORING AND REPORTING PROGRAM NO. 5985
for
PAKTANK CORPORATION - LOS ANGELES
(Marine Terminal)
(CA0055247)**

I. Reporting Requirements

- A. Paktank Corporation-Los Angeles (hereinafter Paktank 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. The first monitoring report under this Program is due by July 15, 2002.

Reporting Period	Report Due
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. 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 136.3, 136.4, and 136.5 (revised May 14, 1999); or, where no methods are specified for a given pollutant, by methods approved by this Regional Board or the State Board. Laboratories analyzing effluent samples and receiving water samples shall be certified by the California Department of Health Services and must include quality assurance/quality control (QA/QC) data in their reports.

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 T-1) 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 T-1 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 T-1;
- 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 T-1;
 4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment T-1, 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
Flow	gal/day	----	once per discharge event ^{1/}
Oil and Grease	mg/L	grab	once per discharge event ^{1/}
BOD5 20°C	mg/L	grab	once per discharge event ^{1/}
Total suspended solids	mg/L	grab	once per discharge event ^{1/}
Turbidity	TU	grab	once per discharge event ^{1/}
Sulfides	mg/L	grab	once per discharge event ^{1/}
Phenols	mg/L	grab	once per discharge event ^{1/}
Benzene	µg/L	grab	once per discharge event ^{1/}
Toluene	µg/L	grab	once per discharge event ^{1/}
Xylene	µg/L	grab	once per discharge event ^{1/}
Ethylbenzene	µg/L	grab	once per discharge event ^{1/}
Arsenic	µg/L	grab	annually
Cadmium	µg/L	grab	annually
Chromium	µg/L	grab	annually
Copper	µg/L	grab	annually
Lead	µg/L	grab	annually
Mercury	µg/L	grab	annually

Constituent	Units	Type of Sample	Sampling Frequency
Selenium	µg/L	grab	annually
Silver	µg/L	grab	annually
Zinc	µg/L	grab	annually
Methyl Tertiary Butyl Ether	µg/L	grab	annually
Toxicity-acute	% survival	grab	annually

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.

B. Monitoring shall be conducted for all regulated pollutants at the NPDES discharge point during periods when a discharge occurs. If no discharge occurs from the NPDES discharge point, then the Discharger shall provide the results of a sample from the discharge to the POTW. For those pollutants with a monitoring frequency of once per discharge event, the Discharger is required to provide at least one sample from the discharge to the POTW annually during the term of the permit. The sampling results from the discharge to POTW will not be required to meet the NPDES effluent limitations.

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. 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.
2. 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.
3. The full report shall be submitted by the end of the month in which the DMR is submitted.
4. 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.
5. 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_{15} , IC_{25} , IC_{40} and IC_{50} values in percent effluent;
 - g) TU_c 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).
6. 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 Dominguez Channel and Los Angeles 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. The *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (March 2, 2000) requires that the data be provided no later than May 2003. Therefore, the Discharger shall conduct the following interim monitoring program for all California Toxics Rule priority pollutants until April 2003, or until ordered otherwise by the Regional Board. 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 2003, 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. If no discharge occurs from the NPDES discharge point, then the Discharger shall provide the results of a sample from the discharge to the POTW.
- 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 ^{1/}
Hardness (as CaCO ₃)	mg/L	grab	once per discharge event ^{1/}
PAHs	µg/L	grab	Semiannually ^{2/}
Antimony	µg/L	grab	Semiannually ^{2/}
Nickel	µg/L	grab	Semiannually ^{2/}
Thallium	µg/L	grab	Semiannually ^{2/}
Cyanide	µg/L	grab	Semiannually ^{2/}
Acenaphthene	µg/L	grab	Semiannually ^{2/}
Anthracene	µg/L	grab	Semiannually ^{2/}
Benzo (a) Anthracene	µg/L	grab	Semiannually ^{2/}
Benzo (a) Pyrene	µg/L	grab	Semiannually ^{2/}
Benzo (b) Fluoranthene	µg/L	grab	Semiannually ^{2/}
Benzo (k) Fluoranthene	µg/L	grab	Semiannually ^{2/}
Chrysene	µg/L	grab	Semiannually ^{2/}
Dibenzo (a,h) Anthracene	µg/L	grab	Semiannually ^{2/}
Fluoranthene	µg/L	grab	Semiannually ^{2/}
Fluorene	µg/L	grab	Semiannually ^{2/}
Indeno (1,2,3-cd) Pyrene	µg/L	grab	Semiannually ^{2/}
Pyrene	µg/L	grab	Semiannually ^{2/}
Aldrin	µg/L	grab	Semiannually ^{2/}
alpha-BHC	µg/L	grab	Semiannually ^{2/}
beta-BHC	µg/L	grab	Semiannually ^{2/}
Chlordane	µg/L	grab	Semiannually ^{2/}
Dieldrin	µg/L	grab	Semiannually ^{2/}
alpha-Endosulfan	µg/L	grab	Semiannually ^{2/}
beta-Endosulfan	µg/L	grab	Semiannually ^{2/}
Heptachlor	µg/L	grab	Semiannually ^{2/}
Heptachlor Epoxide	µg/L	grab	Semiannually ^{2/}
4,4-DDT	µg/L	grab	Semiannually ^{2/}
4,4-DDE	µg/L	grab	Semiannually ^{2/}
4,4-DDD	µg/L	grab	Semiannually ^{2/}
Arochlor 1242	µg/L	grab	Semiannually ^{2/}
Arochlor 1254	µg/L	grab	Semiannually ^{2/}

Constituent	Units	Type of Sample	Monitoring Frequency
Arochlor 1221	µg/L	grab	Semiannually ^{2/}
Arochlor 1232	µg/L	grab	Semiannually ^{2/}
Arochlor 1248	µg/L	grab	Semiannually ^{2/}
Arochlor 1260	µg/L	grab	Semiannually ^{2/}
Arochlor 1016	µg/L	grab	Semiannually ^{2/}
Toxaphene	µg/L	grab	Semiannually ^{2/}
Beryllium	µg/L	grab	Semiannually ^{2/}
Asbestos	Fibers/L	grab	Semiannually ^{2/}
Acrolein	µg/L	grab	Semiannually ^{2/}
Acrylonitrile	µg/L	grab	Semiannually ^{2/}
Benzene	µg/L	grab	Semiannually ^{2/}
Bromoform	µg/L	grab	Semiannually ^{2/}
Carbon tetrachloride	µg/L	grab	Semiannually ^{2/}
Chlorobenzene	µg/L	grab	Semiannually ^{2/}
Chlorodibromomethane	µg/L	grab	Semiannually ^{2/}
Chloroethane	µg/L	grab	Semiannually ^{2/}
2-Chloroethylvinyl ether	µg/L	grab	Semiannually ^{2/}
Chloroform	µg/L	grab	Semiannually ^{2/}
Dichlorobromomethane	µg/L	grab	Semiannually ^{2/}
1,1-Dichloroethane	µg/L	grab	Semiannually ^{2/}
1,2-Dichloroethane	µg/L	grab	Semiannually ^{2/}
1,1-Dichloroethylene	µg/L	grab	Semiannually ^{2/}
1,2-Dichloropropane	µg/L	grab	Semiannually ^{2/}
1,3-Dichloropropylene	µg/L	grab	Semiannually ^{2/}
Ethylbenzene	µg/L	grab	Semiannually ^{2/}
Methyl bromide	µg/L	grab	Semiannually ^{2/}
Methyl chloride	µg/L	grab	Semiannually ^{2/}
Methylene chloride	µg/L	grab	Semiannually ^{2/}
1,1,2,2-Tetrachloroethane	µg/L	grab	Semiannually ^{2/}
Tetrachloroethylene	µg/L	grab	Semiannually ^{2/}
Toluene	µg/L	grab	Semiannually ^{2/}
1,2-Trans-dichloroethylene	µg/L	grab	Semiannually ^{2/}
1,1,1-Trichloroethane	µg/L	grab	Semiannually ^{2/}
1,1,2-Trichloroethane	µg/L	grab	Semiannually ^{2/}
Trichloroethylene	µg/L	grab	Semiannually ^{2/}
Vinyl chloride	µg/L	grab	Semiannually ^{2/}
2-Chlorophenol	µg/L	grab	Semiannually ^{2/}
2,4-Dichlorophenol	µg/L	grab	Semiannually ^{2/}
2,4-Dimethylphenol	µg/L	grab	Semiannually ^{2/}
2-Methyl-4,6-Dinitrophenol	µg/L	grab	Semiannually ^{2/}
2,4-Dinitrophenol	µg/L	grab	Semiannually ^{2/}
2-Nitrophenol	µg/L	grab	Semiannually ^{2/}
4-Nitrophenol	µg/L	grab	Semiannually ^{2/}
3-Methyl-4-Chlorophenol	µg/L	grab	Semiannually ^{2/}
Pentachlorophenol	µg/L	grab	Semiannually ^{2/}
2,4,6-Trichlorophenol	µg/L	grab	Semiannually ^{2/}
Acenaphthylene	µg/L	grab	Semiannually ^{2/}
Benzidine	µg/L	grab	Semiannually ^{2/}
Benzo (g,h,i) Perylene	µg/L	grab	Semiannually ^{2/}
Bis (2-Chloroethoxv)	µg/L	grab	Semiannually ^{2/}

Constituent	Units	Type of Sample	Monitoring Frequency
Methane			
Bis (2-Chloroethyl) Ether	µg/L	grab	Semiannually ^{2/}
Bis (2-Chloroisopropyl) Ether	µg/L	grab	Semiannually ^{2/}
Bis (2-Ethylhexyl) Phthalate	µg/L	grab	Semiannually ^{2/}
4-Bromophenyl Phenyl Ether	µg/L	grab	Semiannually ^{2/}
Butylbenzyl Phthalate	µg/L	grab	Semiannually ^{2/}
2-Chloronaphthalene	µg/L	grab	Semiannually ^{2/}
4-Chlorophenyl Phenyl Ether	µg/L	grab	Semiannually ^{2/}
1,2-Dichlorobenzene	µg/L	grab	Semiannually ^{2/}
1,3-Dichlorobenzene	µg/L	grab	Semiannually ^{2/}
1,4-Dichlorobenzene	µg/L	grab	Semiannually ^{2/}
3,3-Dichlorobenzidine	µg/L	grab	Semiannually ^{2/}
Diethyl Phthalate	µg/L	grab	Semiannually ^{2/}
Dimethyl Phthalate	µg/L	grab	Semiannually ^{2/}
Di-n-Butyl Phthalate	µg/L	grab	Semiannually ^{2/}
2,4-Dinitrotoluene	µg/L	grab	Semiannually ^{2/}
2,6-Dinitrotoluene	µg/L	grab	Semiannually ^{2/}
Di-n-Octyl Phthalate	µg/L	grab	Semiannually ^{2/}
1,2-Diphenylhydrazine	µg/L	grab	Semiannually ^{2/}
Hexachlorobenzene	µg/L	grab	Semiannually ^{2/}
Hexachlorobutadiene	µg/L	grab	Semiannually ^{2/}
Hexachlorocyclopentadiene	µg/L	grab	Semiannually ^{2/}
Hexachloroethane	µg/L	grab	Semiannually ^{2/}
Isophorone	µg/L	grab	Semiannually ^{2/}
Napthalene	µg/L	grab	Semiannually ^{2/}
Nitrobenzene	µg/L	grab	Semiannually ^{2/}
N-Nitrosodimethylamine	µg/L	grab	Semiannually ^{2/}
N-Nitrosodi-n-Propylamine	µg/L	grab	Semiannually ^{2/}
N-Nitrosodiphenylamine	µg/L	grab	Semiannually ^{2/}
Phenanthrene	µg/L	grab	Semiannually ^{2/}
1,2,4-Trichlorobenzene	µg/L	grab	Semiannually ^{2/}
gamma-BHC	µg/L	grab	Semiannually ^{2/}
delta-BHC	µg/L	grab	Semiannually ^{2/}
Endosulfan Sulfate	µg/L	grab	Semiannually ^{2/}
Endrin	µg/L	grab	Semiannually ^{2/}
Endrin Aldehyde	µg/L	grab	Semiannually ^{2/}

- 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.

D. 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.

Congeners	TEF
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: March 28, 2002