CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. CI-6920
for
AL LARSON BOAT SHOP
(CA0061051)

I. Reporting Requirements

A. Al Larson Boat Shop (hereinafter ALBS 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 November 1, 2007.

Reporting Period	Report Due
January – March	May 1
April – June	August 1
July – September	November 1
October – December	February 1
Annual	March 1

If there is no discharge during any reporting period, the report shall so state. In case of drought, or if there is no discharge, the Discharger will request the Executive Officer of the Regional Board for extension of the interim monitoring period until at least four samples can be collected for analyses.

B. By March 1 of each year, the Discharger shall submit an annual report to the Regional Water Board. The report shall contain the following:

1. Both tabular and graphical summaries of the monitoring data obtained during the previous year,

2. A discussion on the compliance record and the corrective actions taken or planned to bring the discharge into full compliance with the waste discharge requirements,

3. A report discussing the following: 1) operation/maintenance problems; 2) changes to the facility operations and activities; 3) potential discharge of the pollutants associated with the changes and how these changes are addressed in the BMPP; 3) calibration of flow meters or other equipment/device used to demonstrate compliance with effluent limitations of this Order.

4. A report summarizing the quantities of all chemicals, listed by both trade and chemical names, which are used at the facility and which are discharged or have the potential to be discharged.

5. A report on the status of the implementation and the effectiveness of the BMPP.

B. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs. Until such notification is given, the Discharger shall submit SMRs in accordance with the requirements described herein.

C. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with waste discharge requirements, as well as all excursions of effluent limitations.

D. The Discharger shall inform the Regional Board well in advance of any proposed construction activity that could potentially affect compliance with applicable requirements.

E. Within 90 days of the effective date of this permit, the Discharger is required to submit the following to the Regional Water Board:

1. Initial Investigation TRE workplan
2. Best Management Practices Program (BMPP)
3. Storm Water Pollution Prevention Plan
4. Updated Spill Contingency Plan

F. The Discharger shall submit to the Regional Water Board, together with the first monitoring report required by this permit, a list of all chemicals and proprietary additives which could affect this waste discharge, including quantities of each. Any subsequent changes in types and/or quantities shall be reported promptly.

II. Effluent Monitoring Requirements

A. Effluent monitoring (i.e., low-pressure water blasting wastewater) shall take place at the effluent discharge point (Discharge Serial No. 001) prior to the entry into the receiving waters. The Discharger shall take a sample during a low-pressure blasting event, from the point beneath the ways (or drydock) where the greatest volume of discharge is entering Fish Harbor of the Los Angeles Inner Harbor. A clean steel plate will be placed on to the floor of the ways at the water line. The 5-gallon sample will be taken by means of a peristaltic pump with cleaned teflon tubing, resting on the steel plate at a depth of no more than two (2) inches. The sample will only be taken while process discharge is entering the Harbor. Storm water monitoring shall take place at a point within the on-site storm drain (Discharge Serial No. 002) located on a concrete platform outside the machine shop prior entry into the receiving water. Upon sufficient

rainfall, the piping leading to the Harbor waters within the storm drain is blocked and water sample is collected. Water samples shall be collected into the appropriate containers that comply with the requirements, including the preservation techniques and holding times as specified in 40 CFR Part 136. The block in the storm drain is removed after the collection of the water samples.

B. Effluent samples shall be taken downstream of all operations and/or treatment works and prior to mixing with the receiving waters.

C. 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.

D. Pollutants shall be analyzed using the analytical methods described in 40 CFR sections 136.3, 136.4, and 136.5 (revised May 14, 1999); or, where no methods are specified for a given pollutant, 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 Environmental Laboratory Accreditation Program (ELAP) or approved by the Executive Officer and must include quality assurance/quality control (QA/QC) data in their reports. A copy of the laboratory certification shall be provided each time a new certification and/or renewal of the certification is obtained from ELAP.

E. For any analyses performed for which no procedure is specified in the USEPA guidelines or in the MRP, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

F. Each monitoring report must affirm in writing that “all analyses were conducted at a laboratory certified for such analyses by the Department of Health Services or approved by the Executive Officer and in accordance with current USEPA guideline procedures or as specified in this Monitoring and Reporting Program”.

G. 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-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*.

H. Where possible, the MLs employed for effluent analyses shall be lower than the permit limitations 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-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 T-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 T-A;

4. When the Discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Attachment T-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 U.S. EPA-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.

I. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR section 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.

J. Quarterly effluent analyses shall be performed during the months of February, May, August and November and semiannual effluent analyses shall be performed during the

months of February and August. If applicable, annual effluent analyses shall be performed during the month of February. Results of quarterly, semiannual, and annual analyses shall be reported in the appropriate quarterly monitoring report, as indicated in Section I.A.

K. All analyses shall be accompanied by the chain of custody, including but not limited to data and time of sampling, sample identification, and name of person who performed sampling, date of analysis, name of person who performed analysis, QA/QC data, method detection limits, analytical methods, copy of laboratory certification, and a perjury statement executed by the person responsible for the laboratory.

L. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments to insure accuracy of measurements, or shall insure that both equipment activities will be conducted.

M. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report required in Section IA shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of 10% of the samples, or at least one sample per sampling period, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples.

N. When requested by the Regional Water Board or USEPA, the Discharger will participate in the NPDES discharge monitoring report QA performance study. The Discharger must have a success rate equal to or greater than 80%.

O. For parameters that both average monthly and daily maximum limitations are specified and the monitoring frequency is less than four times a month, the following shall apply. If an analytical result is greater than the average monthly limitation, the Discharger shall collect four additional samples at approximately equal intervals during the month, until compliance with the average monthly limitation has been demonstrated. All five analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later. In the event of noncompliance with an average monthly effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the average monthly effluent limitation has been demonstrated. The Discharger shall provide for the approval of the Executive Officer a program to ensure future compliance with the average monthly limitation.

P. In the event wastes are transported to a different disposal site during the report period, the following shall be reported in the monitoring report:

1. Types of wastes and quantity of each type;

2. Name and address for each hauler of wastes (or method of transport if other than by hauling); and

3. Location of the final point(s) of disposal for each type of waste.

If no wastes are transported off-site during the reporting period, a statement to that effect shall be submitted.

Q. Each monitoring report shall state whether or not there was any change in the discharge as described in the Order during the reporting period.

III. Effluent Monitoring Program

A. The effluent monitoring program for the process water (low-pressure water blasting) through Discharge Serial No. 001 is described in the table below.

B. In addition to monitoring to determine compliance with effluent limitations, the Discharger must monitor the effluent for priority pollutants to determine reasonable potential. 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. Therefore, the Discharger shall conduct the following interim monitoring program for all California Toxics Rule priority pollutants for 2 years (i.e., until July 27, 2009), or until otherwise directed by the Regional Board. The Discharger shall ensure that at least four samples are collected in the interim monitoring period (once per discharge event, not to exceed two samples per calendar year for the first two (2) years of the permit). Subsequently, the discharge is monitored for the California Toxic Rule priority pollutants during one discharge event per year. The priority pollutants are listed in Section VIII of this Monitoring and Reporting Program.

Constituent	Units	Type of Sample	Sampling frequency[1]
Flow	gal/day	estimated	once per discharge event[2]
pH	Standard units	grab	once per discharge event[2]
Temperature	°F	grab	once per discharge[2]
Total suspended solids	mg/L	grab	once per discharge[2]
Turbidity	NTU	grab	once per discharge event[2]
Biochemical oxygen demand (BOD_5@20°C)	mg/L	grab	once per discharge event[2]
Oil and grease	mg/L	grab	once per discharge event[2]
Settleable solids	ml/L	grab	once per discharge event[2]
Sulfide	mg/L	grab	once per discharge event[2]
Phenols[4 3]	mg/L	grab	once per discharge event[2]
Antimony	µg/L	grab	once per discharge event[2]
Arsenic[5 4]	µg/L	grab	once per discharge event[2]
Beryllium	µg/L	grab	once per discharge event[2]
Cadmium[5 4]	µg/L	grab	once per discharge event[2]

Constituent	Units	Type of Sample	Sampling frequency[1]
Copper[5 4]	µg/L	grab	once per discharge event[2]
Chromium III[5 4]	µg/L	grab	once per discharge event[2]
Chromium VI[5 4]	µg/L	grab	once per discharge event[2]
Lead[5 4]	µg/L	grab	once per discharge event[2]
Mercury	µg/L	grab	once per discharge event[2]
Nickel[5 4]	µg/L	grab	once per discharge event[2]
Selenium	µg/L	grab	once per discharge event[2]
Silver[5 4]	µg/L	grab	once per discharge event[2]
Zinc[5 4]	µg/L	grab	once per discharge event[2]
Ammonia as (N)	mg/L	grab	once per discharge event[2]
Toxicity-acute	% survival	grab	monthly[5]
Remaining Priority Pollutants (as listed in Section VII)	µg/L	grab	once per discharge [6]
Total Petroleum Hydrocarbons[8 7]	µg/L	grab	once per discharge event [2]

[1]The Discharger shall monitor for all pollutants/parameters during the first discharge event upon adoption of this Order.

[2]To be monitored once per discharge but no more than one set of samples per month is required.

[3]Total phenols measured by EPA Method 420.1 or 420.2 (using the 4AAP method).

[4]Measured as total recoverable.

[5]The Discharger is required to collect and analyze discharges of storm water for acute toxicity monthly for the first 6 months following permit adoption. The results of these analyses must be compared to the acute toxicity limitation. If toxicity exceeds the limitation [as defined in Order No. R4-2007-0030, Section I.D.11.a.(i)], then the Discharger shall immediately implement accelerated testing as specified in Section I.B.3.a.(ii) which includes conducting six additional tests over a 6-week period. If toxicity levels comply with the effluent limitation, then the Discharger may resume annual monitoring.

[6]CTR priority pollutants: For the first two years of the Order term (July 27, 2007 through July 27, 2009) monitoring is required once per discharge (but no more than two samples per calendar year are required). For the remainder of the Order term, monitoring is required once per discharge (but no more than one sample per calendar year is required). CTR priority pollutant samples shall be collected during the months October – May.

[7]Total petroleum hydrocarbons include all fuels, gasoline, diesel and jet fuel. Analysis should be completed using EPA 418.1 and EPA 8015 (modified) methods.

IV. Storm Water Monitoring Requirements

A. The Discharger shall measure and record the rainfall on each day of the month. This information shall be included in the monitoring report for that month.

The storm water monitoring program for the discharge of storm water through Discharge Serial No. 002 is described in the table below. Storm water samples shall be collected at a point within the on-site storm drain (Discharge Serial No. 002) located on a concrete platform outside the machine shop prior entry into the receiving water. Upon sufficient rainfall, the piping leading to the Harbor waters within the storm drain is blocked and water sample is collected. Water samples shall be collected into the appropriate containers that comply with the requirements, including the preservation techniques and holding times as specified in 40 CFR Part 136. The block in the storm drain is removed after the collection of the water samples.

B. In addition to monitoring to determine compliance with effluent limitations, the Discharger must monitor the effluent for priority pollutants to determine reasonable potential. The Discharger shall conduct the following interim monitoring program for all California Toxics Rule priority pollutants for two (2) years (i.e., until July 27, 2009), or until otherwise directed by the Regional Board. The Discharger shall ensure that at least four samples are collected in the interim monitoring period (once per discharge event, not to exceed two samples per calendar year for the first two (2) years of the permit); the results monitoring for reasonable potential determination shall be submitted in accordance with Section I.A of this Monitoring and Reporting Program. Subsequently, the monitoring for California Toxics Rule priority pollutants is required during one discharge event per year. The priority pollutants are listed in Section VIII of this Monitoring and Reporting Program.

Constituent	Units	Type of Sample	Sampling frequency
Rainfall	Inches/day	continuous	daily
Flow	gal/day	estimated	once per discharge event[1]
pH	Standard units	grab	once per discharge event[1]
Total suspended solids	mg/L	grab	once per discharge event[1]
Oil and grease	mg/L	grab	once per discharge event[1]
Turbidity	NTU	grab	once per discharge event[1]
BOD_5@20°C	mg/L	grab	once per discharge event[1]
Sulfide	mg/L	grab	once per discharge event[1]
Phenols[2]	mg/L	grab	once per discharge event[1]
Settleable solids	ml/L	grab	once per discharge event[1]
Antimony	µg/L	grab	once per discharge event[1]
Arsenic[3]	µg/L	grab	once per discharge event[1]
Beryllium	µg/L	grab	once per discharge event[1]
Cadmium[3]	µg/L	grab	once per discharge event[1]
Copper[3]	µg/L	grab	once per discharge event[1]
Chromium III[3]	µg/L	grab	once per discharge event[1]
Chromium VI[3]	µg/L	grab	once per discharge event[1]
Lead[3]	µg/L	grab	once per discharge event[1]
Nickel[3]	µg/L	grab	once per discharge event[1]
Selenium	µg/L	grab	once per discharge event[1]
Silver[3]	µg/L	grab	once per discharge event[1]
Zinc[3]	µg/L	grab	once per discharge event[1]
Tributyltin	µg/L	grab	once per discharge event[1]
Ammonia as (N)	mg/L	grab	once per discharge event[1]
Total petroleum hydrocarbons (TPH) [6]	µg/L	grab	once per discharge event[1]
Chemical oxygen demand (COD)	mg/L	grab	once per discharge event[1]
Total organic carbon (TOC)	mg/L	grab	once per discharge event[1]
Conductivity	µmhos/cm	measurement	once per discharge event[1]
Toxicty-Acute	% survival	grab	monthly[4]
Remaining CTR Priority Pollutants (As listed in Section VII)	µg/L	grab	once per discharge event[5]

[1] During periods of storm water discharge, samples shall be collected during the first hour of the discharge. Each separate period of storm water discharge shall be sampled but no more than 2 samples per year are required.
[2] Total phenols measured by EPA Method 420.1 or 420.2 (using the 4AAP method).
[3] Measured as total recoverable.
[4] The Discharger is required to collect and analyze discharges of storm water for acute toxicity monthly for the first 6 months following permit adoption. The results of these analyses must be compared to the acute toxicity limitation. If toxicity exceeds the limitation [as defined in Order No. R4-2007-0030, Section I.B.3.a.(i)], then the Discharger shall immediately implement accelerated testing as specified in Section I.B.3.a.(ii) which includes conducting six additional tests over a 6-week period. If toxicity levels comply with the effluent limitation, then the Discharger may resume annual monitoring.
[5] CTR priority pollutants: For the first 2 years of the Order term (interim monitoring period) monitoring is required once per discharge (but no more than two samples per calendar year are required). For the remainder of the Order term, monitoring is required during one discharge event once per calendar year). CTR priority pollutant samples shall be collected during the months October – May.
[6] Total petroleum hydrocarbons includes all fuels, gasoline, diesel and jet fuel. Analysis should be completed using EPA 418.1 and EPA 8015 (modified) methods.

V. Sediment Monitoring

A. Surface grab samples containing the upper 2 centimeters of sediment shall be taken from an Ekman grab (or by another method approved by the Executive Officer) collected at each station and analyzed for the following:

Constituent	Units	Stations[1]	Type of Sample	Sampling Frequency
Arsenic	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Cadmium	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Copper	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Chromium	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Lead	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Nickel	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Silver	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Zinc	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Tributylin	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Total organic carbon	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
TPH[2]	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
PCBs/PCTs[3]	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
PAH[4]	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Grain size	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years
Paint chips	mg/kg dry wt.	R1, R2, R3	grab	once every 2 years

[1] R1 = at the south end of ways, off of finger pier, R2 = At north end of ways, off of finger pier, R3 Within Al Larson Marina, off of dock.
[2] Total petroleum hydrocarbons.
[3] Polychlorinated biphenyls/polychlorinated terphenyls.
[4] Polynuclear aromatic hydrocarbons. (Sum of acenapthene, acenapthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)fluoranthene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene).

VI. 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 U.S. EPA's *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms*, Fifth Edition, October, 2002 (EPA/821-R-02-012) 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 U.S. EPA'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).

3. In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 48 hours of the chronic toxicity test as the results of the acute toxicity test.

4. Effluent samples shall be collected as follows:

    - Process water discharges: The Discharger shall take a sample during a low-pressure blasting event, from the point beneath Marine Railway 4 where the greatest volume of discharge is entering Fish Harbor or Los Angeles Inner Harbor. A clean steel plate will be placed on to the floor of the ways at the water line. The 5-gallon sample will be taken by means of a peristaltic pump with cleaned teflon tubing, resting on the steel plate at a depth of no more than two (2) inches. The sample will only be taken while process discharge is entering the Harbor.

    - Storm water effluent discharge: A storm water sample shall be collected at a point within the on-site storm drain (Discharge Serial No. 002) located on a concrete platform outside the machine shop prior entry into the receiving water. Upon sufficient rainfall, the piping leading to the Harbor waters within the storm drain is blocked and water sample is collected. Water samples shall be collected into the appropriate containers that comply with the requirements, including the preservation techniques and holding times as specified in 40 CFR Part 136. The block in the storm drain is removed after the collection of the water samples.

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. Upon adoption of this Order, and for six (6) months thereafter, the Discharger shall implement accelerated testing as specified in Section I.D.11.a.3 of Order No. R4-2007-0030 for the discharges during low-pressure water blasting events and storm events. If toxicity during the first 6 months does not exceed the limitations, the monitoring frequency may revert to quarterly. If toxicity exceeds the limitations (as defined in Order No. R4-2007-0030, Section I.D.11.a.1.) after the initial six (6) month period, then the Discharger shall immediately implement accelerated testing as specified in Section I.D.11.a.3 of the Order. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the close of the test and the additional tests shall begin within three (3) business days of the receipt of the result. 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 Toxicity Identification Evaluation (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 Discharge Serial Nos. 001 and 002 causes or contributes to the measured downstream acute toxicity. If this first step TRE testing shows that the effluent does not cause or contribute to downstream acute toxicity, using U.S. EPA's *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms*, *Fifth Edition*, October, 2002 (EPA/821-R-02-012). 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. 6920 shall be continued thereafter.

D. Steps in TRE and TIE procedures:

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 acute toxicity results are greater than or equal to 90 percent survival).

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.D.11.a.2 of Order No. R4-2007-0030, 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 per cent (%) 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.

   a. The full report shall be submitted on or before the end of the month in which the DMR is submitted.

   b. 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 as described in Order No. R4-2007-0030 section I.D.11.a.1; and (4) printout of the ToxCalc or CETIS program results.

3. 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. Mean percent mortality (±standard deviation) after 96 hours in 100% effluent (if applicable);
   f. NOEC and LOEC values for reference toxicant test(s);
   g. C_{25} value for reference toxicant test(s);
   h. Any applicable charts; and
   i. Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).

4. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from at least eleven of the most recent samples.

   The Discharger shall notify by telephone or electronically, this Regional Board of any toxicity exceedance of the limit or trigger within 24 hours of receipt of the results followed by a written report within 14 calendar days of receipt of the results. The verbal or electronic notification shall include the exceedance and the plan 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.

VII. Receiving Water Monitoring Program

A. Receiving Water Observations. The receiving water monitoring program shall consist of periodic surveys of receiving water and shall include studies of those physical-chemical characteristics of the receiving water that may be impacted by the discharge. 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:

1. Tidal stage, time, and date of monitoring
2. Weather conditions
3. Color of water
4. Appearance of oil films or grease, or floatable materials
5. Extent of visible turbidity or color patches
6. Direction of tidal flow
7. Description of odor, if any, of the receiving water
8. Presence and activity of California Least Tern and California Brown Pelican.

B. Receiving Water Monitoring for Reasonable Potential Determination. 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 SIP requires that the data be provided. Therefore, the Discharger shall conduct the following interim monitoring program for the receiving water for all California Toxics Rule priority pollutants for two years (i.e., until July 27, 2009), or until otherwise directed by the Regional Board. The Discharger shall ensure that at least four samples of the receiving water are collected in the interim monitoring period; the results of monitoring for reasonable potential determination shall be submitted in accordance with Section I.A of this Monitoring and Reporting Program. Receiving water sampling shall be conducted at the same time as the effluent (i.e., low-pressure water blasting or storm water, whichever makes up the first two discharges of the calendar year). The receiving water monitoring location shall be approximately 50 feet upstream of the discharge point into the receiving water (Fish Harbor of the Los Angeles Inner Harbor) outside the influence of the discharge.

The required monitoring frequency and type of sample for pH, hardness, salinity, and toxic pollutants are listed in Section VI of this Monitoring and Reporting Program.

VIII. Effluent and Receiving Water Monitoring for Reasonable Potential

As described in Sections III.B and VII of this Monitoring and Reporting Program, the Discharger is required to monitor both the effluent (low-pressure water blasting and storm water) and receiving water for priority pollutants listed in the Table below to determine reasonable potential.

Receiving water sampling shall be conducted at the same time as the effluent sampling (low-pressure water blasting and storm water discharges). Further, the Discharger must analyze pH, salinity, and hardness of the receiving water at the same time as priority pollutants in the receiving water.

- Process water discharges: The Discharger shall take a sample during a low-pressure blasting event, from the point beneath the ways (or drydock) where the greatest volume of discharge is entering Fish Harbor or Los Angeles Inner Harbor. A clean steel plate will be placed on to the floor of the ways at the water line. The 5-gallon sample will be taken by means of a peristaltic pump with cleaned teflon tubing, resting on the steel plate at a depth of no more than 2 inches. The sample will only be taken while process discharge is entering the Harbor.

- Storm water effluent discharge: Storm water samples shall be collected at a point within the on-site storm water drain (Discharge Serial No. 002) located on a concrete platform outside the machine shop prior entry into the receiving water. Upon sufficient rainfall, the piping leading to the Harbor waters within the storm drain is blocked and water sample is collected. Water samples shall be collected into the appropriate containers that comply with the requirements, including the preservation techniques and holding times as specified in 40 CFR Part 136. The block in the storm drain is removed after the collection of the water samples.

- Receiving water: The monitoring stations shall be within 50 feet upstream of the discharge point into the receiving water (Fish Harbor of Los Angeles Inner Harbor).

Constituent	**Units**	**Type of Sample**	**Monitoring Frequency** [1, 2]
pH	Standard Units	grab	once per discharge event[3]
Hardness (as $CaCO_3$)	mg/L	grab	once per discharge event[3]
Salinity	g/L	grab	once per discharge event[3]
Antimony	µg/L	grab	once per discharge event
Arsenic [4]	µg/L	grab	once per discharge event
Beryllium	µg/L	grab	once per discharge event
Cadmium [4]	µg/L	grab	once per discharge event
Chromium (III) [4]	µg/L	grab	once per discharge event
Chromium (VI) [4]	µg/L	grab	once per discharge event
Copper [4]	µg/L	grab	once per discharge event
Lead [4]	µg/L	grab	once per discharge event
Mercury	µg/L	grab	once per discharge event
Nickel [4]	µg/L	grab	once per discharge event
Selenium	µg/L	grab	once per discharge event
Silver [4]	µg/L	grab	once per discharge event
Thallium	µg/L	grab	once per discharge event
Zinc [4]	µg/L	grab	once per discharge event
Cyanide	µg/L	grab	once per discharge event
Asbestos	fibers/L	grab	once per discharge event
Acrolein	µg/L	grab	once per discharge event
Acrylonitrile	µg/L	grab	once per discharge event
Benzene	µg/L	grab	once per discharge event

Constituent	Units	Type of Sample	Monitoring Frequency [1, 2]
Bromoform	µg/L	grab	once per discharge event
Carbon tetrachloride	µg/L	grab	once per discharge event
Chlorobenzene	µg/L	grab	once per discharge event
Chlorodibromomethane	µg/L	grab	once per discharge event
Chloroethane	µg/L	grab	once per discharge event
2-Chloroethylvinyl ether	µg/L	grab	once per discharge event
Chloroform	µg/L	grab	once per discharge event
Dichlorobromomethane	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
1,2-Dichloropropane	µg/L	grab	once per discharge event
1,3-Dichloropropylene	µg/L	grab	once per discharge event
Ethylbenzene	µg/L	grab	once per discharge event
Methyl bromide	µg/L	grab	once per discharge event
Methyl chloride	µg/L	grab	once per discharge event
Methylene chloride	µg/L	grab	once per discharge event
1,1,2,2-Tetrachloroethane	µg/L	grab	once per discharge event
Tetrachloroethylene	µg/L	grab	once per discharge event
Toluene	µg/L	grab	once per discharge event
1,2-Trans-dichloroethylene	µg/L	grab	once per discharge event
1,1,1-Trichloroethane	µg/L	grab	once per discharge event
1,1,2-Trichloroethane	µg/L	grab	once per discharge event
Trichloroethylene	µg/L	grab	once per discharge event
Vinyl chloride	µg/L	grab	once per discharge event
2-Chlorophenol	µg/L	grab	once per discharge event
2,4-Dichlorophenol	µg/L	grab	once per discharge event
2,4-Dimethylphenol	µg/L	grab	once per discharge event
2-Methyl-4,6-Dinitrophenol	µg/L	grab	once per discharge event
2,4-Dinitrophenol	µg/L	grab	once per discharge event
2-Nitrophenol	µg/L	grab	once per discharge event
4-Nitrophenol	µg/L	grab	once per discharge event
3-Methyl-4-Chlorophenol	µg/L	grab	once per discharge event
Pentachlorophenol	µg/L	grab	once per discharge event
Phenol	µg/L	grab	once per discharge event
2,4,6-Trichlorophenol	µg/L	grab	once per discharge event
Acenaphthene	µg/L	grab	once per discharge event
Acenaphthylene	µg/L	grab	once per discharge event
Anthracene	µg/L	grab	once per discharge event
Benzidine	µg/L	grab	once per discharge event
Benzo (a) Anthracene	µg/L	grab	once per discharge event
Benzo (a) Pyrene	µg/L	grab	once per discharge event
Benzo (b) Fluoranthene	µg/L	grab	once per discharge event
Benzo (g,h,i) Perylene	µg/L	grab	once per discharge event
Benzo (k) Fluoranthene	µg/L	grab	once per discharge event
Bis (2-Chloroethoxy) Methane	µg/L	grab	once per discharge event
Bis (2-Chloroethyl) Ether	µg/L	grab	once per discharge event
Bis (2-Chloroisopropyl) Ether	µg/L	grab	once per discharge event
Bis (2-Ethylhexyl) Phthalate	µg/L	grab	once per discharge event

Constituent	Units	Type of Sample	Monitoring Frequency [1, 2]
4-Bromophenyl Phenyl Ether	µg/L	grab	once per discharge event
Butylbenzyl Phthalate	µg/L	grab	once per discharge event
2-Chloronapthalene	µg/L	grab	once per discharge event
4-Chlorophenyl Phenyl Ether	µg/L	grab	once per discharge event
Chrysene	µg/L	grab	once per discharge event
Dibenzo (a,h) Anthracene	µg/L	grab	once per discharge event
1,2-Dichlorobenzene	µg/L	grab	once per discharge event
1,3-Dichlorobenzene	µg/L	grab	once per discharge event
1,4-Dichlorobenzene	µg/L	grab	once per discharge event
3,3'-Dichlorobenzidine	µg/L	grab	once per discharge event
Diethyl Phthalate	µg/L	grab	once per discharge event
Dimethyl Phthalate	µg/L	grab	once per discharge event
Di-n-Butyl Phthalate	µg/L	grab	once per discharge event
2,4-Dinitrotoluene	µg/L	grab	once per discharge event
2,6-Dinitrotoluene	µg/L	grab	once per discharge event
Di-n-Octyl Phthalate	µg/L	grab	once per discharge event
1,2-Diphenylhydrazine	µg/L	grab	once per discharge event
Fluoranthene	µg/L	grab	once per discharge event
Fluorene	µg/L	grab	once per discharge event
Hexachlorobenzene	µg/L	grab	once per discharge event
Hexachlorobutadiene	µg/L	grab	once per discharge event
Hexachlorocyclopentadiene	µg/L	grab	once per discharge event
Hexachloroethane	µg/L	grab	once per discharge event
Indeno (1,2,3-cd) Pyrene	µg/L	grab	once per discharge event
Isophorone	µg/L	grab	once per discharge event
Naphthalene	µg/L	grab	once per discharge event
Nitrobenzene	µg/L	grab	once per discharge event
N-Nitrosodimethylamine	µg/L	grab	once per discharge event
N-Nitrosodi-n-Propylamine	µg/L	grab	once per discharge event
N-Nitrosodiphenylamine	µg/L	grab	once per discharge event
Phenanthrene	µg/L	grab	once per discharge event
Pyrene	µg/L	grab	once per discharge event
1,2,4-Trichlorobenzene	µg/L	grab	once per discharge event
Aldrin	µg/L	grab	once per discharge event
alpha-BHC	µg/L	grab	once per discharge event
beta-BHC	µg/L	grab	once per discharge event
gamma-BHC	µg/L	grab	once per discharge event
delta-BHC	µg/L	grab	once per discharge event
Chlordane	µg/L	grab	once per discharge event
4,4'-DDT	µg/L	grab	once per discharge event
4,4'-DDE	µg/L	grab	once per discharge event
4,4'-DDD	µg/L	grab	once per discharge event
Dieldrin	µg/L	grab	once per discharge event
alpha-Endosulfan	µg/L	grab	once per discharge event
beta-Endosulfan	µg/L	grab	once per discharge event
Endosulfan Sulfate	µg/L	grab	once per discharge event
Endrin	µg/L	grab	once per discharge event
Endrin Aldehyde	µg/L	grab	once per discharge event
Heptachlor	µg/L	grab	once per discharge event

Constituent	Units	Type of Sample	Monitoring Frequency [1, 2]
Heptachlor Epoxide	µg/L	grab	once per discharge event
Polychlorinated Biphenyls [5]	µg/L	grab	once per discharge event
TCDD	µg/L	grab	once per discharge event
Toxaphene	µg/L	grab	once per discharge event
Total petroleum hydrocarbons [6]	µg/L	grab	once per discharge event[1]

[1] During periods of storm water discharge, samples shall be collected during the first hour of the discharge.
[2] CTR priority pollutants: For the first 2 years of the permit term (interim monitoring period) monitoring is required once per discharge (but no more than two samples per calendar year are required). For the remainder of the permit term, monitoring is required once per calendar year is required. All samples shall be collected during the months October – May.
[3] Sampling for pH, hardness, and salinity of receiving water shall be concurrent with sampling for priority pollutants in receiving water.
[4] Measured as total recoverable.
[5] Refers to the sum of PCB Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260.
[6] Total petroleum hydrocarbons includes all fuels, gasoline, diesel and jet fuel. Analysis should be completed using EPA 418.1 and EPA 8015 (modified) methods.

A. The Discharger must monitor the effluent (i.e., low-pressure water blasting wastewater and storm water) and receiving water for the presence of the 16 congeners of 2,3,7,8-TCDD listed below, twice during the permit term (once during a low-pressure water blasting discharge event and once during a storm water discharge event). Samples for 2,3,7,8-TCDD shall be collected during the months of October – May. The report must include for each congener the analytical results of the effluent monitoring, including the quantifiable limit and the Method Detection Limit (MDL), and the measured or estimated concentration. The Discharger must multiply each measured or estimated congener concentration by its respective Toxicity Equivalent Factors (TEFs) provided below and report the sum of these values.

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

B. The report for this required monitoring must be submitted separately from the self-monitoring reports, but in accordance with the quarterly reporting schedule provided in Section I.A.

C. SWRCB-approved laboratory methods and the corresponding MLs for the examination of each priority pollutant are listed in Attachment T-B. Reporting requirements for the data to be submitted are listed in Attachment T-C. We recommend that you select the analytical method from Attachment T-A capable of achieving the lowest ML for each pollutant as listed on Attachment T-B. ML is necessary for determining compliance for a priority pollutant when an effluent limit is below the MDL.

D. The laboratory analytical data shall include applicable MLs, MDL, quality assurance/quality control data, and shall comply with the reporting requirements contained in the Attachments T-A & T-B.

E. Forward all interim monitoring data/reports to The Regional Board, Attn: Industrial Permitting Unit, and please include a reference to "Compliance File No. CI-6920 and NPDES No. CA0061051".

Ordered by: _____ Date: June 7, 2007
Deborah J. Smith
Interim Executive Officer

SWRCB Minimum Levels in ppb (µg/L)

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethylene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Methyl Bromide	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethylene	0.5	2
Toluene	0.5	2
Trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Benzo (a) Anthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
Benzo (b) Fluoranthene		10	10	
3-Methyl-Chlorophenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

** Phenol by colorimetric technique has a factor of 1.

Table 2c – INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1,000
Arsenic		2	10	2	2	1		20	1,000
Beryllium	20	0.5	2	0.5	1				1,000
Cadmium	10	0.5	10	0.25	0.5				1,000
Chromium (total)	50	2	10	0.5	1				1,000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1,000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1,000
Selenium		5	10	2	5	1			1,000
Silver	10	1	10	0.25	2				1,000
Thallium	10	2	10	1	5				1,000
Zinc	20		20	1	10				1,000

* The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
alpha-BHC	0.01
Aldrin	0.005
b-Endosulfan	0.01
Beta-BHC	0.005
Chlordane	0.1
Delta-BHC	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Gamma-BHC (Lindane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

* The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

Techniques:

GC - Gas Chromatography
GCMS - Gas Chromatography/Mass Spectrometry
HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
LC - High Pressure Liquid Chromatography
FAA - Flame Atomic Absorption
GFAA - Graphite Furnace Atomic Absorption
HYDRIDE - Gaseous Hydride Atomic Absorption
CVAA - Cold Vapor Atomic Absorption
ICP - Inductively Coupled Plasma
ICPMS - Inductively Coupled Plasma/Mass Spectrometry
SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
DCP - Direct Current Plasma
COLOR - Colorimetric

ATTACHMENT T-B

ANALYTICAL METHODS FOR INTERIM MONITORING

# Compound	Pollutant_ID	Toxic Pollutants	EPA Analytical Method[1]
		Metals & Miscellaneous	
1	1097	Antimony (Sb)	200.7, 200.8, 204.1, 204.2, 6010B, 6020, 7040, 7041
2	1000	Arsenic (As)	200.7, 200.8, 200.9, 206.2, 206.3, 206.4, 206.5, 6010B, 6020, 7060A, 7061A
3	1012	Beryllium (Be)	200.7, 200.8, 200.9, 210.1, 210.2, 6010B, 6020, 7090, 7091
4	1027	Cadmium (Cd)	200.7, 200.8, 200.9, 213.1, 213.2, 6010B, 6020, 7130, 7131A
5a	1032	Chromium (Total)	200.7, 200.8, 200.9, 218.1, 218.2, 218.3, 6010B, 6020, 7190, 7191
5b	1033	Chromium-(Cr-VI)	218.4, 7196A, 218.6, 7199
6	1119	Copper (Cu)	200.7, 200.8, 200.9, 220.1, 220.2, 6010B, 6020, 7210, 7211
	720	Cyanide (CN)	335.2, 335.3, 9010B, 9012A
8	1051	Lead (Pb)	200.8, 200.9, 239.1, 239.2, 6010B, 6020, 7420, 7421
9	71900	Mercury (Hg)	245.1, 245.2, 200.8, 7470A, 7471A
10	1067	Nickel (Ni)	200.7, 200.8, 200.9, 249.1, 249.2, 6010B, 6020, 7520, 7521
11	1147	Selenium (Se)	200.7, 200.8, 200.9, 270.2, 6010B, 6020, 7740, 7741A
12	1077	Silver (Ag)	200.7, 200.8, 200.9, 272.1, 272.2, 6010B, 6020, 7760A, 7761
13	1059	Thallium (Tl)	200.7, 200.8, 200.9, 279.1, 279.2, 6010B, 6020, 7840, 7841
14	1092	Zinc (Zn)	200.7, 200.8, 289.1, 289.2, 6010B, 6020, 7950, 7951
15	948	Asbestos	100.1, 100.2
16[2]	82698	TCDD Equivalent	1613
		Toxicity Equivalent Factors (TEFs) for 2,3,7,8-TCCD Equivalents	
		Congener / TEF	
		2,3,7,8-TetraCDD: 1	
		1,2,3,7,8-PentaCDD: 1.0	
		1,2,3,4,7,8-HexaCDD: 0.1	
		1,2,3,6,7,8-HexaCDD: 0.1	
		1,2,3,7,8,9-HexaCDD: 0.1	
		1,2,3,4,6,7,8-HeptaCDD: 0.01	
		OctaCDD: 0.0001	
		2,3,7,8-TetraCDF: 0.1	

[1] **Analytical Method selected must be capable of achieving an ML that is lower than the lowest criterion for the pollutant, as shown on Attachment B.**

[2] **You shall report for each congener the analytical results of the effluent monitoring, including the quantifiable limit and the MDL, and the measured or estimated concentration. In addition you shall multiply each measured or estimated congener concentration by its respective TEF value above and report the sum of these values.**

ATTACHMENT T-B

# Compound	Pollutant_ID	Toxic Pollutants		EPA Analytical Method[1]
		1,2,3,7,8-PentaCDF	0.05	
		2,3,4,7,8-PentaCDF	0.5	
		1,2,3,4,7,8-HexaCDF	0.1	
		1,2,3,6,7,8-HexaCDF	0.1	
		1,2,3,7,8,9-HexaCDF	0.1	
		2,3,4,6,7,8-HexaCDF	0.1	
		1,2,3,4,6,7,8-HeptaCDF	0.01	
		1,2,3,4,7,8,9-HeptaCDF	0.01	
		OctaCDF	0.0001	
		Volatile Pollutants		
17	34210	Acrolein		603, 8030A, 8260B
18	34215	Acrylonitrile		603, 8031, 8260B
19	34030	Benzene		602, 624, 8021B, 8260B
20	32104	Bromoform		601, 624, 8021B, 8260B
21	32102	Carbon Tetrachloride		601, 624, 8021B, 8260B
22	34301	Chlorobenzene		601, 602, 624, 8021B, 8260B
23	34306	Chlorodibromomethane		601, 624, 8021B, 8260B
24	85811	Chloroethane		601, 624, 8021B, 8260B
25	34576	2-Chloroethylvinyl Ether		601, 624, 8021B, 8260B
26	32106	Chloroform		601, 624, 8021B, 8260B
27	32101	Dichlorobromomethane		601, 624, 8021B, 8260B
28	34496	1,1-Dichloroethane		601, 624, 8021B, 8260B
29	32103	1,2-Dichloroethane		601, 624, 8021B, 8260B
30	34501	1,1-Dichloroethylene		601, 624, 8021B, 8260B
31	34541	1,2-Dichloropropane		601, 624, 8021B, 8260B
32	34561	1,3-Dichloropropylene		601, 624, 8021B, 8260B
33	78113	Ethylbenzene		602, 624, 8021B, 8260B
34	34413	Methyl Bromide		601, 624, 8021B, 8260B
35	3	Methyl Chloride		601, 624, 8021B, 8260B
36	34418	Methylene Chloride		601, 624, 8021B, 8260B
37	34516	1,1,2,2-Tetrachloroethane		601, 624, 8021B, 8260B
38	34475	Tetrachloroethylene		601, 624, 8021B, 8260B
39	34010	Toluene		602, 624, 8021B, 8260B
40	34549	1,2-Trans-Dichloroethylene		601, 624, 8021B, 8260B
41	34506	1,1,1-Trichloroethane		601, 624, 8021B, 8260B
42	34511	1,1,2-Trichloroethane		601, 624, 8021B, 8260B
43	39180	Trichloroethylene		601, 624, 8021B, 8260B
44	39175	Vinyl Chloride		601, 624, 8021B, 8260B
		Semi-Volatile Pollutants		
45	34586	2-Chlorophenol		604, 625, 8041, 8270C
46	34601	2,4-Dichlorophenol		604, 625, 8041, 8270C
47	34606	2,4-Dimethylphenol		604, 625, 8041, 8270C
48	34452	2-Methyl-4,6-Dintrophenol		604, 625, 8041, 8270C

ATTACHMENT T-B

# Compound	Pollutant_ID	Toxic Pollutants	EPA Analytical Method[1]
49	34616	2,4-Dinitrophenol	604, 625, 8041, 8270C
50	34591	2-Nitrophenol	604, 625, 8041, 8270C
51	34646	4-Nitrophenol	604, 625, 8041, 8270C
52		3-Methyl-4-Chlorophenol	604, 625, 8041, 8270C
53	39032	Pentachlorophenol	604, 625, 8041, 8270C
54	34694	Phenol	604, 625, 8041, 8270C
55	34624	2,4,6-Trichlorophenol	604, 625, 8041, 8270C
56	34205	Acenaphthene	610, 625, 8100, 8270C
57	34200	Acenapthylene	610, 625, 8100, 8270C
58	34220	Anthracene	610, 625, 8100, 8270C
59	39120	Benzidine	625, 8270C
60	34526	Benzo (a) Anthracene	610, 625, 8100, 8270C
61	34247	Benzo (a) Pyrene	610, 625, 8100, 8270C
62	34230	Benzo (b) Fluoranthene	610, 625, 8100, 8270C
63	34521	Benzo (g,h,i) Perylene	610, 625, 8100, 8270C
64	34242	Benzo (k) Fluoranthene	610, 625, 8100, 8270C
65	34278	Bis (2-Chloroethoxy) Methane	611, 625, 8270C
66	34283	Bis (2-Chloroisopropyl) Ether	611, 625, 8111, 8270C
67	34273	Bis (2-Chloroethyl) Ether	611, 625, 8111, 8270C
68	39100	Bis (2-Ethylhexyl) Phthalate	606, 625, 8061A, 8270C
69	34636	4-Bromophenyl Phenyl Ether	611, 625, 8111, 8270C
70	34292	Butylbenzyl Phthalate	606, 625, 8061A, 8270C
71	34581	2-Chloronaphthalene	612, 625, 8100, 8270C
72	34641	4-Chlorophenyl Phenyl Ether	611, 625, 8111, 8270C
73	34320	Chrysene	610, 625, 8100, 8270C
74	34556	Dibenzo (a,h) Anthracene	610, 625, 8100, 8270C
75	34536	1,2-Dichlorobenzene	601, 602, 612, 624, 625, 8021B, 8270C
76	34566	1,3-Dichlorobenzene	601, 602, 612, 624, 625, 8021B, 8270C
77	34571	1,4-Dichlorobenzene	601, 602, 612, 624, 625, 8021B, 8270C
78	34631	3,3-Dichlorobenzidine	625, 8270C
79	34336	Diethyl Phthalate	606, 625, 8061A, 8270C
80	34341	Dimethyl Phthalate	606, 625, 8061A, 8270C
81	34596	Di-n-Octyl Phthalate	606, 625, 8061A, 8270C
82	34611	2,4-Dinitrotoluene	609, 625, 8091, 8270C
83	34626	2,6-Dinitrotoluene	609, 625, 8091, 8270C
84	39110	Di-n-Butyl Phthalate	606, 625, 8061A, 8270C
85	34346	1,2-Diphenylhydrazine	625, 8270C
86	34376	Fluoranthene	610, 625, 8100, 8270C
87	34381	Fluorene	610, 625, 8100, 8270C
88	39700	Hexachlorobenzene	612, 625, 8120A, 8270C
89	39702	Hexachlorobutadiene	612, 625, 8120A, 8270C
90	34386	Hexachlorocyclopentatadiene	612, 8120A, 8270C
91	34396	Hexachloroethane	616, 625, 8120A, 8270C

ATTACHMENT T-B

# Compound	Pollutant_ID	Toxic Pollutants	EPA Analytical Method[1]
92	34403	Indeno (1,2,3-cd) Pyrene	610, 625, 8100, 8270C
93	34408	Isophorone	609, 625, 8270C
94	34696	Napthalene	610, 625, 8100, 8270C
95	34447	Nitrobenzene	609, 625, 8091, 8270C
96	34438	N-Nitrosodimethylamine	607, 625, 8070A, 8270C
97	34428	N-Nitrosodi-n-Propylamine	607, 625, 8070A, 8270C
98	34433	N-Nitrosodiphenylamine	607, 8070A, 8270C
99	34461	Phenanthrene	610, 625, 8100, 8270C
100	34469	Pyrene	610, 625, 8100, 8270C
101	34551	1,2,4-Trichlorobenzene	612, 625, 8120A, 8270C
		Pesticides	
102	39330	Aldrin	608, 8081A
103	39336	Alpha-BHC	608, 8081A
104	39338	beta-BHC	608, 8081A
105	39340	Gamma-BHC	608, 8081A
106	34198	delta-BHC	608, 8081A
107	39350	Chlordane	608, 8081A
108	39300	4,4'-DDT	608, 8081A
109	39320	4,4'-DDE	608, 8081A
110	39310	4,4'-DDD	608, 8081A
111	39380	Dieldrin	608, 8081A
112	78428	Alpha-Endosulfan	608, 8081A
113	34356	beta-Endosulfan	608, 8081A
114	34351	Endosulfan Sulfate	608, 8081A
115	39390	Endrin	608, 8081A
116	34366	Endrin Aldehyde	608, 8081A
117	39410	Heptachlor	608, 8081A
118	39420	Heptachlor Epoxide	608, 8081A
119-125	4166	PCBs)	608, 8082
126	39400	Toxaphene	608, 8081A
		Miscellaneous receiving water Monitoring parameters	
	4	pH of receiving water	
	2	Hardness (mg/L as CaCO3)	
		Salinity of receiving water (mg/L)	
		Receiving water flow rate (cfs)	

Discharger:	Name of Laboratory:
Contact Name:	Laboratory Contact:
Phone Number:	Phone Number:
Compliance File CI #	

Pollutant ID	Name of Constituent	Date Sample Collected	Date Sample Analyzed	USEPA Method Used	Analytical Results (µg/L)	Detected? 1=Yes 0=No	ML (µg/L)	MDL (µg/L)	RDL (µg/L)	Source	Location	Outfall Name (for Effluent only)	Outlier 1=Yes 0=No	Comments
VOLATILE POLLUTANTS														
34496	1,1 Dichloroethane													
34501	1,1 Dichloroethylene													
34506	1,1,1 Trichloroethane													
34511	1,1,2 Trichloroethane													
34516	1,1,2,2 Tetrachloroethane													
34536	1,2 Dichlorobenzene													
32103	1,2 Dichloroethane													
34541	1,2 Dichloropropane													
34566	1,3 Dichlorobenzene													
34561	1,3 Dichloropropylene													
34571	1,4 Dichlorobenzene													
34210	Acrolein													
34215	Acrylonitrile													
34030	Benzene													
32104	Bromoform													
34413	Methyl Bromide													
32102	Carbon Tetrachloride													
34301	Chlorobenzene													
34306	Chlorodibromo-methane													
85811	Chloroethane													
32106	Chloroform													
32101	Dichlorobromo-methane													
34418	Methylene Chloride													
78113	Ethylbenzene													
34475	Tetrachloroethylene													
34010	Toluene													
34549	1,2-Trans Dichloroethylene													
39180	Trichloroethylene													
39175	Vinyl Chloride													
SEMI – VOLATILE POLLUTANTS														
34526	Benzo (a) Anthracene													
34536	1,2 Dichlorobenzene													
34346	1,2 Diphenylhydrazine													
34551	1,2,4 Trichlorobenzene													
34566	1,3 Dichlorobenzene													
34571	1,4 Dichlorobenzene													
34586	2 Chlorophenol													

Pollutant ID	Name of Constituent	Date Sample Collected	Date Sample Analyzed	USEPA Method Used	Analytical Results (µg/L)	Detected? 1=Yes 0=No	ML (µg/L)	MDL (µg/L)	RDL (µg/L)	Source	Location	Outfall Name (for Effluent only)	Outlier 1=Yes 0=No	Comments
34601	2,4 Dichlorophenol													
34606	2,4 Dimethylphenol													
34616	2,4 Dinitrophenol													
34611	2,4 Dinitrotoluene													
34624	2,4,6 Trichlorophenol													
34626	2,6 Dinitrotoluene													
34591	2-Nitrophenol													
34576	2-Chloroethyl vinyl ether													
34581	2-Chloronaphthalene													
34631	3,3' Dichlorobenzidine													
34230	Benzo (b) Fluoranthene													
	3-Methyl-4-Chlorophenol													
3615	2-Methyl-4,6-Dinitrophenol													
34646	4-Nitrophenol													
34636	4-Bromophenyl phenyl ether													
34641	4-Chlorophenyl phenyl ether													
34205	Acenaphthene													
34200	Acenaphthylene													
34220	Anthracene													
39120	Benzidine													
34247	Benzo (a) Pyrene													
34521	Benzo (g,h,i) Perylene													
34242	Benzo (k) Fluoranthene													
34278	Bis (2-Chloroethoxyl) methane													
34273	Bis(2-Chloroethyl) ether													
34283	Bis(2-Chloroisopropyl) ether													
39100	Bis(2-Ethylhexyl) phthalate													
34292	Butyl benzyl phthalate													
34320	Chrysene													
39110	di-n-Butyl phthalate													
34596	di-n-Octyl phthalate													
34556	Dibenzo(a,h)-anthracene													
34336	Diethyl phthalate													
34341	Dimethyl phthalate													
34376	Fluoranthene													
34381	Fluorene													
34386	Hexachloro-cyclopentadiene													
39700	Hexachlorobenzene													
39702	Hexachlorobutadiene													
34396	Hexachloroethane													
34403	Indeno(1,2,3,cd)-pyrene													
34408	Isophorone													
34433	N-Nitrosodiphenyl amine													
34438	N-Nitrosodimethyl amine													
34428	N-Nitroso-di-n-propyl amine													
34696	Naphthalene													
34447	Nitrobenzene													
39032	Pentachlorophenol													
34461	Phenanthrene													
34694	Phenol													
34469	Pyrene													

Pollutant ID	Name of Constituent	Date Sample Collected	Date Sample Analyzed	USEPA Method Used	Analytical Results (µg/L)	Detected? 1=Yes 0=No	ML (µg/L)	MDL (µg/L)	RDL (µg/L)	Source	Location	Outfall Name (for Effluent only)	Outlier 1=Yes 0=No	Comments
INORGANICS														
1097	Antimony (Sb)													
1000	Arsenic (As)													
1012	Beryllium (Be)													
1027	Cadmium (Cd)													
1033	Chromium-III (Cr-III)													
1032	Chromium VI (Cr-VI)													
1119	Copper (Cu)													
720	Cyanide(CN)													
1051	Lead													
71900	Mercury													
1067	Nickel(Ni)													
1147	Selenium(Se)													
1077	Silver(Ag)													
1059	Thallium(Tl)													
1092	Zinc(Zn)													
948	Asbestos													
PESTICIDES														
39310	4,4'-DDD													
39320	4,4'-DDE													
39300	4,4'-DDT													
78428	Alpha-Endosulfan													
39336	Alpha-BHC													
39330	Aldrin													
34356	Beta-Endosulfan													
39338	beta-BHC													
39350	Chlordane													
34198	delta-BHC													
39380	Dieldrin													
34351	Endosulfan Sulfate													
39390	Endrin													
34366	Endrin Aldehyde													
39410	Heptachlor													
39420	Heptachlor Epoxide													
39340	gamma-BHC													
4166	PCB 1016													
4166	PCB 1221													
4166	PCB 1232													
4166	PCB 1242													
4166	PCB 1248													
4166	PCB 1254													
4166	PCB 1260													
39400	Toxaphene													
82698	TCDD													
Miscellaneous parameters														
4	pH													
2	Hardness (mg/L as CaC03)													
1	TSS (mg/L)													
	Salinity of receiving water (ppm)													
	Receiving water flow rate (cfs)													