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

ORDER NO. R4-2007-0030
NPDES PERMIT NO. CA0061051

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
FOR
AL LARSON BOAT SHOP

The California Regional Water Quality Board, Los Angeles Region (hereinafter Regional Board), finds:

Background

1. Al Larson Boat Shop (hereinafter ALBS or Discharger) discharges process (wastewater generated during the low-pressure water blasting operations) water and storm water under waste discharge requirements (WDRs) contained in Order No. 97-079 (NPDES No. CA0061051) adopted by the Regional Board on June 16, 1997, CI-6920.

2. The Discharger filed a report of waste discharge (ROWD) initially on June 14, 2002. Updates to the ROWD were submitted to the Los Angeles Regional Board on April 19, 2004, July 20, 2004, November 12, 2004 and finally on February 9. 2007. The completed ROWD serves as application for renewal of ALBS's WDRs and NPDES permit. This Order is the reissuance of the WDRs and NPDES permit for discharges from ALBS.

Purpose of Order

3. The purpose of this Order is to renew the WDRs for the Al Larson Boat Shop. This NPDES permit regulates the discharge of low-pressure water blasting wastewater and harbor waters through Discharge Serial No. 001 to Fish Harbor located within the Los Angeles Inner Harbor, a water of the United States. This NPDES permit also regulates the discharge of storm water runoff through Discharge Serial No. 002, which discharges to Fish Harbor located within Los Angeles Inner Harbor, a water of the United States.

Facility Description

4. Al Larson Boat Shop is the owner and operator of a marina and boat cleaning and repair facility located at Berth 258, at the entrance of Fish Harbor, or, at 1049 Seaside Avenue, Terminal Island, California. Figure 1 provides a facility location map.

5. The Discharger operates four marine ways and one submersible dry dock to undertake general repair and maintenance of various types of sea going vessels. The marine ways

enable vessels to be drawn up out of the water and worked on in dry dock conditions. There are also repair shops housing activities such as carpentry, welding, machining, electrical and painting located at the facility. Dry sandblasting and low pressure water blasting are conducted on the dry dock and at the four marine ways.

Discharge Description

6. Because of the nature of ship repair, and maintenance facilities and activities, there are a number of pathways by which pollutants and wastes from these facilities and activities could be discharged to the Harbor. These repair facilities are located on, or immediately adjacent to, Fish Harbor of Los Angeles Inner Harbor (receiving water) and many of these activities are conducted outdoors. Therefore, contaminants generated during the repair and maintenance operations may enter the receiving water. Storm water discharges associated with industrial activity at ship repair and maintenance sites constitute one potentially significant pathway by which pollutants and wastes could be discharged to the Harbor.

7. The existing permit describes modification plans to prevent sandblast grit/dry paint chip and wastewater from entering Fish Harbor. In the first project, Marine Ways 1, 2, and 3 were modified to include a totally enclosed steel floor with sumps to restrict any wastewater and debris from falling in the Harbor. Marine Way #4 could not be enclosed due to its length, width, and general situation. As an alternative, the concrete flooring was extended with containment berms. This allows material that does enter the water to be trapped at the end of the way by a berm in place across the end of the concrete area. Material collected there is retrieved after the maintenance activities are complete and stored prior to being recycled. These upgrades described are complete.

8. Low-pressure water blasting is used on the marine ways and drydock to remove marine life from the vessel exterior. Wastewater generated during the low-pressure water blasting operations at Marine Ways 1, 2, and 3 is captured and discharged to the City of Los Angeles sewer system. Wastewater generated during the low-pressure water blasting operations at Marine Way 4 flows into Fish Harbor located within the Los Angeles Inner Harbor. In addition, storm water runoff, which may be contaminated with residual spent sandblast grit/dry paint chips, and harbor water washing over the surfaces during tidal flooding, also flows into Fish Harbor.

9. ALBS discharges process water (low pressure water blasting wastewater) and harbor water to Fish Harbor located within Los Angeles Inner Harbor, through Discharge Serial No. 001. Fish Harbor is considered a part of the Los Angeles Inner Harbor; Los Angeles Inner Harbor is a water of the United States, and is part of the Los Angeles County Coastal Waters. ALBS discharges storm water through an on-site storm drain (Discharge Serial No. 002) located on a concrete platform outside the machine shop and into Fish Harbor.

   Storm water runoff from Seaside Avenue is directed through a man-made trough located about 30 feet from the machine shop and discharges to Fish Harbor.

10. Discharges from Marine Way 4 are in violation of the Clean Water Act. Modifications to that area are required to bring the facility into compliance. The ROWD submitted on February 9, 2007, provides a plan to move the railway inland such that vessels that are repaired at that location are taken completely out of the water. The plan requires that the

Port of Long Beach move the street adjacent the facility (Seaside Avenue) into the vacated property formerly owned by Southwest Marine. The estimated time to move the street and the operations from Marine Way 4 is eight months.

Storm Water Management

11. Storm water discharge from the facility was covered under the general NPDES permit for storm water discharges associated with industrial activities [State Water Resources Control Board (State Board) Order No. 97-03-DWQ, NPDES Permit No. CAS000001, adopted on April 17, 1997] and the Discharger has developed and implemented a Storm Water Pollution Prevention Plan (SWPPP) in accordance with this general NPDES permit. The proposed permit will authorize storm water discharges from the ALBS facility; therefore the General Permit will no longer regulate the discharge of storm water.

    The proposed Order requires the Discharger to update and continue to implement its SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff containing pollutants from being discharged into surface waters. This Order also requires monitoring of the storm water discharges for conventional pollutants, nonconventional pollutants, and priority pollutants.

12. The objective of this Order is to protect the beneficial uses of receiving waters. To meet this objective, this order requires that the SWPPP specify Best Management Practices (BMPs) that will be implemented to reduce the discharge of pollutants in storm water. Further, the Discharger shall assure that the storm water discharges from the facility would neither cause, nor contribute to, the exceedance of water quality standards and objectives, nor create conditions of nuisance in the receiving water.

13. The Clean Water Act (CWA) authorizes inclusion of BMP requirements in the NPDES permits under certain conditions. The nature of ship modification, repair, and maintenance facilities and activities, and the waste streams and pollutants associated with such facilities and activities is such that BMPs are appropriate and necessary. Implementation of a BMP program that emphasizes preventive measures is an effective way to control the potential discharge of pollutants and wastes to receiving waters.

Applicable Plans, Policies, Laws, and Regulations

14. The Regional Water Board adopted a *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean.

15. The immediate receiving body for the permitted discharge covered by this permit is Los Angeles Fish Harbor, which conveys water to the Los Angeles Inner Harbor. The Basin Plan contains beneficial uses and water quality objectives for the Los Angeles Inner Harbor. The beneficial uses listed in the Basin Plan for the Los Angeles Inner Harbor are:

Los Angeles-Long Beach Harbor (all other inner areas) – Hydro Unit No. 405.12

Existing uses: Industrial uses, navigational uses, non-contact water recreation, commercial and sports fishing, marine habitat, wildlife habitat, and preservation of rare, threatened or endangered species.

Potential uses: Water contact recreation, and shellfish harvesting.

16. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through 3-4. However, those ammonia objectives were revised on March 4, 2004, by the Regional Water Board with the adoption of Resolution No. 2004-022, Amendment to the *Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands) with the Beneficial Use designations for protection of "Aquatic Life".* The ammonia Basin Plan amendment was approved by the Office of Administrative Law on September 15, 2004 and by USEPA on May 19, 2005. The amendment revised the Basin Plan by updating the ammonia objectives for inland surface waters not characteristic of freshwater such that they are consistent with the USEPA "*Ambient Water Quality Criteria for Ammonia (Saltwater) – 1989*." The amendment revised the regulatory provisions of the Basin Plan by adding language to Chapter 3, "Water Quality Objectives."

    The amendment contains objectives for a 4-day average concentration of un-ionized ammonia of 0.035 mg/L, and a 1-hour average concentration of un-ionized ammonia of 0.233 mg/L. The objectives are fixed concentrations of un-ionized ammonia, independent of pH, temperature, or salinity. The amendment also contains an implementation procedure to convert un-ionized ammonia objectives to total ammonia effluent limitations. The implementation plan as outlined is to be used to determine the appropriate effluent limit for Total Nitrogen.

    Water Quality Control Policy for Enclosed Bays and Estuaries of California (State Board Resolution No. 74-43). In May 1974, the State Board adopted Resolution 74-43 which lists principles of management that include the State Board's desire to phase out all discharges (exclusive of cooling waters) to enclosed bays and estuaries as soon as practicable. This Order includes prohibitions in compliance with the aforementioned policy including a prohibition of discharges of rubbish or refuse into surface waters at any place where they would be eventually transported to enclosed bays and estuaries.

17. **Thermal Plan.** The State Water Resources Control Board (State Board) adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

    Subsequently, a white paper was developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region* The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. A survey was completed for several kinds of fish and the 86 °F temperature was found to be

protective. The new temperature effluent limitation was developed that is reflective of new information available that indicates that the 100 °F temperature is not protective of aquatic organisms, but that 86 °F is protective.

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

18. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.

19. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements included in this Order implement the SIP.

    The SIP requires the Discharger's submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limits (WQBELs) and to calculate the effluent limitations. The CTR criteria for salt water or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of Fish Harbor of Los Angeles Inner Harbor.

20. **Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under Section 5.3 of the SIP, a compliance schedule may not exceed five years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order includes compliance schedules and interim effluent limitations.

21. **Antidegradation Policy.** Section 131.12 requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16,

which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution 68-16.

22. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed.

23. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 C.F.R. § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

24. **Stringency of Requirements for Individual Pollutants.** This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), oil and grease, total suspended solids (TSS), and turbidity. Restrictions on biochemical oxygen demand (BOD), oil and grease, total suspended solids (TSS), and turbidity are specified in federal regulations as discussed in section IV.B in the Fact Sheet, and the permit's technology-based pollutant restrictions are no more stringent than required by the CWA. Water quality-based effluent limitations (WQBELs) have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual WQBELs are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.

25. Under 40 CFR 122.44(d), Water Quality Standards and State Requirements, "Limitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants), which the Director [permitting authority] determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Where numeric effluent limitations for a pollutant or pollutant parameter have not been

established in the applicable state water quality control plan, 40 CFR section 122.44(d)(1)(vi) specifies that WQBELs may be set based on U.S. EPA criteria, and may be supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria, and to fully protect designated beneficial uses.

26. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were promulgated by U.S. EPA for some pollutants in this discharge. Effluent limitations for pollutants not subject to U.S. EPA effluent limitation guidelines are based on one of the following: Best Professional Judgment (BPJ) of BPT, BCT or BAT; current plant performance; or WQBELs. The WQBELs are based on the Basin Plan, other State plans and policies, or U.S. EPA water quality criteria which are taken from the CTR. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water. The attached Fact Sheet for this Order includes specific bases for the effluent limitations.

27. 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both. Generally, mass-based effluent limits would ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, would discourage the reduction in treatment efficiency during low flow periods and would require proper operation of treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low flow periods and still meet its mass-based effluent limits.

28. Effluent limitations established pursuant to sections 301 (Effluent Limitations), 302 (Water Quality-Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 304 (Information and Guidelines), and 402 (NPDES) of the CWA and amendments thereto, are applicable to the discharges herein. These requirements, as they are met, will maintain and protect the beneficial uses of Fish Harbor of Los Angeles Inner Harbor.

Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

29. The Regional Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Board's many diverse programs, particularly TMDLs, to better assess cumulative impacts of pollutants from all point and non-point sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the

environmental and economic impacts within the watershed. The TMDLs will establish waste load allocation (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

30. The U.S. EPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. The 2002 State Board's California 303(d) List classifies Fish Harbor of Los Angeles Inner Harbor as impaired. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include DDT, PAHs, and PCBs.

Data Availability and Reasonable Potential Monitoring

31. 40 CFR 122.44(d)(1)(ii) requires that each toxic pollutant be analyzed with respect to its reasonable potential when determining whether a discharge (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality objective. This is done by performing a reasonable potential analysis (RPA) for each pollutant.

32. The SIP requires, and the *Technical Support Document for Water Quality-based Toxics Control* (TSD) recommends, that dischargers submit sufficient data to conduct the determination of priority pollutants requiring WQBELs and to calculate the effluent limitations. There are insufficient monitoring data available to perform a complete RPA for the priority pollutants. This permit includes monitoring requirements to obtain the necessary data to complete the RPA analysis for each priority pollutant.

    However, there are some data available. There are two data points for discharges of wastewater from Outfalls 001 for water washing operations and other effluent. The concentrations detected for copper, lead, and zinc exceed the CTR-based WQBELs. Hence, this permit includes effluent limits for these constituents.

    There are also data available for one storm water discharge. The detected concentrations for several of the metals exceed the CTR-based WQBELs. Since there is only one data point, this permit includes requirements to update the SWPPP, to implement BMPs and to conduct additional sampling.

33. This permit will be reopened to include effluent limitations for other toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of the Order.

Compliance Schedules and Interim Limitations

34. Data submitted in self-monitoring reports indicate that copper, lead and zinc have been detected at concentrations greater than the new WQBELs proposed in this Order. The Discharger may not be able to achieve immediate compliance with the WQBELs for the priority pollutants (copper, lead and zinc) contained in Section I.B.4. of this Order. Hence, this Order includes a compliance schedule designed to provide time for the Discharger to determine the appropriate treatment technology and implement it to treat the discharge to meet final effluent limitations.

35. The SIP requires that the Regional Board establish other interim requirements, such as requiring the Discharger to develop a pollutant minimization plan and/or source control measures, and to participate in the activities necessary to achieve the final effluent limitations.

    These interim limitations shall be effective until July 27, 2009, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

CEQA and Notifications

36. The Regional Board has notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge, and has provided them with an opportunity to submit their written views and recommendations.

37. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the revised tentative requirements.

38. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to section 402 of the Federal Clean Water Act or amendments thereto, and shall take effect 50 days (July 28, 2007) after the date of its adoption, in accordance with federal law, provided the Regional Administrator, U.S. EPA, has no objections.

39. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, Office of Chief Counsel, ATTN: Elizabeth Miller Jennings, Senior Staff Counsel, 1001 I Street, 22nd Floor, Sacramento, California, 95814, within 30 days of adoption of this Order.

40. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) in accordance with the California Water Code, section 13389.

IT IS HEREBY ORDERED that Al Larson Boat Shop, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted there under, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. Discharge Prohibitions

1. Wastes discharged shall be limited to effluent from low-pressure water blasting water, storm water, and harbor waters. Discharges from accidental spills or other sources are strictly prohibited.

2. The discharge of particulate and paint residues from the dry dock or marine ways into the Fish Harbor of Los Angeles Inner Harbor (receiving water), or waters of the United States, is prohibited.

3. The discharge of solids (spent sandblast grit or dry paint chips), generated during sandblasting activities, into the receiving water is prohibited. This material must be collected and disposed offsite and documentation of disposal must be provided.

4. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Fish Harbor of Los Angeles Inner Harbor, or waters of the United States, are prohibited.

5. The placement of spent abrasive and paint residue in areas where the materials may be washed into Fish Harbor of Los Angeles Inner Harbor by storm water runoff, or by tide or wave action, is prohibited.

6. The discharge of floating oil or other floating material from any activity that may cause deleterious bottom deposits, turbidity, or discoloration in surface waters, is prohibited.

7. The discharge of particulates from the dry dock shall not exceed those quantities remaining after the following measures have been taken: prior to the submergence of any portion of the dry dock, the Discharger shall remove spent abrasives, paint residues, and other debris from those portions of the dry dock floor which are reasonably accessible, to a degree achievable by scraping, broom cleaning, and pressure washing as soon as practical, and prior to introduction of another vessel. This provision shall not apply in cases where a vessel must be introduced into the dry dock on an emergency basis, such as to prevent sinking, or leakage of oil or other materials. The Executive Officer shall be notified in such cases.

8. The discharge of wastes and pollutants from underwater operations, such as underwater paint and/or coating removal and underwater hull cleaning (e.g. scraping), is prohibited.

9. The discharge of the initial 0.1 inch of storm water runoff from high-risk areas is prohibited. High risk areas are areas where wastes or pollutants from ship repair, modification, and maintenance activities are subject to exposure to precipitation, run-on, and/or runoff. The wastes or pollutants include, but are not limited to abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, cleaners, hazardous substances, toxic pollutants, non-conventional pollutants, materials of petroleum origin, or other substances that are designated as hazardous under Section 101 (14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The wastes also include any chemical the facility is required to report pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA). The high risk areas shall include but are not limited to all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas,

waste treatment, storage and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential sources of pollutants.

B. Discharge Specification

1. The discharge shall not contain hazardous substances equal to, or in excess of, eportable quantity listed in 40 Part CFR 117 and/or 40 Part CFR 302.

2. Al Larson Boat Shop shall reduce or prevent the discharge of pollutants through implementation of Best Available Technology [BAT, CWA § 301 (b)(2)(A)] for toxic and non-conventional pollutants.

3. Waste management systems (e.g., waste storage facilities) shall be designed, constructed, operated, and maintained so as to prevent the discharge of pollutants, and maintain indigenous marine life and a healthy and diverse marine community.

4. Waste discharged shall be essentially free of:

   a. Material (other than ship launch grease/wax) that is floatable or will become floatable upon discharge.

   b. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.

   c. Substances which will accumulate to toxic levels in marine waters, sediments, or biota.

   d. Materials that result in aesthetically undesirable discoloration of receiving waters.

   e. Substances that significantly decrease the natural light to benthic communities and other marine life.

C. Effluent Limitations

The discharge of low-pressure water blasting water and harbor water from Discharge Serial Nos. 001 and the discharge of storm water from Discharge Serial No. 002, in excess of the following limitations is prohibited:

1. A pH value less than 6.5 or greater than 8.5.

2. A temperature greater than 86°F.

3. Final effluent limitations for discharges of low-pressure water blasting water and harbor water through NPDES Discharge Serial Nos. 001:

Constituents	Units	Discharge Limitations			
		Monthly Average	Mass[1]	Daily Maximum	Mass[1]
Total suspended solids	mg/L	50	0.6	75	0.9
Turbidity	NTU	50	--	75	--
BOD_5 @ 20°C	mg/L	20	0.2	30	0.4
Oil and grease	mg/L	10	0.1	15	0.2
Settleable solids	ml/L	0.1	--	0.3	--
Sulfides	mg/L	--	--	1.0	0.01
Phenols[2]	mg/L	--	--	1.0	0.01
Copper[3]	µg/L	2.9	0.00003	5.8	0.00007
Lead[3]	µg/L	7.0	0.00008	14	0.0002
Zinc[3]	µg/L	47.4	0.0006	95	0.001
Total petroleum hydrocarbons[4]	µg/L	--	--	100	0.0012

[1] The mass-based effluent limitations for pollutants are based on a maximum low-pressure water blasting discharge flow rate of 1,440 gpd.
[2] Total phenols measured by EPA Method 420.1 or 420.2 (using the 4AAP method).
[3] Results are total recoverable.
[4] Total petroleum hydrocarbons includes all fuels, gasoline, diesel and jet fuel. Analysis should be completed using EPA 418.1 and EPA 8015 (modified) methods.

4. Final effluent limitations for discharges of storm water through Discharge Serial No. 002:

Constituents	Units	Monthly Average	Daily Maximum
Total suspended solids	mg/L	50	75
Turbidity	NTU	50	75
BOD_5 @ 20°C	mg/L	20	30
Oil and grease	mg/L	10	15
Settleable solids	ml/L	0.1	0.3
Sulfides	mg/L	--	1.0
Phenols[1]	mg/L	--	1.0
Total petroleum hydrocarbons[2]	µg/L	--	100

[1] Total phenols measured by EPA Method 420.1 or 420.2 (using the 4AAP method).
[2] Total petroleum hydrocarbons includes all fuels, gasoline, diesel and jet fuel. Analysis should be completed using EPA 418.1 and EPA 8015 (modified) methods.

5. Interim effluent limitations. From the effective date of this Order until July 27, 2009, the discharge of an effluent in excess of the following limitations from Discharge Serial No. 001 is prohibited:

Constituents	Units	Discharge Limitations	
		Daily Maximum	Mass[1] (lbs/day)
Copper[1]	µg/L	2,000	0.02
Lead[1]	µg/L	17	0.0002
Zinc[1]	µg/L	530	0.006

[1] Results are total recoverable.

Discharges after July 27, 2009, must comply with the limits for these constituents in the Table in Section I.B.4.

D. Receiving Water Limitations

1. The discharge shall not cause the following conditions to exist in the receiving waters:

   a) Floating, suspended or deposited macroscopic particulate matter or foam;

   b) Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

   c) Visible, floating, suspended or deposited oil or other products of petroleum origin;

   d) Bottom deposits or aquatic growths; or,

   e) Toxic or other deleterious substances to be present in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge shall not cause nuisance, or adversely effect beneficial uses of the receiving water.

3. No discharge shall cause a surface water temperature rise greater than $5^{o}F$ above the natural temperature of the receiving waters at any time or place.

4. The discharge shall not cause the following limitations to be exceeded in the receiving waters at any place within the waterbody of the receiving waters:

   a) The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units;

   b) Dissolved oxygen shall not be less than 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation;

   c) Dissolved sulfide shall not be greater than 0.1 mg/L;

   d) The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through 3-4. However, those ammonia objectives were revised on March 4, 2004, by the Regional Water Board with the adoption of Resolution No. 2004-022, Amendment to the *Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands) with the Beneficial Use designations for protection of "Aquatic Life".* The ammonia Basin Plan amendment was approved by the Office of Administrative Law on September 15, 2004 and by USEPA on May

19, 2005. The amendment revised the Basin Plan by updating the ammonia objectives for inland surface waters not characteristic of freshwater such that they are consistent with the USEPA "*Ambient Water Quality Criteria for Ammonia (Saltwater) – 1989*." The amendment revised the regulatory provisions of the Basin Plan by adding language to Chapter 3, "Water Quality Objectives."

The amendment contains objectives for a 4-day average concentration of un-ionized ammonia of 0.035 mg/L, and a 1-hour average concentration of un-ionized ammonia of 0.233 mg/L. The objectives are fixed concentrations of un-ionized ammonia, independent of pH, temperature, or salinity. The amendment also contains an implementation procedure to convert un-ionized ammonia objectives to total ammonia effluent limitations. The implementation plan as outlined is to be used to determine the appropriate effluent limit for Total Nitrogen.

e) The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or State Board. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Regional Board will revise or modify this Order in accordance with such standards.

5. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or State Board. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Regional Board will revise or modify this Order in accordance with such standards.

6. The discharge shall not cause the following to be present in receiving waters:

   a) Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses;

   b) Chemical substances in amounts that adversely affect any designated beneficial use;

   c) Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water;

   d) Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses;

   e) Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses;

f) Substances that result in increases of BOD_5 20°C that adversely affect beneficial uses;

7. The discharge shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.

8. The discharge shall not degrade surface water communities and populations including vertebrate, invertebrate, and plant species.

9. The discharge shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload their design capacity.

10. The discharge shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

11. Toxicity limitations:

a) Acute Toxicity Limitation and Requirements

(1) The acute toxicity of the effluent and storm water shall be such that (i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour (or shorter test duration period with Executive Officer approval) static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.

(2) For the first six months of the Order term, and during the remainder of the Order term if either of the above requirements [Section I.D.11.a(1)] is not met, the Discharger shall conduct an additional test for each subsequent discharge event following a failed test until six samples are collected. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the completion of the test, and the additional tests shall begin within 3 business days of the receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing (i.e., revert to quarterly). However if the results are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the source(s) of toxicity.

Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the objective.

(3) If any two out of the initial test and the additional six acute toxicity bioassay tests result in less than 70% survival, including the initial test, the Discharger shall immediately begin a TIE.

(4) The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. CI-6920.

(5) Preparation of an Initial Investigation TRE Workplan

i. The Discharger shall submit a detailed initial investigation Toxicity Reduction Evaluation (TRE) workplan to the Executive Officer of the Regional Board for approval within 90 days of the effective date of this permit. The Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance or current versions. At a minimum, the TRE workplan must contain the provisions in Attachment C. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

ii. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;

iii. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility; and,

iv. If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).

II. REQUIREMENTS

A. Compliance Plan

1. Within six months after the effective date of the Order, the Discharger shall develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of copper, lead, and zinc. in their discharge. This plan must evaluate options to achieve compliance with the final permit limitations specified in Provisions I.C.3 and I.C.4.

2. The Discharger shall submit annual reports to describe the progress of studies and or actions undertaken to reduce copper, lead, and zinc in the effluent, and to achieve compliance with the final limits in this Order by the deadline specified in Provision I.C.5. The Regional Board shall receive the first annual progress report at the same time the annual summary report is due, as required in Section I.B of *M&RP* No. 6920.

3. The interim limits stipulated in Sections I.C.5. shall be in effect for a period not to extend beyond July 27, 2009. Thereafter, the Discharger shall comply with the limitations specified in Sections I.C.3 and I.C.4. of this Order.

B. The Discharger shall submit, within 90 days of the effective date of this Order:

1. An updated SWPPP that describes site-specific management practices for minimizing contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged to waters of the State. The tasks shall address the following specific areas of concern: spent grit storage, oil spills, drum storage, and chemical storage. The SWPPP shall be developed in accordance with the requirements in *Storm Water Pollution Prevention Plan Requirements* (Attachment A).

   The Discharger shall submit a list within 90 days of adoption of this Order, which identifies high risk areas.

   The Discharger shall develop a plan to capture 0.1 inch of the first storm water flush from high risk areas to be disposed to either the sanitary sewer or to an offsite disposal facility. The plan shall be submitted to the Regional Board for review six months after the date of adoption of the permit. The plan must include calculation completed to determine the amount of water to be collected and the projected plan for collecting the runoff and the schedule for implementing the chosen method. After reviewing the plan, the Executive Officer will provide approval to implement it. Within 15 days of completion of the installation of any required equipment or connections required, the Discharger shall submit a written notification to the Executive Officer that the diversion or collection system has been completed.

2. A Best Management Practices Plan (BMPP) that entails site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. The BMPP shall be consistent with the general guidance contained in the EPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential of hazardous or toxic waste/material discharge to surface waters. In addition, the BMPP shall include a provision to research alternative methods for disposal of non-storm water discharges (e.g., low- pressure water blasting water), and to prevent the discharge of contaminated storm water into Fish Harbor of Los Angeles Inner Harbor. The BMPP should address employee education and training, record maintenance including observation records and preventative maintenance records, and notification of spills to the Regional Board. The BMPP shall also include a provision to capture spent abrasive and any other solids resulting from sand blasting activities.

   The Discharger shall implement or require the implementation of the most effective combination of BMPs for storm water pollution control. When implemented, BMPs are intended to result in the reduction of pollutants in storm water. These BMPs shall be implemented no later than six(6) months after the date of adoption of this Order.

   Within 15 days of completion of all the measures, the Discharger shall submit a written notification to the Executive Officer that the measures have been completed.

3. The Discharger shall submit an updated Spill Contingency Plan. The Contingency Plan shall be site-specific and shall cover all areas of the facility. The Contingency Plan shall be reviewed at the same time as the SWPPP and BMPP. Updated information shall be submitted within 30 days of the revision.

   Plans shall cover all areas of the facility and shall include an updated drainage map for the facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and address the feasibility of containment and/or treatment of the storm water.

D. Implementation of a BMP Program does not, in and of itself, constitute compliance with the receiving water limitations or other requirements of this Order. If discharges cause or contribute to any impairment of a beneficial use or any violation of the receiving water limitations of this Order, the Discharger shall conduct an investigation to determine the source(s) of pollutants causing or contributing to such impairment or violation, and the persistence thereof. Based on the findings of the completed investigation, the Discharger shall submit to the Executive Officer a technical report that presents the results of this investigation, evaluates whether its BMP Program will prevent future beneficial use impairment and receiving water limitation violation, and includes a description of and schedule for implementation of any necessary modifications to its BMP Program. The Discharger shall complete and submit the technical report within 60 days after the impairment or violation is identified, unless a different time frame is specified by the Executive Officer. The Discharger shall document the status and effectiveness of such modifications to the BMP Program in its annual report (see M&RP 6920).

E. A copy of this Order, the SWPPP, the BMP Program, and the Spill Contingency Plan for the facility shall be kept at a readily accessible location and shall be available on-site at all times.

F. In the determination of compliance with the monthly average limitations, the following provisions shall apply to all constituents:

   1. If the analytical result of a single sample, monitored monthly or at a lesser frequency, does not exceed the monthly average limit for that constituent, the Discharger will have demonstrated compliance with the monthly average limit for that month.

   2. If the analytical result of a single sample, monitored monthly or at a lesser frequency, exceeds the monthly average limit for any constituent, the Discharger shall collect three additional samples at approximately equal intervals during the month. All four analytical results shall be reported in the monitoring report for that month.

If the numerical average of the analytical result of these four samples does not exceed the monthly average limit for that constituent, compliance with the monthly average limit has been demonstrated for that month. Otherwise, the monthly average limit has been violated.

2. In the event of noncompliance with a monthly average effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average effluent limitation has been demonstrated.

3. Any single reported value which exceeds a daily maximum effluent concentration of the waste discharge requirements shall be considered a violation of said limit.

If there is any conflict between the provisions stated herein before and the attached "Standard Provisions", those stated hereinbefore prevail.

G. Pursuant to the requirements of 40 CFR Section 122.42(a), the Discharger must notify the Board as soon as it knows, or has reason to believe (1) that it has begun or expected to begin, to use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of toxic pollutant not limited by this Order has occurred, or will occur, in concentrations that exceed the specified limitations in 40 CFR Section 122.42(a).

H. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.

I. The Discharger shall comply with the waste load allocations that will be developed from the TMDL process for the 303(d)-listed pollutants.

J. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit.

K. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream which ultimately discharges to waters of the United States is prohibited.

L. The Discharger shall notify the Executive Officer in writing no later than six (6) months prior to planned discharge of any chemical, other than chlorine or other product previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

a. Name and general composition of the chemical,
b. Frequency of use,
c. Quantities to be used,
d. Proposed discharge concentrations, and
e. U.S. EPA registration number, if applicable.

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

M. The Regional Board and U.S. EPA shall be notified immediately by telephone, of the presence of adverse conditions in the receiving waters or on beaches and shores as a result of wastes discharged; written confirmation shall follow as soon as possible but not later than five working days after occurrence.

III. PROVISIONS

A. This Order includes the attached *Standard Provisions and General Monitoring and Reporting Requirements* (Standard Provisions, Attachment N). If there is any conflict between provisions stated herein and the attached Standard Provisions, those provisions stated herein shall prevail.

B. This Order includes the attached Monitoring and Reporting Program No. CI-6920. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former shall prevail.

C. This Order includes the attached *Storm Water Pollution Prevention Plan Requirements* (Attachment A).

D. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 125.62 and 125.64. Causes for taking such actions include, but are not limited to: failure to comply with any condition of this Order; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

E. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Board to local agencies.

F. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.

G. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, and 423 of the Federal Clean Water Act and amendments thereto.

H. Compliance Determination

1. Compliance with single constituent effluent limitation -- If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater

than or equal to the reported Minimum Level (see Effluent Monitoring Requirements II.G. of M&RP), then the Discharger is out of compliance.

2. Compliance with effluent limitations expressed as a sum of several constituents – If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.

3. Compliance with effluent limitations expressed as a median – in determining compliance with a median limitation, the analytical results in a set of data will be arranged in order of magnitude (either increasing or decreasing order); and

   a. If the number of measurements (n) is odd, then the median will be calculated as = $X_{(n+1)/2}$, or
   b. If the number of measurements (n) is even, then the median will be calculated as $[X_{n/2} + X_{(n/2)+1}]$, i.e. the midpoint between the n/2 and n/2+1 data points.

IV. REOPENERS

A. This Order may be reopened and modified, to incorporate new limits based on future RPA to be conducted, upon completion of the collection of additional data by the Discharger.

B. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.

C. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new minimum levels (MLs) for each pollutant.

D. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, or the adoption of a TMDL for Fish Harbor of Los Angeles Harbor.

E. This Order may be reopened upon the submission by the Discharger, of adequate information, as determined by the Regional Board, to provide for dilution credits or a mixing zone, as may be appropriate.

F. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this order and permit, endangerment to human health or the environment resulting from the permitted activity.

V. EXPIRATION DATE

This Order expires on May 10, 2012.

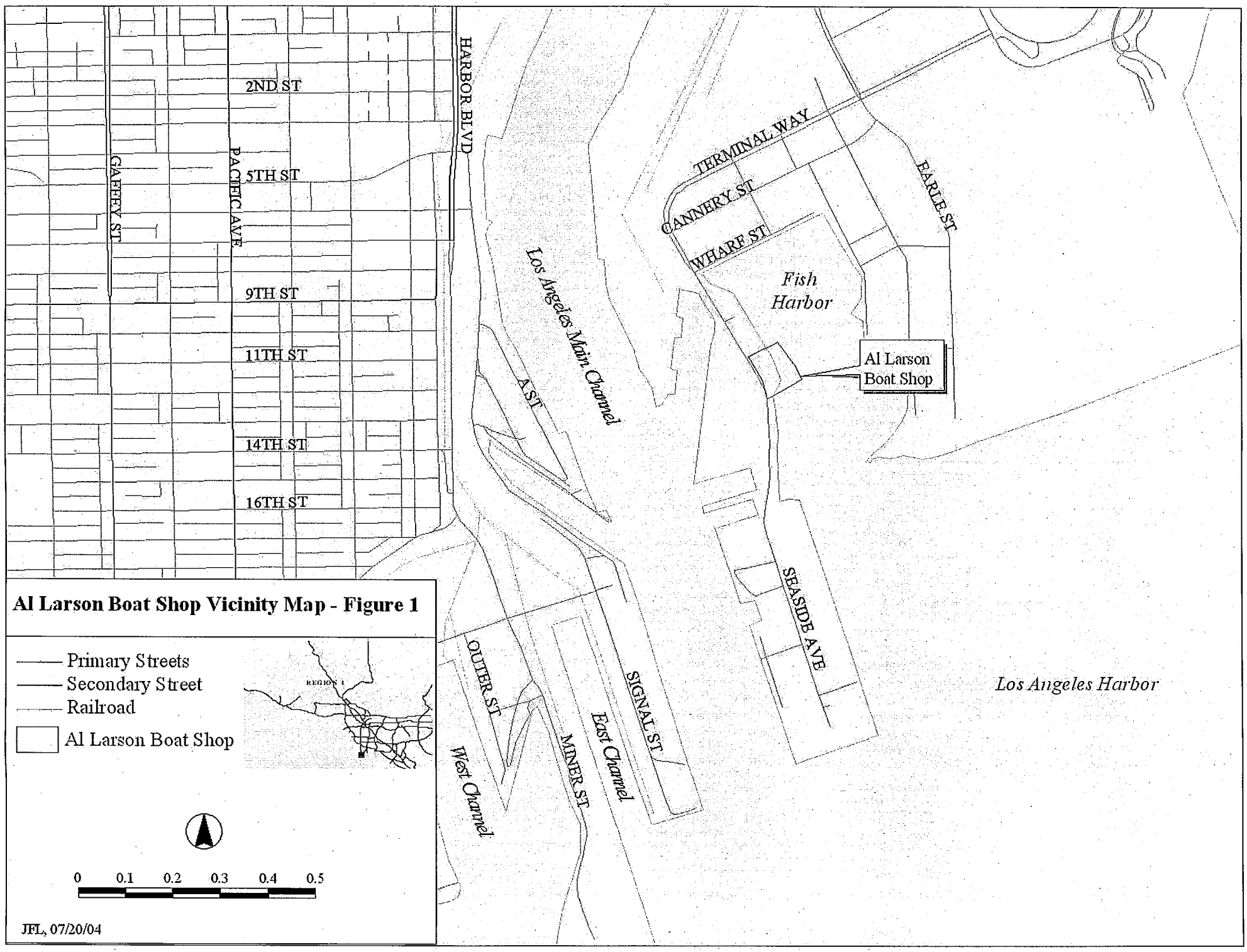
The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

VI. RESCISSION

Order No. 97-079, adopted by this Regional Board on June 16, 1997, is hereby rescinded except for enforcement purposes.

I, Deborah J. Smith, Interim Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 7, 2007.

Deborah J. Smith
Interim Executive Officer


2ND ST
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9TH ST
11TH ST
14TH ST
16TH ST
HARBOR BLVD
GAFFEY ST
PACIFIC AVE
TERMINAL WAY
CANNERY ST
WHARF ST
EARLE ST
Fish Harbor
Al Larson Boat Shop
Los Angeles Main Channel
A ST
SEASIDE AVE
OUTER ST
SIGNAL ST
East Channel
MINER ST
West Channel
Los Angeles Harbor
Al Larson Boat Shop Vicinity Map - Figure 1
Primary Streets
Secondary Street
Railroad
Al Larson Boat Shop
REGION 1
0 0.1 0.2 0.3 0.4 0.5
JFL, 07/20/04

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ATTACHMENT "A"

SECTION A: STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

1. *Implementation Schedule*

A storm water pollution prevention plan (SWPPP) shall be developed and implemented for each facility covered by this General Permit in accordance with the following schedule.

a. Facility operators beginning industrial activities before October 1, 1992 shall develop and implement the SWPPP no later than October 1, 1992. Facility operators beginning industrial activities after October 1, 1992 shall develop and implement the SWPPP when industrial activities begin.

b. Existing facility operators that submitted a Notice of Intent (NOI), pursuant to State Water Resources Control Board (State Water Board) Order No. 91-013-DWQ (as amended by Order No. 92-12) or San Francisco Bay Regional Water Quality Control Board (Regional Water Board) Order No. 92-11 (as amended by Order No. 92-116), shall continue to implement their existing SWPPP and shall implement any necessary revisions to their SWPPP in a timely manner, but in no case later than August 1, 1997.

2. *Objectives*

The SWPPP has two major objectives: (a) to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of storm water discharges and authorized non-storm water discharges from the facility; and (b) to identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges. BMPs may include a variety of pollution prevention measures or other low-cost and pollution control measures. They are generally categorized as non-structural BMPs (activity schedules, prohibitions of practices, maintenance procedures, and other low-cost measures) and as structural BMPs (treatment measures, run-off controls, overhead coverage.) To achieve these objectives, facility operators should consider the five phase process for SWPPP development and implementation as shown in Table A.

The SWPPP requirements are designed to be sufficiently flexible to meet the needs of various facilities. SWPPP requirements that are not applicable to a facility should not be included in the SWPPP.

A facility's SWPPP is a written document that shall contain a compliance activity schedule, a description of industrial activities and pollutant sources, descriptions of BMPs, drawings, maps, and relevant copies or references of parts of other plans. The SWPPP shall be revised whenever appropriate and shall be readily available for review by facility employees or Regional Water Board inspectors.

3. *Planning and Organization*

a. *Pollution Prevention Team*

The SWPPP shall identify a specific individual or individuals and their positions within the facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in Section B of this General Permit. The SWPPP shall clearly identify the General Permit related responsibilities, duties, and activities of each team member. For small facilities, storm water pollution prevention teams may consist of one individual where appropriate.

b. *Review Other Requirements and Existing Facility Plans*

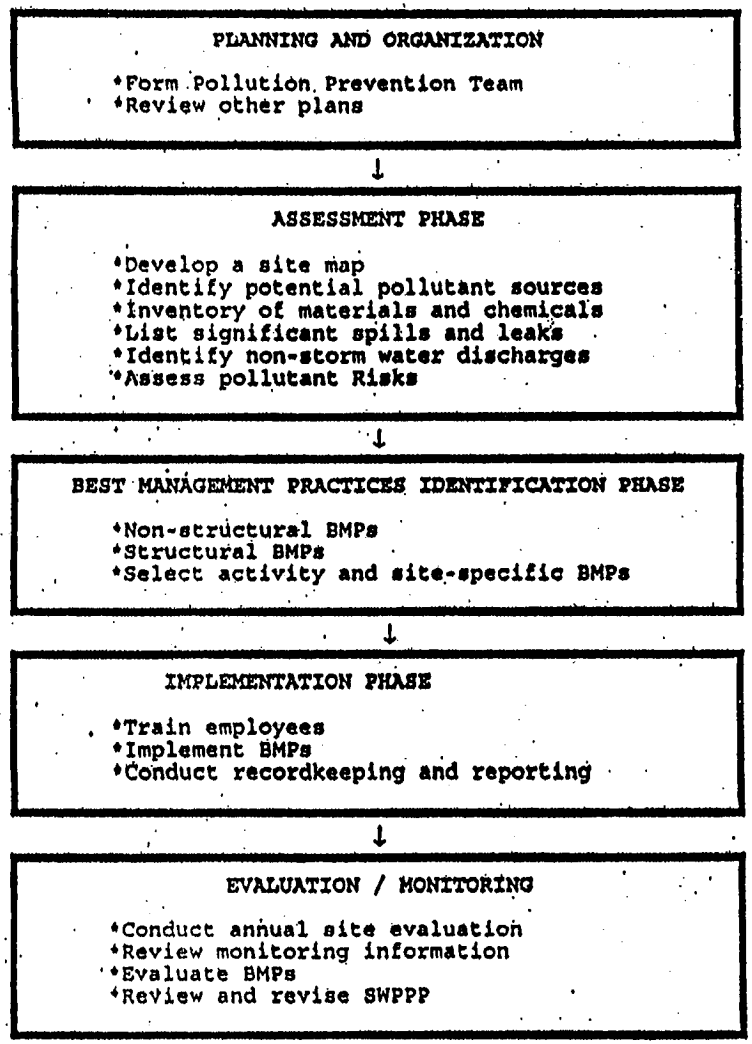
The SWPPP may incorporate or reference the appropriate elements of other regulatory requirements. Facility operators should review all local, State, and Federal requirements that impact, complement, or are consistent with the requirements of this General Permit. Facility operators should identify any existing facility plans that contain storm water pollutant control measures or relate to the requirements of this General Permit. As examples, facility operators whose facilities are subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials. Similarly, facility operators whose facilities are subject to air quality related permits and regulations may already have evaluated industrial activities that generate dust or particulates.

4. *Site Map*

The SWPPP shall include a site map. The site map shall be provided on an 8-½ x 11 inch or larger sheet and include notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, facility operators may provide the required information on multiple site maps.

TABLE A

FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL STORM WATER POLLUTION PREVENTION PLANS



The following information shall be included on the site map:

a. The facility boundaries; the outline of all storm water drainage areas within the facility boundaries; portions of the drainage area impacted by run-on from surrounding areas; and direction of flow of each drainage area, on-site surface water bodies, and areas of soil erosion. The map shall also identify nearby water bodies (such as rivers, lakes, ponds) and municipal storm drain inlets where the facility's storm water discharges and authorized non-storm water discharges may be received.

b. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

c. An outline of all impervious areas of the facility, including paved areas, buildings, covered storage areas, or other roofed structures.

d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in Section A.6.a.iv. below have occurred.

e. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and other areas of industrial activity which are potential pollutant sources.

5. *List of Significant Materials*

The SWPPP shall include a list of significant materials handled and stored at the site. For each material on the list, describe the locations where the material is being stored, received, shipped, and handled, as well as the typical quantities and frequency. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. *Description of Potential Pollutant Sources*

a. The SWPPP shall include a narrative description of the facility's industrial activities, as identified in Section A.4.e above, associated potential pollutant sources, and potential pollutants that could be discharged in storm water discharges or authorized non-storm water discharges. At a minimum, the following items related to a facility's industrial activities shall be considered:

i. Industrial Processes

Describe each industrial process, the type, characteristics, and quantity of significant materials used in or resulting from the process, and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

ii. Material Handling and Storage Areas

Describe each handling and storage area, type, characteristics, and quantity of significant materials handled or stored, description of the shipping, receiving, and loading procedures, and the spill or leak prevention and response procedures. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

iii. Dust and Particulate Generating Activities

Describe all industrial activities that generate dust or particulates that may be deposited within the facility's boundaries and identify their discharge locations; the characteristics of dust and particulate pollutants; the approximate quantity of dust and particulate pollutants that may be deposited within the facility boundaries; and a description of the primary areas of the facility where dust and particulate pollutants would settle.

iv. Significant Spills and Leaks

Describe materials that have spilled or leaked in significant quantities in storm water discharges or non-storm water discharges since April 17, 1994. Include toxic chemicals (listed in 40 CFR, Part 302) that have been discharged to storm water as reported on U.S. Environmental Protection Agency (U.S. EPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 Code of Federal Regulations [CFR], Parts 110, 117, and 302).

The description shall include the type, characteristics, and approximate quantity of the material spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that may be exposed to storm water or non-storm water discharges, and the preventative measures taken to ensure spill or leaks do not reoccur. Such list shall be updated as appropriate during the term of this General Permit.

v. Non-Storm Water Discharges

Facility operators shall investigate the facility to identify all non-storm water discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

All non-storm water discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area.

Non-storm water discharges that contain significant quantities of pollutants or that do not meet the conditions provided in Special Conditions D. are prohibited by this General Permit (Examples of prohibited non-storm water discharges are contact and non-contact cooling water, boiler blowdown, rinse water, wash water, etc.). Non-storm water discharges that meet the conditions provided in Special Condition D. are authorized by this General Permit. The SWPPP must include BMPs to prevent or reduce contact of non-storm water discharges with significant materials or equipment.

vi. Soil Erosion

Describe the facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges.

b. The SWPPP shall include a summary of all areas of industrial activities, potential pollutant sources, and

potential pollutants. This information should be summarized similar to Table B. The last column of Table B, "Control Practices", should be completed in accordance with Section A.8. below.

7. *Assessment of Potential Pollutant Sources*

a. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in A.6. above to determine:

i. Which areas of the facility are likely sources of pollutants in storm water discharges and authorized non-storm water discharges, and

ii. Which pollutants are likely to be present in storm water discharges and authorized non-storm water discharges. Facility operators shall consider and evaluate various factors when performing this assessment such as current storm water BMPs; quantities of significant materials handled, produced, stored, or disposed of; likelihood of exposure to storm water or authorized non-storm water discharges; history of spill or leaks; and run-on from outside sources.

b. Facility operators shall summarize the areas of the facility that are likely sources of pollutants and the corresponding pollutants that are likely to be present in storm water discharges and authorized non-storm water discharges.

Facility operators are required to develop and implement additional BMPs as appropriate and necessary to prevent or reduce pollutants associated with each pollutant source. The BMPs will be narratively described in Section 8 below.

8. *Storm Water Best Management Practices*

The SWPPP shall include a narrative description of the storm water BMPs to be implemented at the facility for each potential pollutant and its source identified in the site assessment phase (Sections A.6. and 7. above). The BMPs shall be developed and implemented to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Each pollutant and its source may require one or more BMPs. Some BMPs may be implemented for multiple pollutants and their sources, while other BMPs will be implemented for a very specific pollutant and its source.

TABLE B

EXAMPLE

ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND CORRESPONDING BEST MANAGEMENT PRACTICES
SUMMARY

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery	fuel oil	- Use spill and overflow protection - Minimize run-on of storm water into the fueling area - Cover fueling area
		Spills caused by topping off fuel tanks	fuel oil	- Use dry cleanup methods rather than hosing down area - Implement proper spill prevention control program
		Hosing or washing down fuel area	fuel oil	- Implement adequate preventative maintenance program to prevent tank and line leaks
		Leaking storage tanks	fuel oil	- Inspect fueling areas regularly to detect problems before they occur - Train employees on proper fueling, cleanup, and spill response techniques.
		Rainfall running off fueling area, and rainfall running onto and off fueling area	fuel oil	

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion on the effectiveness of each BMP to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. The SWPPP shall provide a summary of all BMPs implemented for each pollutant source. This information should be summarized similar to Table B.

Facility operators shall consider the following BMPs for implementation at the facility:

a. Non-Structural BMPs

Non-structural BMPs generally consist of processes, prohibitions, procedures, schedule of activities, etc., that prevent pollutants associated with industrial activity from contacting with storm water discharges and authorized non-storm water discharges. They are considered low technology, cost-effective measures. Facility operators should consider all possible non-structural BMPs options before considering additional structural BMPs (see Section A.8.b. below). Below is a list of non-structural BMPs that should be considered:

i. Good Housekeeping

Good housekeeping generally consist of practical procedures to maintain a clean and orderly facility.

ii. Preventive Maintenance

Preventive maintenance includes the regular inspection and maintenance of structural storm water controls (catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

iii. Spill Response

This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

iv. Material Handling and Storage

This includes all procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to storm water and authorized non-storm water discharges.

v. Employee Training

This includes training of personnel who are responsible for (1) implementing activities identified in the SWPPP, (2) conducting inspections, sampling, and visual observations, and (3) managing storm water. Training should address topics such as spill response, good housekeeping, and material handling procedures, and actions necessary to implement all BMPs identified in the SWPPP. The SWPPP shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

vi. Waste Handling/Recycling

This includes the procedures or processes to handle, store, or dispose of waste materials or recyclable materials.

vii. Recordkeeping and Internal Reporting

This includes the procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate facility personnel.

viii. Erosion Control and Site Stabilization

This includes a description of all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment control devices, etc.

ix. Inspections

This includes, in addition to the preventative maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be described to ensure adequate corrective actions are taken and SWPPPs are made.

x. Quality Assurance

This includes the procedures to ensure that all elements of the SWPPP and Monitoring Program are adequately conducted.

b. Structural BMPs

Where non-structural BMPs as identified in Section A.8.a. above are not effective, structural BMPs shall be considered. Structural BMPs generally consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that should be considered:

i. Overhead Coverage

This includes structures that provide horizontal coverage of materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

ii. Retention Ponds

This includes basins, ponds, surface impoundments, bermed areas, etc., that do not allow storm water to discharge from the facility.

iii. Control Devices

This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

iv. Secondary Containment Structures

This generally includes containment structures around storage tanks and other areas for the purpose of collecting any leaks or spills.

v. Treatment

This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., that reduce the pollutants in storm water discharges and authorized non-storm water discharges.

Annual Comprehensive Site Compliance Evaluation

The facility operator shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted within 8-16 months of each other. The SWPPP shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

a. A review of all visual observation records, inspection records, and sampling and analysis results.

b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system.

c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be included.

d. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary SWPPP revisions, (iv) schedule, as required in Section A.10.e, for implementing SWPPP revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the facility operator is in compliance with this General Permit. If the above certification cannot be provided, explain in the evaluation report why the facility operator is not in compliance with this General Permit. The evaluation report shall be submitted as part of the annual report, retained for at least five years, and signed and certified in accordance with Standard Provisions 9. and 10. of Section C. of this General Permit.

10. *SWPPP General Requirements*

a. The SWPPP shall be retained on site and made available upon request of a representative of the Regional Water Board and/or local storm water management agency (local agency) which receives the storm water discharges.

b. The Regional Water Board and/or local agency may notify the facility operator when the SWPPP does not meet one or more of the minimum requirements of this Section. As requested by the Regional Water Board and/or local agency, the facility operator shall submit an SWPPP revision and implementation schedule that meets the minimum requirements of this section to the Regional Water Board and/or local agency that requested the SWPPP revisions. Within 14 days after implementing the required SWPPP revisions, the facility operator shall provide written certification to the Regional Water Board and/or local agency that the revisions have been implemented.

c. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities which (i) may significantly increase the quantities of pollutants in storm water discharge, (ii) cause a new area of industrial activity at the facility to be exposed to storm water, or (iii) begin an industrial activity which would introduce a new pollutant source at the facility.

d. Other than as provided in Provisions B.11, B.12, and E.2 of the General Permit, the SWPPP shall be revised and implemented in a timely manner, but in no case more than 90 days after a facility operator determines that the SWPPP is in violation of any requirement(s) of this General Permit.

e. When any part of the SWPPP is infeasible to implement by the deadlines specified in Provision E.2 or Sections A.1, A.9, A.10.c, and A.10.d of this General Permit due to proposed significant structural changes, the facility operator shall submit a report to the Regional Water Board prior to the applicable deadline that (i) describes the portion of the SWPPP that is infeasible to implement by the deadline, (ii) provides justification for a time extension, (iii) provides a schedule for completing and implementing that portion of the SWPPP, and (iv) describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Such reports are subject to Regional Water Board approval and/or modifications. Facility operators shall provide written notification to the Regional Water Board within 14 days after the SWPPP revisions are implemented.

f. The SWPPP shall be provided, upon request, to the Regional Water Board. The SWPPP is considered a report that shall be available to the public by the Regional Water Board under Section 308(b) of the Clean Water Act.

Attachment C

GENERIC TOXICITY REDUCTION EVALUATION WORKPLAN (TRE)
INDUSTRIAL

1. Information and Data Acquisition
   - a. Regulatory information
     - i. NPDES permit limits
     - ii. Trigger
   - b. Facility monitoring data
     - i. NPDES monitoring data
     - ii. In-house monitoring data
     - iii. State agency monitoring data
   - c. Plant and Process Description
     - i. Process and treatment plant description
       - (1) numbers and types of streams
       - (2) their size
       - (3) scheduled changes or events in process stream operation
       - (4) types and configurations of equipment
       - (5) flow equalization facilities
       - (6) records of treatment plant upsets
     - ii. Physical/chemical monitoring data
       - (1) chemical analyses of process streams
       - (2) physical/chemical analyses of treatment streams

2. Housekeeping
   - a. Initiation of housekeeping study
     - i. Identify areas which may contribute to toxicity
     - ii. Reduce these contributions through best management practices (BMPs), administrative, and procedural controls
   - b. Evaluation of housekeeping practices
     - i. Review of plant policies
     - ii. "Walk-through" inspection
   - c. Identification of potential problem areas
     - i. Probability of release of toxic material
     - ii. Type and frequency of release which may occur
     - iii. Quantity of toxic substances involved
     - iv. Toxicity of substances released
     - v. Potential downstream impact of the substances released
     - vi. Effect of release on final effluent
   - d. Identification of corrective measures
     - i. Area cleanup
     - ii. Process or operational changes
     - iii. Material loss collection and recovery
     - iv. Chemical and biological testing of contained waters prior to release from diked storage areas
     - v. Increased storage capacity for contained waters
     - vi. Equipment modifications or changes
   - e. Selection of corrective measures
   - f. Implementation of corrective measures

3. Treatment Plant Optimization
   - a. Evaluation of influent wastestreams
     - i. Raw chemicals or materials used in the process
     - ii. Byproducts or reaction products produced during the process
     - iii. Reaction vessels, valves, piping systems, overflow points, and other mechanical aspects of the system
     - iv. Wastestreams produced, volumes, and routing paths

v. Non-point sources

b. Description and evaluation of the treatment system
   i. Design basis for each constituent, including variability in flow conditions and concentrations
   ii. Treatment sequence
   iii. Performance projections by constituents
   iv. Operational flexibility of each process
   v. Treatment objectives and projected effluent standards

c. Analysis of treatment system operation
   i. Flow loading
   ii. Mass loading
   iii. Frequency and impact of shock loadings
      (1) normal cleaning and maintenance
      (2) spills and upsets
   iv. Changes in operating procedures

4. Chemical optimization

a. Information gathering
   i. Examination of wastestreams produced by specific production processes
   ii. Chemicals and raw materials and their contaminants and by-products used in the process
   iii. Chemicals used in treatment
   iv. Chemicals and material use rates
   v. Percentage of chemical in final product
   vi. Chemical reuse and waste recycling activities

b. Process chemical review
   i. List all chemicals used
   ii. List all quantities
   iii. Determine pounds per product
   iv. Determine pounds per gallon of wastewater discharged

c. MSDS information review
   i. Obtain MSDS for all process chemicals discharged
   ii. Highlight MSDS sections on aquatic toxicity
   iii. Examine Hazardous Ingredient section and note "hazardous substances" listed
   iv. Categorize all chemicals by hazard and irritation potential and use standard references to obtain aquatic toxicity information, if possible

d. Chemical composition screen of incoming raw materials

e. Outcome of chemical optimization phase
   i. List of all chemicals used in processing and manufacturing the product
   ii. MSDS and literature reviews will be on file when needed
   iii. List of all chemicals and raw material purchased on a monthly basis and a record of production volumes during the same time period

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

STANDARD PROVISIONS, GENERAL MONITORING AND REPORTING REQUIREMENTS

"ATTACHMENT N"

A. General Requirements

1. Neither the disposal nor any handling of wastes shall cause pollution or nuisance.

2. Wastes discharged shall not contain any substances in concentrations toxic to human, animal, plant, or aquatic life.

3. This discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Clean Water Act, and amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

4. Wastes discharged shall not contain visible color,oil or grease, and shall not cause the appearance of color, grease, oil or oily slick, or persistent foam in the receiving waters or on channel banks, walls, inverts or other structures.

5. Wastes discharged shall not increase the natural turbidity of the receiving waters at the time of discharge.

6. Wastes discharged shall not cause the formation of sludge deposits.

7. Wastes discharged shall not damage flood control structures or facilities.

8. Oil or oily material, chemicals, refuse, or other pollutionable materials shall not be stored or deposited in areas where they may be picked up by rainfall and carried off of the property and/or discharged to surface waters. Any spill of such materials shall be contained and removed immediately.

9. The pH of wastes discharged shall at all times be within the range 6.0 to 9.0.

10. The temperature of wastes discharged shall not exceed 100° F.

11. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

12. Effluent limitations, national standards of performance and toxic and pretreatment effluent standards established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, 318 and 405 of the Federal Clean Water Act and amendments thereto are applicable to the discharge.

B. General Provisions

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

2. These requirements do not exempt the operator of the waste disposal facility from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this waste disposal facility, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes or required by other agencies.

3. The discharger must comply with all of the terms, requirements, and conditions of this order. Any violation of this order constitutes a violation of the Clean Water Act, its regulations and the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance; or a combination thereof.

4. A copy of these waste discharge specifications shall be maintained at the discharge facility so as to be available at all times to operating personnel.

5. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

6. The Regional Board, EPA, and other authorized representatives shall be allowed:

   a) Entry upon premises where a regulated facility is located or conducted, or where records are kept under conditions of this Order;

   (b) Access to copy any records that are kept under the conditions of this Order;

   (c) To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and

(d) To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the Clean Water Act and the California Water Code.

7. If the discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the discharger must apply for and obtain a new Order.

8. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. If a toxic effluent standard or prohibition is established for toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.

9. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

(a) Violation of any term or condition contained in this Order;

(b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

(c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

10. In the event the discharger is unable to comply with any of the conditions of this Order due to:

(a) breakdown of waste treatment equipment;

(b) accidents caused by human error or negligence; or

(c) other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

11. If there is any storage of hazardous or toxic materials or hydrocarbons at this facility and if the facility is not manned at all times, a 24-hour emergency response telephone number shall be prominently posted where it can easily be read from the outside.

12. The discharger shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

13. The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control including sludge use and disposal facilities (and related appurtenances) that are installed or used by the discharger to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar system that are installed by a discharger only when necessary to achieve compliance with the conditions of this Order.

14. This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the discharger for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

15. This Order does not convey any property rights of any sort, or any exclusive privilege.

16. The discharger shall furnish, within a reasonable time, any information the Regional Board or EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

17. All applications, reports, or information submitted to the Regional Board shall be signed:

    (a) In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates;

    (b) In the case of a partnership, by a general partner;

    (c) In the case of a sole proprietorship, by the proprietor;

(d) In the case of municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

18. The discharger shall notify the Board of:

(a) new introduction into such works of pollutants from a source which could be a new source as defined in section 306 of the Federal Clean Water Act, or amendments thereto, if such source were discharging pollutants to the waters of the United States,

(b) new introductions of pollutants into such works from a source which would be subject to Section 301 of the Federal Clean Water Act, or amendments thereto, if substantial change in the volume or character of pollutants being introduced into such works by a source introducing pollutants into such works at the time the waste discharge requirements were adopted.

Notice shall include a description of the quantity and quality of pollutants and the impact of such change on the quantity and quality of effluent from such publicly owned treatment works. A substantial change in volume is considered an increase of ten percent in the mean dry-weather flow rate. The discharger shall forward a copy of such notice directly to the Regional Administrator.

19. The discharger shall notify the Board not later than 120 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new report of waste discharge appropriate filing fee.

20. The discharger shall give advance notice to the Regional Board as soon as possible of any planned physical alterations or additions to the facility or of any planned changes in the facility or activity that may result in noncompliance with requirements.

21. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

22. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Regional Board as soon as they know or have reason to believe:

(a) that any activity has occurred or will occur that would result in the

discharge of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels:"

(i) One hundred micrograms per liter (100 µg/l);

(ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

(iv) The level established by the Regional Board in accordance with 40 CFR 122.44(f).

(b) that they have begun or expect to begin to use or manufacture intermediate or final product or byproduct of any toxic pollutant that was not reported on their application.

23. Bypass (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Regional Board may take enforcement action against the discharger for bypass unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.);

(b) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass that could occur during normal periods of equipment downtime or preventive maintenance; and

(c) The discharger submitted a notice at least ten days in advance of the need for a bypass to the Regional Board.

The discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable. The discharger shall submit notice of an unanticipated bypass as required in E-16.

24. A discharger that wishes to establish the affirmative defense of an upset in an action brought for non- compliance shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(a) an upset occurred and that the discharger can identify the cause(s) of the upset;

(b) the permitted facility was being properly operated by the time of the upset;

(c) the discharger submitted notice of the upset as required in E-16; and

(d) the discharger complied with any remedial measures required.

No determination made before an action for noncompliance, such as during administrative review of claims that non-compliance was caused by an upset,is final administrative action subject to judicial review.

In any enforcement proceeding, the discharger seeking to establish the occurrence of an upset has the burden of proof.

25. This Order is not transferable to any person except after notice to the Regional Board. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Board. The Regional Board may require modification or revocation and reissuance of the Order to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act.

C. Enforcement

1. The California Water Code provides that any person who violates a waste discharge requirement or a provision of the California Water Code is subject to civil penalties of up to $5,000 per day, $10,000 per day, or $25,000 per day of violation, or when the violation involves the discharge of pollutants, is subject to civil penalties of up to $10 per gallon per day or $25 per gallon per day of violation; or some combination thereof, depending on the violation, or upon the combination of violations.

Violation of any of the provisions of the NPDES program or of any of the provisions of this Order may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalty may be applied for each kind of violation.

2. The Federal Clean Water Act (CWA) provides that any person who violates a permit condition or any requirement imposed in a pretreatment program implementing sections 301, 302, 306, 307, 308, 318 or 405 of the CWA is subject to a civil penalty not to exceed $25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing these sections of the CWA is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both. Any person who knowingly violates permit conditions implementing these sections of the CWA is subject to a fine of not less than $5,000, or more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or by both.

3. It shall not be a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order.

4. The Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document submitted or required to be maintained under this Order, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this act, shall upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 2 years per violation, or by both.

D. Monitoring Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The discharger shall retain records of all monitoring information, including all calibration and maintenance monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge and application for this Order, for a period of at least five(5) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or EPA at any time and shall be extended during the course of any unresolved litigation regarding this discharge.

3. Records of monitoring information shall include:

   (a) The date, exact place, and time of sampling or measurements;

   (b) The individual(s) who performed the sampling or measurements;

   (c) The date(s) analyses were performed;

   (d) The individual(s) who performed the analyses;

   (e) The analytical techniques or methods used; and

   (f) The results of such analyses.

4. All sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this Order.

5. All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by an appropriate governmental regulatory agency.

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

7. The discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. The annual monitoring report required in E-8 shall also summarize the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent (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.

   When requested by the Board or EPA, 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%.

8. Effluent samples shall be taken downstream of any addition to treatment works and prior to mixing with the receiving waters.

9. For parameters where both 30-day average and maximum limits are specified but where the monitoring frequency is less than four times a month, the following procedure shall apply:

(a) Initially, not later than the first week of the second month after the adoption of this permit, a representative sample shall be obtained of each waste discharge at least once per week for at least four consecutive weeks and until compliance with the 30-day average limit has been demonstrated. Once compliance has been demonstrated, sampling and analyses shall revert to the frequency specified.

(b) If future analyses of two successive samples yield results greater than 90% of the maximum limit for a parameter, the sampling frequency for that parameter shall be increased (within one week of receiving the laboratory result on the second sample) to a minimum of once weekly until at least four consecutive weekly samples have been obtained and compliance with the 30-day average limit has been demonstrated again and the discharger has set forth for the approval of the Executive Officer a program which ensures future compliance with the 30-day average limit.

E. Reporting Requirements

1. The discharger shall file with the Board technical reports on self monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Programs as directed by the Executive Officer.

2. In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernable. The data shall be summarized to demonstrate compliance with waste discharge requirements and, where applicable, shall include results of receiving water observations.

3. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

4. The discharger shall submit to the 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.

5. The discharger shall file a technical report with this Board not later than 30 days after receipt of this Order, relative to the operation and maintenance program for this waste disposal facility. The information to be contained in that report shall include as a minimum, the following:

(a) The name and address of the person or company responsible for operation

and maintenance of the facility.

(b) Type of maintenance (preventive or corrective).

(c) Frequency of maintenance, if preventive.

If an operation and maintenance report has been supplied to the Board previously and there have been no changes, a second report need not be provided.

6. Monitoring results shall be reported at the intervals specified in the monitoring and Reporting Program.

(a) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

(b) If the discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

(c) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order.

7. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this Order shall be submitted no later than 14 days following, each schedule date.

8. By March 1 of each year, the discharger shall submit an annual report to the Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.

9. The discharger shall include in the annual report, an annual summary of the quantities of all chemicals, listed by both trade and chemical names, which are used for cooling and/or boiler water treatment and which are discharged.

10. 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 EPA guideline procedures or as specified in this Monitoring Program".

11. Each report shall contain the following completed declaration:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility, of a fine and imprisonment for knowing violations.

Executed on the ___ day of _____, 19__,

at _____.

_____(Signature)

_____(Title)"

12. If no flow occurred during the reporting period, the monitoring report shall so state.

13. For any analyses performed for which no procedure is specified in the EPA guidelines or in the monitoring and Reporting Program, the constituent or parameter analyzed and the method or procedure used must be specified in the monitoring report.

14. This Board requires the discharger to file with the Board, within 90 days after the effective date of this Order, a technical report on his preventive (failsafe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

(a) Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.

(b) Evaluate the effectiveness of present facilities and procedures and state when they become operational.

(c) Describe facilities and procedures needed for effective preventive and contingency plans.

(d) Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule contingent interim and final dates when they will be constructed, implemented, or operational.

This Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events.

Such conditions may be incorporated as part of this Order, upon notice to the discharger.

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

(a) Types of wastes and quantity of each type;

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

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

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

16. The discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
The following shall be included as information that must be reported within 24 hours under this paragraph:

(a) Any unanticipated bypass that exceeds any effluent limitation in the Order.

(b) Any upset that exceeds any effluent limitation in the Order.
(c) Violation of a maximum daily discharge limitation for any of the pollutants listed in this Order to be reported within 24 hours.

The Regional Board may waive the above-required written report on a case-by-case basis.

17. Should the discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in a report, it shall promptly submit the missing or correct information.

18. The discharger shall report all instances of non- compliance not other wise reported at the time monitoring reports are submitted. The reports shall contain all information listed in E-16.

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

20. Analytical data reported as "less than" for the purpose of reporting compliance with permit limitations shall be the same or lower than the permit limit(s) established for the given parameter.

21. The discharger shall mail a copy of each monitoring report to:

TECHNICAL SUPPORT UNIT
CALIFORNIA REGIONAL WATER QUALITY
CONTROL BOARD - LOS ANGELES REGION
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

A copy of such monitoring report for those discharges designated as a major discharge shall also be mailed to:

REGIONAL ADMINISTRATOR
ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, CA 94105

F. Publicly Owned Wastewater Treatment Plant Requirements
(Does not apply to any other type or class of discharger)

1. Publicly owned treatment works (POTWs) must provide adequate notice to the Regional Board of:

(a) Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants.

(b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the Order.

Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

2. The discharger shall file a written report with the Board within 90 days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of his waste treatment and/or disposal facilities. The discharger's senior administration officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

(a) Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.

(b) The discharger's best estimate of when the average daily dry weather flow rate will equal or exceed the design capacity of his facilities.

(c) The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for his waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units.

3. The flow measurement system shall be calibrated at least once per year or more frequently, to ensure continued accuracy.

4. The discharger shall require any industrial user of the treatment works to comply with applicable service charges and toxic pretreatment standards promulgated in accordance with Sections 204(b), 307, and 308 of the Federal Clean Water Act or amendments thereto. The discharger shall require each individual user to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the Federal Clean Water Act or amendments thereto. The discharger shall forward a copy of such notice to the Board and the Regional Administrator.

5. Collected screening, biosolids (sludges), and other solids removed from liquid wastes shall be disposed of at a legal point of disposal and in accordance with the provisions of Section 405(d) of the Federal Clean Water Act and Division 7 of the California Water Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been

prescribed by a Regional Water Quality Control Board and which is in full compliance therewith.

6. Supervisors and operators of publicly owned wastewater treatment plants shall possess a certificate of appropriate grade in accordance with regulations adopted by the State Water Resources Control Board.

The annual report required by E-8 shall address operator certification and provide a list of current operating personnel and their grade of certification. The report shall include the date of each facility's Operation and Maintenance Manual, the date the manual was last reviewed, and whether the manual is complete and valid for the current facilities. The report shall restate, for the record, the laboratories used by the discharger to monitor compliance with this order and permit and provide a summary of performance.

G. Definitions

1. "Biosolids" (sludge) means the solids, semi-liquid suspensions of solids, residues, screenings, grit, scum, and precipitates separated from, or created in, wastewater by the unit processes of a treatment system. It also includes, but is not limited to, all supernatant, filtrate, centrate, decantate, and thickener overflow/underflow in the solids handling parts of the wastewater treatment system.

2. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility whose operation is necessary to maintain compliance with the terms and conditions of this Order.

3. "Chlordane" means the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonchlor-alpha, nonchlor-gamma and chlordane.

4. "Composite sample" means, for flow rate measurements, the arithmetic mean of no fewer than eight individual measurements taken at equal intervals for 24 hours or for the duration of discharge, whichever is shorter.

"Composite sample" means, for other than flow rate measurement,

(a) A combination of at least eight individual portions obtained at equal time intervals for 24 hours, or the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling;

OR

(b) A combination of at least eight individual portions of equal volume obtained over a 24-hour period. The time interval will vary such that the volume of wastewater discharged between samplings remains constant.

The compositing period shall equal the specified sampling period, or 24 hours, if no period is specified.

5. "Daily discharge" means:

(a) For flow rate measurements, the average flow rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.

(b) For pollutant measurements, the concentration or mass emission rate measured during a calendar day or during any 24-hour period reasonably representative of the calendar day for purposes of sampling.

6. The "daily discharge rate" shall be obtained from the following calculation for any calendar day:

$$\text{Daily discharge rate} = \frac{8.34}{N} \sum_{1}^{N} (Q_i)(C_i)$$

in which N is the number of samples analyzed in any calendar day, Q_i and C_i are the rate (MGD) and the constituent concentration (mg/l) respectively, which are associated with each of the N grab samples which may be taken in any calendar day. If a composite sample is taken, C_i is the concentration measured in the composite sample and Q_i is the average flow rate occurring during the period over which samples are composited.

7. "Daily maximum" limit means the maximum acceptable "daily discharge" for pollutant measurements. Unless otherwise specified, the results to be compared to the "daily maximum" limit are based on composite samples."

8. "DDT" means the sum of the 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD and 2,4'-DDD. DDT is dichloro diphenyl trichloroethane.

9. "Degrade" means to impair. Determination of whether degradation has occurred and of the extent to which it has occurred shall be made by analysis of species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species.

10. "Dichlorobenzenes" mean the sum of 1,2- and 1,3-dichlorobenzene.

11. "Duly authorized representative" is one whose:

    (a) Authorization is made in writing by a principal executive officer or ranking elected official;

    (b) Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

    (c) Written authorization is submitted to the Regional Board and EPA Region 9. If an authorization becomes no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements above must be submitted to the Regional Board and EPA Region 9 prior to or together with any reports, information, or applications to be signed by an authorized representative.

12. "Grab sample" is defined as any individual sample collected in a short period of time not exceeding 15 minutes. "Grab samples" shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with "daily maximum" limits and the "instantaneous maximum" limits.

13. "Halomethanes" means the sum of bromoform, bromomethane (methylbromide), chloromethane (methylchloride), chlorodibromomethane and dichlorobromomethane.

14. "Hazardous substance" means any substance designated under 40 CFR 116 pursuant to Section 311 of the Clean Water Act.

15. "HCH" shall mean the sum of the alpha, beta, gamma (Lindane), and delta isomers of hexachlorocyclohexane.

16. "Heavy metals" are for purposes of this Order, arsenic, cadmium, chromium, copper, lead, mercury, silver, nickel, and zinc.

17. "Heptachlor" means the sum of heptachlor and heptachlor epoxide.

18. "Indirect discharger" means a non-domestic discharger introducing pollutants into a publicly owned treatment and disposal system.

19. "Initial dilution" is the process which results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

Numerically, initial dilution is expressed as the ratio of the volume of discharged effluent plus ambient water entrained during the process of initial dilution to the volume of discharged effluent.

20. "Instantaneous maximum" concentration is defined as the maximum value measured from any single "grab sample."

21. "Interference" discharge which, alone or in conjunction with discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use, or disposal and is a cause of a violation of the POTW's NPDES permit or prevents lawful sludge use or disposal.

22. "Kelp beds" are, for purposes of the bacteriological standards of this order and permit, significant aggregations of marine algae of the genus Macrocystis. Kelp beds include the total foliage canopy of Macrocystis plants throughout the water column. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelpbeds for purposes of bacteriological standards.

23. Land application is the spraying or spreading of sewage sludge onto the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil so that the sewage sludge can either condition the soil or fertilize crops or vegetation grown in the soil.

24. "Log mean" is the geometric mean. Used for determining compliance with bacteriological standards, it is calculated with the following equation:

$$\text{Log Mean} = (C_1 \times C_2 \times \ldots \times C_N)^{1/N}$$

in which 'N' is the number of days samples that were analyzed during the period and 'C' is the concentration of bacteria (MPN/100mL) found on each day of sampling.

25. "Mass emission rate" is obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.435}{N} \sum_{i=1}^{N} Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.785}{N} \sum_{i=1}^{N} Q_i C_i$$

in which 'N' is the number of samples analyzed in any calendar day. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' grab samples which may be taken in any calendar day. If a composite sample is taken, 'C_i' is the concentration measured in the composite sample and 'Q_i' is the average flow rate occurring during the period over which samples are composited.

The daily concentration of all constituents shall be determined from the flow-weighted average of the same constituents in the combined waste streams as follows:

$$\text{Daily concentration} = \frac{1}{Q_t} \sum_{i=1}^{N} Q_i C_i$$

in which 'N' is the number of component waste streams. 'Q_i' and 'C_i' are the flow rate (MGD) and the constituent concentration (mg/L), respectively, which are associated with each of the 'N' waste streams. 'Q_t' is the total flow rate of the combined waste streams.

26. "Maximum allowable mass emission rate, "whether for a 24-hour, 7-day, 30-day (monthly), or 6-month period, is a limitation expressed as a daily rate determined with the formulas in paragraph A.20., above, using the effluent concentration limit specified in this order and permit for the period and the specified allowable flow.

27. MDL (Method Detection Limit) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136 Appendix B.

28. "Median" of an ordered set of values is the value which the values above and below is an equal number of values, or which is the arithmetic mean of the two middle values, if there is no one middle value.

29. "Monthly average" is the arithmetic mean of daily concentrations, or of daily "mass emission rates", over the specified monthly period:

$$\text{Average} = \frac{1}{N} \sum_{i=1} X_i$$

in which 'N' is the number of days samples were analyzed during the period and 'X_i' is either the constituent concentration (mg/L) or mass emission rate (kg/day or lb/day) for each sampled day.

30. "Overflow" means the intentional or unintentional diversion of flow from the collection and transport systems, including pumping facilities.

31. "PAHs" (polynuclear aromatic hydrocarbons) mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

32. "Pass through" defines as the discharge through the POTW to navigable waters which, alone or in conjunction with discharges from other sources, is a cause of a violation of POTW's NPDES permit.

33. "PCBs" (polychlorinated biphenyls) mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

34. "PQL" (Practical Quantitation Level) is the lowest concentration of a substance which can be consistently determined within +/-20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL* for carcinogens is the MDL*x 5, and for noncarcinogens is the MDL*x 10.

35. "Priority pollutants" are those constituents referred to in 40 CFR §401.15 and listed in the EPA NPDES Application Form 2C, pp. V-3 thru V-9.

36. "Removal efficiency" is the ratio of pollutants removed by the treatment facilities to pollutants entering the treatment facilities. Removal efficiencies of a treatment plant shall be determined using "30-day averages" of pollutant concentrations ('C' in mg/L) of influent and effluent samples collected at about the same time and using the following equation (or its equivalent):

Removal Efficiency (%) = $100 \times [1-(C_{Effluent}/C_{Influent})]$

When preferred, the discharger may substitute mass loadings and mass emissions for the concentrations.

37. "Shellfish" are organisms identified by the California Department of Health Services

as shellfish for public health purposes (i.e., mussels, clams, and oysters).

38. "Sludge" see biosolids.

39. "6-month median" means a moving "median" of daily values for any 180-day period in which daily values represent flow-weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.

40. "7-day" and "30-day average" shall be the arithmetic average of the values of daily discharge calculated using the results of analyses of all samples collected during any 7 and 30 consecutive calendar day periods, respectively.

41. TCDD equivalents mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below:

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
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
2,3,7,8-hexa CDFs	0.1
2,3,7,8-hepta CDFs	0.01
octa CDF	0.001

42. "Toxic pollutant" means any pollutant listed as toxic under Section 307(a)(l) of the Clean Water Act or under 40 CFR §122, Appendix D. Violation of maximum daily discharge limitations are subject to the 24-hour reporting requirement (paragraph E.4.).

43. "Toxicity" means:

Acute toxicity: measures effects of relatively short-term exposures on a selected organism, with mortality the generally designated endpoint.

Chronic toxicity: measures effects of exposure on selected organisms, with either

mortality or various sublethal effects generally the designated endpoints. The chronic tests are usually longer-term than acute tests or test a very critical life stage of the organism.

44. "Toxicity concentration" shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. The acute toxicity concentration (TC_a) expressed in toxicity units (tu_a) is calculated as:

$$Tc_a\ (tu_a) = 100 / [96\text{-hr } LC_{50}]$$

Where: LC_{50} is the Lethal Concentration (the percent waste giving 50 percent survival of test organisms)

The LC_{50} shall be determined by static or continuous flow bioassay techniques specified in "Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms" (March 1985, EPA/600/4-85/013). Submission of bioassay results should include the information noted on pp. 45-49 of the Methods. The fathead minnow (Pimephales promelas) shall be used as the test species. In addition, the Regional Board and/or EPA may specify test methods which are more sensitive than those specified above. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC_{50} may be determined after the test samples are adjusted to remove the influence of those substances: subject to Executive Officer notification and authorization.

When it is not possible to measure the 96-hour LC_{50} due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$Tc_a\ (tu_a) = \text{Log } (100 - S) / 1.7$$

where: S = percent survival in 100 percent waste. If $S > 99$, Tc shall be reported as zero.

b. The chronic toxicity concentration (TC_c) expressed in chronic toxicity units (tu_c) is calculated as:

$$TC_c\ (tu_c) = 100/NOEC$$

where: NOEC is the No Observable Effect Concentration which is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism as determined by the result of a critical life stage toxicity test conducted according to the protocols listed in Appendix II of the California Ocean Plan adopted on March 22, 1990.

NOEC shall be determined based on toxicity tests having chronic end-points.

45. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with effluent limitations in the order and permit because of factors beyond the reasonable control of the discharger. It does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation, or those problems the discharger should have foreseen.

46. "Waste", "waste discharge", "discharge of waste", and "discharge" are used interchangeably in this order and permit. The requirements of this order and permit are applicable to the entire volume of water, and the material therein, which is disposed of to ocean waters.

47. Water Reclamation: The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

48. "Weekly average" is the arithmetic mean of daily concentrations, or of daily mass emission rates, over the specified weekly period:

$$\text{Average} = \frac{1}{N} \sum_{i=1}^{N} X_i$$

in which "N" is the number of days samples were analyzed during the period and "X_i" is either the constituent concentration (mg/L) or mass emission rate (kg/day or lb/day) for each sampled day.

49. "Zone of initial dilution" (ZID) means, for purposes of designating monitoring stations, the region within a horizontal distance equal to a specified water depth (usually depth of outfall or average depth of diffuser) from any point of the diffuser or end of the outfall and the water column above and below that region, including the underlying seabed.