



California Regional Water Quality Control Board

San Diego Region



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Supporting Document No. 2
Item No. 8
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TENTATIVE ORDER NO. R9-2010-0096

AN ORDER MODIFYING ORDER NO. R9-2005-0149 NPDES NO. CA0109088 KNIGHT AND CARVER YACHTCENTER BOAT REPAIR FACILITY DISCHARGE TO SAN DIEGO BAY SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter San Diego Water Board), finds that:

1. On December 14, 2005, the San Diego Water Board adopted Order No. R9-2005-0149, National Pollutant Discharge Elimination System (NPDES) No. CA0109088 (NPDES Order), establishing waste discharge requirements for Knight and Carver Yachtcenter Boat Repair Facility (Facility) to discharge storm water to San Diego Bay.
2. By letter dated March 16, 2010, Knight and Carver Yachtcenter (Discharger) submitted a request to amend its NPDES Order to add a 4,000-ton drydock (Diligence) to the facilities covered under the NPDES Order. This drydock was purchased from BAE Systems San Diego Ship Repair, Inc. and the drydock is being relocated to the Knight and Carver Facility. The drydock is covered under the federal Vessel General Permit when it is underway as a vessel and that coverage has been transferred with the drydock to its new owner.
3. Federal NPDES program regulations [40 CFR 122.62(a)(1)] allow NPDES permit modification during its term for additions to a permitted facility that require the application of permit conditions absent in the existing permit. The addition of the discharge from the drydock, as described in this Order, is justification for modifying the NPDES Order (pursuant to 40 CFR 122.62). The modifications to Order No. R9-2005-0149, NPDES No. CA0109088 as described herein are to add a discharge point for the drydock Diligence and add associated NPDES permit requirements for that discharge. No other changes are being made to Order No. R9-2005-0149.
4. The San Diego Water Board has notified the Discharger and all known interested persons of the intent to modify Order No. R9-2005-0149, NPDES No. CA0109088 to

add discharges from the drydock Diligence.

5. The San Diego Water Board in a public meeting has heard and considered all comments pertaining to the proposed modifications to the NPDES Order.
6. Under Water Code section 13389, this action to amend an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21000-21177.

IT IS HEREBY ORDERED, that:

Except as modified or superseded by the permit modifications set forth below, all of the findings, prohibitions, provisions, and other requirements of Order No. R9-2005-0149, NPDES No. CA0109088 remain in full force and effect. The following modifications of Order No. R9-2005-0149, NPDES No. CA0109088 are hereby incorporated and immediately effective:

1. Table 2 of Order No. R9-2005-0149 shall be changed as follows:

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
C-001	Storm water	32° 39' 33" N	117° 07' 0" W	San Diego Bay
<u>BW-001 (Diligence)</u>	<u>Ballast Water</u>	<u>1</u>	<u>1</u>	<u>San Diego Bay</u>

- 1 **Discharge Point BW-001 (Diligence) is located on a floating drydock and may occur at any point within the leasehold area of the Knight and Carver Yachtcenter Facility**

2. Finding II.A of Order No. R9-2005-0149 shall be modified as follows:

Background. Knight and Carver Yachtcenter, Inc. (hereafter, Discharger) is currently discharging pursuant to Order No. 2000-209 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA 0109088. The Discharger submitted a Report of Waste Discharge (RWD), dated April 15, 2005, and applied for a NPDES permit renewal to discharge storm water from the Knight and Carver Yachtcenter (hereafter Facility). The application was deemed complete on April 18, 2005. **On March 16, 2010, the Discharger submitted an application to add a 4,000-ton floating drydock Diligence to the facilities covered under the NPDES Order.**

The Facility conducts various boat construction, refitting, maintenance, and repair activities, including but not limited to exterior/interior surface coating application/removal (e.g., painting and sanding), hull cleaning, engine repair, and general mechanical/fixture repair. These industrial activities along with material handling equipment or activities, raw materials, by-products, waste materials or industrial machinery generate pollutants that discharge when exposed to storm

water.

3. Finding II.B of Order No. R9-2005-0149 shall be modified as follows:

Facility Description. The Discharger owns and operates a full-service boat construction, retrofit and repair facility. The Discharger is able to lift boats up to 150 feet long from the water using a 330-ton Travelift. Construction, maintenance and repair activities, which include exterior/interior surface coating application/removal (e.g., painting and sanding), hull cleaning, and general mechanical and engine repair. The facility is also able to conduct retrofit and maintenance activities on boats up to 200 feet long at its floating dock. These activities generate industrial process water defined as any water, which, during manufacturing or processing, comes into direct contact with or results from the production of use of any raw material, intermediate product, by product, or waste product. Discharges from the Facility also include drydock ballast tank water and flood water from the floating drydock Diligence. The supply water for the drydock ballast water and floodwater is from San Diego Bay.

The site covers approximately 9 acres and is impervious, consisting of a 100,000 square-foot building, paved parking areas and work spaces. The site is graded to direct process wastewater and storm water to one of four drains. The drains connect to a low spot within the facility with the capacity to hold 120,000 gallons of water. A pump in this area moves water to a 50,000-gallon storage tank from which it passes through a wastewater treatment system containing a three-stage clarifier and a filter prior to being discharged to the sanitary sewer. In its RWD dated April 13, 2005, the facility reported no discharges to San Diego Bay during the term of Order No. 2000-209.

4. Table 5 of Order No. R9-2005-0149 shall be changed as follows:

Table 5. Beneficial Uses of San Diego Bay

Discharge Points	Receiving Water Name	Beneficial Use(s)
C-001; <u>BW-001</u>	San Diego Bay	Industrial Service Supply (IND); Navigation (NAV); Contact Water Recreation (REC1); Non-contact Water Recreation (REC2); Commercial and Sport Fishing (COMM); Preservation of Biological Habitats of Special Significance (BIOL); Estuarine Habitat (EST); Wildlife Habitat (WILD); Preservation of Rare, Threatened or Endangered Species (RARE); Marine Habitat (MAR); Migration of Aquatic Organisms (MIGR); Shellfish Harvesting (SHELL)

5. Discharge Prohibition III.B.2 of Order No. R9-2005-0149 is changed as follows:

The discharge of first-flush (0.1 inch) storm water runoff, as defined in Attachment A, from the Discharger's maintenance and repair areas including the floating drydock Diligence is prohibited subject to Section VIII.C.2.a of this Order.

6. Discharge Prohibition III.B.6 of Order No. R9-2005-0149 is added as follows:

The discharge of anything other than San Diego Bay water from the ballast tanks of the drydock Diligence including sediment, chlorine, biocides, or other maintenance byproducts is prohibited.

7. Final Effluent Limitations IV.A.2 of Order No. R9-2005-0149 is added as follows:

A. Effluent Limitations ~~- Discharge Point No. C-001~~

1. Final Effluent Limitations - Discharge Point No. C-001

The acute toxicity of storm water runoff to surface waters or to storm drains shall not be less than seventy (70) percent survival as determined by a 96-hour bioassay based on a grab sample.

2. Final Effluent Limitations – Discharge Point No. BW-001

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. BW-001 with compliance measured at Monitoring Location No. BW-001 as described in the attached Monitoring and Reporting Program (MRP):

Table 6. Effluent Limitations For Discharge Point No. BW-001

<u>Parameter</u>	<u>Units</u>	<u>Effluent Limitations</u>		
		<u>Average Monthly</u>	<u>Weekly Average</u>	<u>Instantaneous Maximum</u>
<u>Oil and Grease</u>	<u>mg/L</u>	<u>25</u>	<u>40</u>	<u>75</u>
<u>Settleable Solids</u>	<u>m/L</u>	<u>1.0</u>	<u>1.5</u>	<u>3.0</u>
<u>Turbidity</u>	<u>NTU</u>	<u>75</u>	<u>100</u>	<u>225</u>
<u>pH</u>	<u>pH units</u>	<u>--</u>	<u>--</u>	<u>1</u>
<u>Temperature</u>	<u>°F</u>	<u>--</u>	<u>--</u>	<u>2</u>
<u>Acute Toxicity</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>3</u>
<u>Chronic Toxicity</u>	<u>TUc</u>	<u>--</u>	<u>--</u>	<u>1⁴</u>

¹ Within limits of 7.0 – 9.0 at all times.

² At no time shall any discharge be greater than 20°F over the natural temperature of the receiving water.

³ The acute toxicity shall not be less than seventy (70) percent survival as determined by a 96-hour bioassay based on a grab sample.

⁴ Discharges shall achieve a rating of 1 TUC for chronic toxicity with compliance determined as specified in section IX.E. of this Order.

8. Provision VIII.C.2.a. of Order No. R9-2005-0149 shall be changed as follows:

The Discharger shall eliminate the discharge of the first-flush (0.1 inch) storm water runoff, as defined in Attachment A, from the Facility maintenance and repair areas **including the floating drydock Diligence** to surface waters or storm drains, and shall appropriately maintain all means by which this is accomplished.

9. Best Management Practices (BMP) Plan VIII.C.3 of Order No. R9-2005-0149 shall be changed as follows:

The Discharger shall implement and maintain a BMP Plan. The BMP Plan shall incorporate the SWPPP provisions in Attachment G to prevent and or minimize the potential for the release of toxic and hazardous pollutants to surface waters. The Discharger shall amend its BMP Plan in accordance with 40 CFR 125.100 through 125.104 whenever there is a change in facility leasehold work area design, construction, operation, or maintenance, which materially affects the potential for discharge of toxic and hazardous pollutant to surface waters. The BMP Plan shall also address pier, float, dock, or other leasehold areas where work may occur directly over or on the receiving water. **The BMP Plan shall contain adequate BMPs to prevent the discharge of any ship repair or other pollutants generated on the floating drydock, as well as BMPs for floating drydock ballast water discharges and vessel cooling water discharges including applicable BMPs from USEPA's Vessel General Permit.** The Discharger shall submit its BMP Plan and any amendment thereto to the Executive Officer.

10. Compliance Schedules, VIII.C.5 of Order No. R9-2005-0149 shall be changed as follows:

5. Compliance Schedules

[Not Applicable]

a. Compliance Schedule for Drydock Ballast Water Sampling

- i. By December 31, 2010, the Discharger shall comply with the sampling requirements for drydock ballast water. The Discharger needs a compliance schedule to design and install a system to sample discharge water from the ballast system on the drydock.**
- ii. With the Annual Report required by MRP section X.B.3, the Discharger shall submit a progress report on the design, procurement, installation, and testing of the new drydock ballast water sampling system.**

11. Compliance Determination IX. of Order No. R9-2005-0149 shall be changed as follows:

IX. COMPLIANCE DETERMINATION

[Not Applicable]

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

A. General.

Compliance with effluent limitations shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purpose of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the constituent in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL) or lowest quantifiable level.

B. Multiple Sample Data.

When determining compliance with an average monthly effluent limitation (AMEL) or maximum daily effluent limitation (MDEL) and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determination of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, following by quantified values (if any). The order of individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month

exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each discharge day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

D. Average Weekly Effluent Limitation (AWEL)

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any on calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

E. Chronic Toxicity.

The chronic toxicity of undiluted discharges to San Diego Bay which consist of effluent discharge prior to reaching the receiving water shall not exceed 1 TUc, except where the chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc. Where the chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc, the chronic toxicity of undiluted discharges to San Diego Bay which consists of effluent discharge prior to reaching the receiving water shall not exceed the chronic toxicity of San Diego Bay water at the intake location. (In the absence of test results demonstrating otherwise, it will be assumed that the chronic toxicity in San Diego Bay water at the intake location does not exceed 1 TUc).

12. Monitoring and Reporting Program, Monitoring Locations. II. of Order No. R9-2005-0149 will be modified as follows:

Table 1. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
001	M-001	Storm water diversion system storm water outfall to San Diego Bay (Latitude 32° 39' 33"; Longitude 117° 07' 01 ").
"	KC-01	Latitude 32° 39' 29.2" Longitude 117° 07' 05.9"
"	KC-02	Latitude 32° 39' 29.1" Longitude 117° 07' 06.8"
<u>BW-001</u>	<u>BW-001</u>	<u>A location where a representative sample of the ballast water can be obtained just prior to, or during, the discharge into the Bay by the Diligence drydock.</u>

13. Monitoring and Reporting Program, Effluent Monitoring Requirements. IV.B. of Order No. R9-2005-0149 will be added as follows:

B. Monitoring Location BW-001

1. The Discharger shall monitor the discharge of ballast water at Monitoring Location No. BW-001 by December 31, 2010 in accordance with the time schedule in Section VII.C.5. of this Order as follows:

Table E-3. Effluent Monitoring for Ballast Water

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Minimum Sampling Frequency⁴</u>	<u>Required Analytical Test Method and (Minimum Level, units), respectively</u>
Flow	GPD	Grab	1/quarter	Estimate
pH	standard units	Grab	1/quarter	1
Temperature	°F	Grab	1/quarter	1
Arsenic, Total Recoverable	µg/L	Grab	1/quarter	1
Copper, Total Recoverable	µg/L	Grab	1/quarter	1,2
Settleable Solids	ml/L	Grab	1/year	1
Turbidity	NTU	Grab	1/year	1
Total Suspended Solids	mg/L	Grab	1/year	1
Oil and Grease	mg/L	Grab	1/year	1
Total Petroleum Hydrocarbons (TPH)	mg/L	Grab	1/year	1
Polynuclear Aromatic Hydrocarbons (PAH) ³	µg/L	Grab	1/year	1
Tributyltin (TBT)	µg/L	Grab	1/year	1
Acute Toxicity	% Survival	Grab	1/year	1
Chronic Toxicity	TUc	Grab	1/year	1
Total Residual Chlorine	µg/L	Grab	1/year	1
Remaining CTR Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	1

¹ As specified in 40 CFR 136.

² Influent and effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample that is analyzed by methods 6010B or 200.7 are known.

³ PAHs shall mean the sum of acenaphthylene; anthracene; 1,2-benzanthracene; 3,4-benzofluoranthene; benzo(k)fluoranthene; 1,12-benzoperylene; benzo(a)pyrene; chrysene; dibenzo(a,h)anthracene; fluorene; indeno(1,2,3-cd)pyrene; phenanthrene; and pyrene.

⁴ Ballast water (BW-001) sampling shall only occur when there is a discharge not regulated by the USEPA's Vessel General Permit.

14. Monitoring and Reporting Program, Whole Effluent Toxicity Testing Requirements V. of Order No. R9-2005-0149 will be changed as follows:

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute Toxicity

The presence of acute toxicity in the storm water or ballast water shall be determined as specified in *Methods for Measuring Acute Toxicity of Effluents*

and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition (EPA 600/4-90-027F, August 1993, or subsequent editions). The Discharger shall conduct an annual acute toxicity test on a grab sample of storm water and ballast water. The Discharger shall conduct a 96-hour static-renewal test for the vertebrates *Menidia beryllina* (inland silverside [fish]), *Antherinops affinis* (topsmelt [fish]), or the invertebrate *Mysidopsis bahia* (mysid shrimp). The acute toxicity testing shall be conducted on a sample of 100% storm water and 100% ballast water and a laboratory control. Use of two laboratory controls, a receiving water control, and a synthetic laboratory seawater control, is highly recommended. The salinity of the sample should be adjusted to the salinity level typical of the receiving water using dry sea salt. The adjusted salinity levels shall be reported. The storm water and ballast water tests shall be conducted with concurrent reference toxicant tests. ~~Both t~~ The reference toxicant and the storm water and the ballast water test shall meet all test acceptability criteria as specified in the above named manual. If the test acceptability criteria are not achieved, the Discharger shall re-sample and re-test during the next storm or ballast water discharge.

The Discharger shall implement the Toxic Pollutant Source Control Study described in Section VIII.C.4 of Order No. R9-2005-0149 in the event effluent limitations are not achieved.

B. Chronic Toxicity

a. Monitoring Frequency

The permittee shall conduct annual chronic toxicity tests on effluent grab samples. Each year (July-June), at a different time of year from the previous years, the permittee shall split an effluent sample and concurrently conduct three toxicity tests using a fish, kelp, and an invertebrate species; the permittee shall then continue to conduct routine toxicity testing using the single, most sensitive species, until the next sensitivity testing the following year.

Chronic toxicity test samples shall be collected for each point of discharge at the designated NPDES sampling station for the effluent (i.e., downstream from the last treatment process and any in-plant return flows where a representative effluent sample can be obtained). During years 1 and 5 of the permit, a split of each sample shall be analyzed for all other monitored parameters at the minimum frequency of analysis specified by the effluent monitoring program.

b. Marine and Estuarine Species and Test Methods

Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the first edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95/136, 1995) and applicable water quality standards; also see 40 CFR Parts 122.41(j)(4) and 122.44(d)(1)(iv) and 40 CFR Part 122.21(j)(5)(viii) for POTWs. The permittee shall conduct a static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0 (Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (i.e., 7-day LC50, 96-hour LC50, etc.)); a static nonrenewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0); and a toxicity test with one of the following invertebrate species:

- Static renewal toxicity test with the mysid, *Holmesimysis costata* (Survival and Growth Test Method 1007.0);
- Static non-renewal toxicity test with the Pacific oyster, *Crassostrea gigas*, or the mussel, *Mytilus* spp., (Embryo-larval Shell Development Test Method 1005.0);
- Static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method);
- Static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dendraster excentricus* (Embryo-larval Development Test Method); or
- Static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0).

If laboratory-held cultures of the topsmelt, *Atherinops affinis*, are not available for testing, then the permittee shall conduct a static renewal toxicity test with the inland silverside, *Menidia beryllina* (Larval Survival and Growth Test Method 1006.0), found in the third edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA/821/R-02/014, 2002; Table IA, 40 CFR Part 136).

c. Quality Assurance

- i. Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified, below.

- ii. For this discharge, a mixing zone or dilution allowance is not authorized. The chronic instream waste concentrations (IWCs) for this discharge are 100% effluent and 62.5% effluent. A series of at least five effluent dilutions and a control shall be tested. At minimum, the dilution series shall include the IWCs and three dilutions below the IWCs (e.g., 100%, 62.5%, 50%, 25% and 12.5%).
- iii. Effluent dilution water and control water should be prepared and used as specified in the test methods manual Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995) and/or Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA/821/R-02/014, 2002). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the use of artificial sea salts is considered provisional in the test method, then artificial sea salts shall not be used to increase the salinity of the effluent sample prior to toxicity testing without written approval by the permitting authority.
- iv. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).
- v. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the permittee must resample and retest during the next rain event.
- vi. Following Paragraph 10.2.6.2 of the freshwater test methods manual, all chronic toxicity test results from the multi-concentration tests required by this permit must be reviewed and reported according to USEPA guidance on the evaluation of concentration response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136)* (EPA/821/B-00-004, 2000).
- vii. Because this permit requires sublethal hypothesis testing endpoints from test methods in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995), within-test variability must be reviewed for acceptability and a variability criterion (upper %MSD bound) must be applied, as directed under each test method. Based on this review, only accepted effluent toxicity test results shall

be reported on the (Discharge Monitoring Report) DMR form. If excessive within-test variability invalidates a test result, then the permittee must resample and retest within 14 days.

viii. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority.

ix. Hydrogen ion concentration (pH) drift during the toxicity test may contribute to artifactual toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in an effluent. To determine whether or not pH drift during the toxicity test is contributing to artifactual toxicity, the permittee shall conduct three sets of parallel toxicity tests, in which the pH of one treatment is controlled at the pH of the effluent and the pH of the other treatment is not controlled, as described in Section 11.3.6.1 of the test methods manual, *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic WET permit limit or trigger is observed in the treatments controlled at the pH of the effluent. If toxicity is confirmed to be artifactual and due to pH drift, then, following written approval by the permitting authority, the permittee may use the procedures outlined in Section 11.3.6.2 of the test methods manual to control sample pH during the toxicity test.

d. Reporting of Chronic Toxicity Monitoring Results

A full laboratory report for all toxicity testing shall be submitted as an attachment to the DMR for the month in which the toxicity test was conducted and shall also include: the toxicity test results—in NOEC; $TUc = 100/NOEC$; EC25 (or IC25); and $TUc = 100/EC25$ (or IC25)—reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

15. Monitoring and Reporting Program, Other Monitoring Requirements IX.I and J. of Order No. R9-2005-0149 will be added as follows:

I. Floating Drydock Submergence/Emergence Water Discharge

The Discharger shall provide written notification to the San Diego Water Board 48 hours prior to flooding of its floating drydock. If the drydock has to be flooded on a short notice and the 48 hour notification time can not be met, the Discharger shall notify the San Diego Water Board as early as possible and include information on why the notification time could not be met.

The Discharger shall document the condition of its drydock prior to each flooding. The conditions will be digitally documented either by video or photographs. The video must be in DVD format or other computer file format compatible with MS Windows such as mpg (Moving Picture Experts Group), avi (Audio Video Interleave), or wmv (Windows Media Video), and the photographs must be digital photographs that show date and time on each picture. Video or photographs shall document conditions at the initial flooding of the facilities. If flooding is to occur at night, video or photographs shall be taken during daylight hours as close to the flooding event as possible.

The Discharger shall submit documentation on the facility conditions quarterly to the San Diego Water Board in accordance with Table 7.

If a floating drydock was not flooded during the quarter, the Discharger shall document in the quarterly effluent monitoring report that no flooding occurred during that period.

J. Floating Drydock Ballast Tank

The Discharger shall submit U.S. Navy and ASTM reports certifying the integrity of the floating drydock ballast tanks annually, in accordance with Table 7.

16. Facility Description II. of the Fact sheet to Order No. R9-2005-0149 will be changed as follows:

The Discharger owns and operates a full-service boat building, retrofitting and repair facility. The 9 acre site consists of docks, piers, a 330-ton Travelift, in-yard boat repair areas, a 100,000 square-foot building, and an industrial process/storm water treatment system. The building houses work space, electrical, mechanical, welding and carpentry shops as well as a tool room and offices; it is surrounded on the south, east and west sides by parking areas. All work areas are graded to drain to one of a series of drains so that all pollutants are captured within the wastewater treatment system. Boats are hauled out of the water by the Travelift from a pier located in the southwestern portion of the Facility and transported to the yard for retrofitting or repairs. Hydro-washing of the bottom of the boats is conducted east of

the Travelift pier. Wastewater generated during hydro-washing is collected in a drain connected to the wastewater treatment system. Industrial activities occurring at the Facility include but are not limited to carpentry, fiberglass work, metal work, sandblasting, painting and coating work, internal combustion engine repair, shaft and prop installation, welding and brazing. These activities generate industrial process water defined as any water, which, during manufacturing or processing, comes into direct contact with or results from the production of use of any raw material, intermediate product, by product, or waste product.

On March 16, 2010, the Discharger submitted an application to add a 4,000-ton floating drydock Diligence to the facilities covered under the NPDES Order. The dry dock is used to conduct repair and maintenance activity which cannot normally be conducted while the vessel is waterborne. These activities generally can include exterior hull repair; abrasive blasting; hydroblasting; painting; the repair or replacement of shafts, propellers, and rudders; and the repair or replacement of valves and fittings below the waterline. Vessel launching and recovery is accomplished by means of integral ballast tanks, which take in and discharge seawater used to raise and lower the dry docks. Wastes generated during ship repair include spent abrasives, paint, rust, petroleum products, marine growth and general refuse and debris. The dry dock must be configured to prevent any waste including industrial process water, storm water, and wash water from entering the receiving water.

17. Description of Wastewater II.A of the Fact Sheet to Order No. R9-2005-0149 will be changed as follows:

Boat repair activities generate several types of pollutants, including oils, greases, paints, varnishes, paint thinners and additives, gelcoat wastes, dust, grit, and other spilled liquids.

The site is designed to prevent industrial process water and storm water discharges to San Diego Bay by a combination of grading and structural BMP implementation. All outdoor work areas are sloped to direct any process wastewater or storm water into a one of a series of drains. The drains direct water to a low spot with the capacity of approximately 120,000 gallons. Wastewater is pumped from the low area to a 50,000-gallon storage tank. From the tank, the wastewater passes through a three-stage clarifier and a filter prior to discharging to San Diego Metropolitan Wastewater District's sanitary sewer system.

Sinking and floating of the drydock Diligence is accomplished by flooding or ballasting the ballast tanks of the floating drydock. Ballast water from the Diligence is discharged through Discharge Point No. BW-001. The estimated discharge of ballast water is up to 4.488 million gallons per lift for the

Diligence. The facility does not alter the floating drydock ballast tank water chemically or physically, so degradation of the receiving water due to the discharge of ballast water is not expected. BMPs are required for this discharge to ensure that no pollutants are added.

18. Rationale for Effluent Limitations and Discharge Specifications V. of the Fact Sheet to Order No. R9-2005-0149 will be changed as follows:

B. Technology-Based Effluent Limitations (TBELs)

The Regional Water Board has determined that the establishment and enforcement of numeric effluent limitations for storm water discharges from the Facility are infeasible, due to the difficulties of collecting representative effluent samples and of determining concentration and mass emissions. In lieu of technology-based limitations, the Regional Water Board has further determined that such discharges are most appropriately controlled by BMPs. The inclusion of BMPs as requirements in NPDES permits is authorized by CWA Section 304 (e); and in accordance with NPDES regulations at 40 CFR 122.44 (k). BMPs employed by the Facility are defined in the SWPPP and BMP Plan.

TBELs for ballast water discharges at BW-001 are based on the effluent limitations contained in Table A of the Ocean Plan which are summarized below:

Table 5. Ocean Plan Table A Effluent Limitations

<u>Parameter</u>	<u>Units</u>	<u>Table A Effluent Limitations</u>		
		<u>Average Monthly</u>	<u>Weekly Average</u>	<u>Instantaneous Maximum</u>
<u>Oil and Grease</u>	<u>mg/L</u>	<u>25</u>	<u>40</u>	<u>75</u>
<u>Settleable Solids</u>	<u>ml/L</u>	<u>1.0</u>	<u>1.5</u>	<u>3.0</u>
<u>Turbidity</u>	<u>NTU</u>	<u>75</u>	<u>100</u>	<u>225</u>
<u>pH</u>	<u>pH units</u>	<u>--</u>	<u>--</u>	<u>1</u>

1 Within limits of 6.0 – 9.0 at all times

C. Water Quality-Based Effluent Limitations (WQBELs)

No water quality-based limitations for individual pollutants have been established as part of Order No. R9-2005-0149. The Regional Water Board finds that the implementation and maintenance of the SWPPP and BMP Plan will be adequate to protect water quality. The acute toxicity testing requirement (see Section D below) established under Order 2000-209 is retained in the Order as a measure of BMP performance and to assure compliance with water quality standards.

A WQBEL for temperature for ballast water discharges is based on Part 4.b.(1) of the Thermal Plan. The ballast water chronic toxicity testing requirements are consistent with requirements for similar facilities (NPDES CA0109134 NASSCO and NPDES CA0109151 BAE Systems).

19. State and Federal Regulations, Policies, and Plans IV.C. of the Fact Sheet to Order No. R9-2005-0149 will be changed as follows:

7. Bays and Estuaries Policy. The State Water Board adopted a Water Quality Control Policy for Enclosed Bays and Estuaries of California (Bays and Estuaries Policy) on May 16, 1974 (last amended in 1995). The Bays and Estuary Policy establishes principles for management of water quality, quality requirements for waste discharges, discharge prohibitions, and general provisions to prevent water quality degradation and to protect the beneficial uses of waters of enclosed bays and estuaries. The Bays and Estuaries Policy contains a principle for management of water quality in enclosed bays and estuaries which requires the discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries to be phased out at the earliest practicable date. For the purpose of this policy, treated ballast waters and innocuous non-municipal wastewater such as clear brines, washwater, and pool drains are not necessarily considered industrial process wastes, and may be allowed by Regional Water Boards under discharge requirements that provide protection to the beneficial uses of the receiving water.

8. Vessel General Permit. USEPA signed the 2008 Vessel General Permit (VGP) on December 18, 2008. The VGP became effective on February 6, 2009. The VGP regulates discharges incidental to the normal operation of vessels operating in a capacity as a means of transportation. Vessels in a dry dock are not operating in a capacity as a means of transportation and are not covered by the VGP. Floating dry docks have been determined to be operating as a means of transportation when docking or undocking a vessel inclusive of the transition from that operation. Discharges from vessels at the Facility which are not operating as a means of transportation are regulated by this Order.

20. Effluent Monitoring VII.A. of the Fact Sheet to Order No. R9-2005-0149 will be changed as follows:

Ballast Water (Monitoring Locations BW-001 and BW-002)

- 1. Quarterly effluent flow monitoring has been established to accurately determine the volume of effluent being discharged from the Facility into the San Diego Bay.**
- 2. Quarterly effluent monitoring of pH and temperature has been established to characterize the discharge of ballast water from the Facility into the San Diego Bay.**

3. Quarterly monitoring for arsenic and copper have been established because data indicates that these pollutants are present in the receiving water at levels that exceed water quality criteria for these parameters, and these pollutants may be present in the discharge of ballast water in levels that exceed water quality criteria.

4. Monitoring of ballast water for the remaining CTR priority pollutants in years 1 and 5 has been included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

21. Rationale for Provisions VIII.E of the Fact Sheet to Order No. R9-2005-0149 will be added as follows:

E. Compliance Schedule for Drydock Ballast Water Sampling

The Discharge needs a compliance schedule to design and install a system to collect samples of the drydock ballast water. Sampling and analysis of the floating drydock ballast water are new for this Order. Currently there is no method of collecting samples of this discharge from the drydock as the intake and discharge flows occur at 10-15 feet below water near the bottom of the drydock. This Order contains a compliance schedule requiring the Discharger to comply with the sampling requirements for drydock ballast water by December 31, 2010

I, David W. Gibson, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on August 11, 2010.

David W. Gibson
Executive Officer