

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 (WLA) and load allocations (LA) 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, reportable 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

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°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 BOD₅ 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