CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

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ORDER R9-2019-0008 NPDES NO. CAG719001

GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM BOATYARDS AND BOAT MAINTENANCE AND REPAIR FACILITIES ADJACENT TO SURFACE WATERS WITHIN THE SAN DIEGO REGION

Discharges of industrial storm water from boatyards and boat maintenance and repair facilities adjacent to waters of the United States in the San Diego Region (also referred to herein as surface waters) and the discharge of ballast and flood water from floating drydocks to San Diego Bay are subject to waste discharge requirements (WDRs) set forth in this National Pollutant Discharge Elimination System (NPDES) Order (Order) and as authorized by a Notice of Applicability (NOA) issued by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) Executive Officer. Definitions of terms used in this Order are contained in Attachment A.

Tables 1 and 2 below provide summary information regarding the applicability of this Order:

Discharger	Any owner or operator of a boatyard or boat maintenance and repair facility that is located adjacent to a surface water in the San Diego Region.	
Waters of the United States	Generally refers to surface waters, as defined for the purposes of the federal Clean Water Act (CWA). For the purpose of this Order, the terms "surface water" and "receiving water" are interchangeably used to mean "waters of the United States" unless noted otherwise.	

Table 1. General Information

Discharge Points	Locations throughout the San Diego Region
Discharge Description	Industrial wastewater and industrial storm water runoff
Receiving Waters	Inland Surface Waters, Enclosed Bays and Estuaries, and Coastal Waters

Table 3. Administrative Information

This Order was adopted on:	October 9, 2019
This Order shall become effective on:	February 1, 2020
This Order shall expire on:	January 31, 2025
The United States Environmental Protection Agency (USEPA) a Regional Water Quality Control Board, San Diego Region (San have classified these discharges as minor discharges. In accord 2200, Title 23 of the California Code of Regulation, the threat to complexity of the discharge is determined to be category 2C.	Diego Water Board) dance with section

BOATYARDS AND BOAT MAINTENANCE AND REPAIR FACULTIES

ORDER R9-2019-2008 NPDES NO. CAG719001

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the San Diego Water Board on the date indicated above.

David W. Gibson, Executive Officer

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I. SCOPE OF ORDER COVERAGE

This General Order is a National Pollutant Discharge Elimination System (NPDES) permit that regulates discharges of industrial wastewater and industrial storm water runoff from boatyards and boat repair and maintenance facilities located adjacent to surface waters in the San Diego Region. This General Order requires boatyard and boat maintenance and repair facility owners and operators discharging, or proposing to discharge, industrial wastewater or industrial storm water runoff to waters of the United States in the San Diego Region as described in section I.A of this General Order, excluding those facilities that meet the exception criteria in section I.B of this General Order, to obtain NPDES regulatory coverage through enrollment under this General Order.

Boatyards and boat maintenance and repair facilities regulated by General Order No. R9-2013-0026 at the time of adoption of this General Order are listed in Table 4.

Table 4. Regulated Boatyards III the Sall Diego Region				
Dischargers	Facility Address	Receiving Water		
Driscoll Inc.	2500 Shelter Island Drive San Diego, CA 92106	San Diego Bay Shoreline at America's Cup Harbor		
The Marine Group Boat Works, LLC (National City)	1313 Bay Marina Drive National City, CA 91950	San Diego Bay		
Koehler Kraft Company, Inc.	2302 Shelter Island Drive San Diego, CA 92106	San Diego Bay Shoreline at America's Cup Harbor		
Nielsen Beaumont Marine, Inc.	2420 Shelter Island Drive San Diego, CA 92106	San Diego Bay Shoreline at America's Cup Harbor		
Shelter Island Boatyard	2330 and 2390 Shelter Island Drive San Diego, CA 92106	San Diego Bay, Shelter Island Yacht Basin		
The Marine Group Boat Works, LLC (Chula Vista)	997 G Street Chula Vista, CA 91910	San Diego Bay		
Dana Point Shipyard	34671 Puerto Place Dana Point, CA 92629	Dana Point Harbor		
Driscoll Mission Bay, LLC	1500 Quivira Way San Diego, CA 92109	Mission Bay at Quivira Basin		
Oceanside Marine Centre, Inc.	1550 North Harbor Drive Oceanside, CA 92054	Oceanside Harbor		

Table 4. Regulated Boatyards in the San Diego Region

A. Discharges Regulated Under this General Order

1. Discharges of industrial storm water runoff from boatyards and boat repair and maintenance facilities located adjacent to surface waters in the San Diego Region.

2. Discharges of ballast and flood water from floating drydocks to the San Diego Bay.

B. Discharges Not Regulated Under this General Order

- 1. Discharges of industrial wastewater and storm water runoff from boatyards and boat repair and maintenance facilities that are not located adjacent to surface waters in the San Diego Region are not regulated under this General Order.
- 2. Discharges of non-industrial storm water to surface waters in the San Diego Region are not regulated under this General Order.
- **3.** Discharge of ballast and flood water from floating drydocks to surface waters other than San Diego Bay are not regulated under this General Order.

II. APPLICATION REQUIREMENTS

A. Notice of Intent

- 1. Any person proposing to discharge industrial storm water runoff from a boatyard or a boat maintenance and repair facility located adjacent to a surface water in the San Diego Region shall submit a completed Notice of Intent (NOI) Form (Attachment G) with filing fee for coverage under this General Order and obtain authorization from the San Diego Water Board prior to discharging industrial storm water runoff. The filing fee only applies to new Dischargers. Existing Dischargers will continue to be invoiced annually.
- 2. Any person proposing to discharge ballast or flood water from floating drydocks to San Diego Bay shall submit a completed NOI Form (Attachment G) with filing fee for coverage under this General Order and obtain authorization from the San Diego Water Board prior to discharging ballast or flood water from floating drydocks. The filing fee only applies to new Dischargers. Existing Dischargers will continue to be invoiced annually.
- 3. This General Order supersedes and replaces General Order No. R9-2013-0026. Boatyards currently enrolled under General Order No. R9-2013-0026 and listed in Table 4 (referred to in this General Order as Existing Boatyards) shall submit a NOI Form to enroll in this General Order.

B. Notice of Applicability

Regulatory coverage under this General Order will commence when the San Diego Water Board approves the NOI and issues the Discharger a Notice of Applicability (NOA) which may include additional or increased monitoring or other facility-specific requirements due to site-specific circumstances of the discharge or facility. The effective enrollment date will be specified in the NOA, and the Discharger will be authorized to discharge starting on the date specified in the NOA. Upon receipt of an NOA, the Discharger shall comply with the terms and conditions of this General Order.

C. Boatyards Enrolled Under General Order No. R9-2013-0026

Existing Boatyards will continue coverage under General Order No. R9-2013-0026 for 180 days following the adoption date of this General Order. After April 6, 2020, all Notices of Enrollment issued under General Order No. R9-2013-0026 will be

terminated. Existing Boatyards shall submit a complete NOI Form (Attachment G) no later than February 6, 2020 or else risk losing permit coverage.

D. Enrollment Modification

- 1. The Discharger may submit a written request for modification of an NOA to the San Diego Water Board. The request for NOA modification shall include "Request for NOA Amendment" in the subject line; the Waste Discharge Identification Number (WDID) assigned to the Discharger in the original NOA; the name and address of the Discharger; the name and address of the facility; and all of the information the Discharger believes is necessary for the San Diego Water Board to evaluate the request for modification; and shall be signed and certified by the Discharger in accordance with the signatory requirements in section V.B of the Standard Provisions (Attachment D) of this General Order. A request for modification of an NOA does not require resubmittal of the entire NOI package, but the San Diego Water Board may request supplemental information as necessary to determine if the requested modification is appropriate and in compliance with the requirements of this General Order. The submittal of a request by the Discharger for modification of the NOA does not stay any condition of this General Order and the Discharger shall continue to comply with this General Order and the NOA until further notice from the San Diego Water Board.
- 2. The San Diego Water Board reserves the authority to modify, revoke and reissue the NOA, and request an updated NOI based on new information or changed circumstances. New information and changed circumstances include, but is not limited to, the following:
 - a. Failure to fully disclose all relevant facts.
 - b. Receipt of a request for modification of the NOA by the Discharger.
 - c. Material and substantial alterations or additions to the boatyard operation

E. No Exposure Certification Coverage

Dischargers that certify their facility has no exposure of industrial activities or materials to storm water, in accordance with the requirements set forth in section IX of this General Order, are not required to implement a Storm Water Pollution Prevention Plan (SWPPP) or comply with the monitoring requirements of this General Order; except, a SWPPP is required if secondary containment is used to satisfy NEC requirements. Such Dischargers shall submit an NEC Annual Certification Report as described in section IX.F of this General Order, pay an annual fee, and annually certify that their facilities continue to satisfy the NEC requirements.

Dischargers shall file for NEC coverage by submitting the following permit registration documents to the San Diego Water Board:

- 1. A completed No Exposure Certification Form, with a Signed Certification Statement (See Attachment K of this General Order);
- 2. A No Exposure Certification Report (See section IX.E.2 of this General Order);
- **3.** A current site map consistent with requirements in section IX.E.2.c of this General Order and included in the NEC Report; and

4. An Annual Fee (Pursuant to Water Code section 2200.5) for new dischargers. Existing dischargers will be invoiced appropriately following adoption of this General Order.

F. Notice of Termination

The Discharger shall submit a completed Notice of Termination (NOT) form (Attachment H) to the San Diego Water Board when coverage under this General Order is no longer required. Discharger eligibility for termination of permit coverage can be established under the following conditions:

- 1. A new owner or operator has taken over responsibility for the facility;
- 2. The Discharger has ceased boatyard or boat maintenance and repair operations at the facility, and there are no, or no longer will be, discharges of industrial wastewater or industrial storm water runoff associated with boatyard or boat maintenance and repair operations from the facility; or
- **3.** The Discharger has obtained coverage under an individual or alternative Order for all discharges required to be covered by an NPDES permit.

The NOT should include "Notice of Termination" in the subject line, the WDID assigned to the Discharger by the San Diego Water Board in the NOA, the name and address of the Discharger, and the name and address of the facility. The NOT must be signed and dated by the Discharger in accordance with the signatory requirements in section V.B of the Standard Provisions (Attachment D) for this General Order. The Discharger's coverage under this General Order will terminate on the date specified in a coverage termination notice issued by the San Diego Water Board and the Discharger will no longer be authorized to discharge industrial storm water or floating drydock ballast and flood water under this General Order.

The Discharger shall continue to comply with the requirements of this General Order until the San Diego Water Board notifies the Discharger in writing that the NOT has been approved. Submittal of an NOT form does not obviate the Discharger's duty to comply with the requirements of this General Order, pay any outstanding invoices of permit fees, or submit any outstanding required reports. Submittal of an NOT does not preclude the San Diego Water Board from taking future enforcement action against the Discharger for any existing violations of the General Order both prior to and after issuance of the notice, including ongoing violations after permit termination and failure to pay any outstanding permit fees.

G. Transfer of Ownership

Enrollment under this General Order is not transferable. The enrolled Discharger must submit an NOT to the San Diego Water Board in the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the enrolled Discharger. The new succeeding owner or operator must submit an NOI application of enrollment under this General Order and obtain authorization from the San Diego Water Board.

III. FINDINGS

The San Diego Water Board finds:

- A. Legal Authorities. This General Order is issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (Water Code) (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from approved facilities to surface waters. This General Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260). States may request authority to issue general NPDES permits pursuant to Title 40, Code of Federal Regulations (40 CFR) section 122.28. On June 8, 1989, the State Water Resources Control Board (State Water Board) submitted an application to USEPA requesting revisions to its NPDES Program in accordance with 40 CFR sections 122.28, 123.62, and 403.10. The application included a request to add general NPDES permit authority to its approved NPDES Program. On September 22, 1989, USEPA, Region 9, approved the State Water Board's request and granted authorization for the State of California to issue general NPDES permits.
- **B.** Background and Rationale for Requirements. The San Diego Water Board developed the requirements in this General Order based on information submitted through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for the requirements of this General Order, is hereby incorporated into this General Order and constitutes part of the Findings for this General Order. Attachments A through E and G through K are also incorporated into this General Order.
- **C. Provisions and Requirements Implementing State Law.** Some of the provisions/requirements in section VII.B of this General Order are included to implement State law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- D. Executive Officer Delegation of Authority. The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this General Order as described in 40 CFR section 122.63.
- E. Notification of Interested Parties. The San Diego Water Board has notified the Dischargers and interested agencies and persons of its intent to prescribe WDRs for these discharges and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this General Order.
- **F.** Consideration of Public Comment. The San Diego Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the public hearing are provided in the Fact Sheet (Attachment F) of this General Order.

THEREFORE, IT IS HEREBY ORDERED that this General Order supersedes General Order No. R9-2013-0026, except for enforcement purposes, and, in order to meet the

provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this General Order.

IV. DISCHARGE PROHIBITIONS

- A. The dumping, deposition or discharge of the following wastes from land, docks, or boats directly into receiving waters, or adjacent to such waters in any manner that may allow its being transported into the waters is prohibited:
 - 1. Paint chips;
 - 2. Blasting materials;
 - 3. Paint overspray;
 - 4. Paint spills;
 - 5. Water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum;
 - 6. Hydro-blast water;
 - 7. Tank cleaning water used to remove sludge and/or dirt;
 - 8. Clarified water from oil and water separators, except for storm water discharges treated by an oil and water separator and reported by the Discharger to the San Diego Water Board;
 - 9. Steam cleaning water;
 - 10. Pipe and tank hydrostatic test water;
 - 11. Saltbox water;
 - **12.** Hydraulic oil leaks and spills;
 - 13. Fuel leaks and spills;
 - 14. Trash;
 - **15.** Refuse and rubbish including, but not limited to, any cans, bottles, paper, plastic, vegetable matter, or dead animals deposited or caused to be deposited by human activities;
 - 16. Fiberglass dust;
 - **17.** Swept materials;
 - 18. Ship repair and maintenance activity debris;
 - **19.** Waste zinc plates;
 - **20.** Marine fouling organisms except the discharge of marine fouling organism removed from unpainted, uncoated surfaces by underwater operations;
 - 21. Demineralizer and reverse osmosis brine;
 - 22. Oily bilge water;

- 23. Materials of petroleum origin in sufficient quantities to be visible; and
- **24.** Polychlorinated biphenyl compounds, such as those used for transformer fluid.
- **B.** The discharge of the first flush of storm water from each storm (first 0.25 inches of rainfall) from maintenance and repair areas, storage areas, or other onsite locations where industrial activity may occur (including floating drydocks, if any) is prohibited.
- **C.** Discharges of liquids or materials other than industrial storm water or floating drydock ballast water and flood water, either directly or indirectly to waters of the United States, are prohibited. These prohibited discharges include, but are not limited to, any water which, during industrial activity, comes into direct contact with or results from waste or materials used during industrial processes. Prohibited non-storm water discharges must be either eliminated or permitted by a separate NPDES permit.
- **D.** If a Discharger reuses or recycles stored or contained industrial storm water in processing activities (e.g., hydrowashing vessels, general vessel washdown, etc.), then the reused/recycled water shall be considered industrial process water and is prohibited from discharge to waters of the United States and/or State under this General Order.
- E. If a floating drydock is used, any discharge other than receiving water in the floating drydock ballast tank discharge or in flood water is prohibited. The discharge of sediment, chlorine, biocides, or other maintenance byproducts from the floating drydock ballast tanks or in the flood water is prohibited.
- **F.** The Discharger must comply with applicable Discharge Prohibitions contained in chapter 4 of the *Water Quality Control Plan for the San Diego Basin* (Basin Plan), the Water Quality Control Plan, Ocean Waters of California, California Ocean Plan (Ocean Plan) and any other applicable Statewide water quality control plan described in Attachment F of this General Order. The Basin Plan and Ocean Plan prohibitions are incorporated into this General Order as fully set forth herein and summarized in Attachment C, as a condition of this General Order.
- **G.** The discharge of wastes that cause or contribute to the violation of water quality standards (designated beneficial uses and water quality objectives developed to protect beneficial uses) is prohibited.
- **H.** The direct or indirect discharge of industrial storm water to waters of the United States in a manner causing or threatening to cause pollution, contamination, or nuisance as defined in Water Code section 13050 are prohibited.
- I. Discharges of wastes to waters of the United States are prohibited except as specifically authorized by this General Order or in a manner or location specifically described in this General Order or another NPDES permit.
- J. The discharge of industrial storm water from boatyards and boat maintenance and repair facilities to waters within the San Diego Region is prohibited unless an NOA has been issued by the San Diego Water Board.

V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. Industrial Storm Water Effluent Limitations

Discharges of industrial storm water runoff from regulated facilities to waters of the United States shall maintain compliance with the following effluent limitation, with compliance measured at the monitoring location specified in Table E-1 and the NOA, as described in section III.A.1 and V.D of Attachment E:

Table 5. Effluent Limitations for Discharges of Industrial Storm Water¹

Parameter	Units	Effluent Limitations Maximum Daily
Chronic	Pass/Fail	Pass and/or <50%
Toxicity	and % Effect	Effect ²

- ^{1.} See Attachment A for definitions of abbreviations and a glossary of common terms used in this General Order.
- ^{2.} Discharges shall maintain compliance with the Maximum Daily Effluent Limitation (MDEL) for chronic toxicity. The MDEL is based on the outcome of the Test of Significant Toxicity (TST) approach and the resulting percent effect at the Instream Waste Concentration (IWC) for any sub-lethal endpoint measured in the test. The chronic toxicity MDEL is exceeded when a toxicity test results in a "Fail" and the percent effect is greater than or equal to 50%, as specified in section X.L of this General Order.

2. Drydock Ballast and Flood Water Effluent Limitations

Discharges of ballast and flood water from floating drydocks to the San Diego Bay shall maintain compliance with the following effluent limitations, with compliance measured at monitoring location specified in Table E-2 and the NOA, as described in section III.A.2 and V.E of Attachment E:

		Effluent Limitations			
Parameter	Units	Average Monthly	Maximum Daily	Weekly Average	Instantaneous Maximum
Oil and Grease	mg/L ²	25		40	75
Settleable Solids	ml/L	1.0		1.5	3.0
Total Suspended Solids	mg/L ²	60			
Turbidity	NTU	75		100	225
рН	Standard Units				$6.0 - 9.0^3$
Temperature	۴				4
Chronic Toxicity	Pass/Fail and % Effect		Pass and/or <50% Effect ⁵		

Table 6. Effluent Limitations for Discharges of Ballast and Flood Water¹

^{1.} See Attachment A for definitions of abbreviations and a glossary of common terms used

in this General Order.

- ^{2.} The concentration-based effluent limitations stated in the table above are also applicable as mass-based effluent limitations expressed as lbs/day which are calculated as follows: Parameter Concentration (expressed as mg/L) x Flow Limit (expressed as MGD) x 8.34 (conversion factor) = Mass-based Effluent Limitation expressed as lbs/day. The Flow Limit (MGD) value used in this equation shall be the maximum volume of the ballast and flood water, as specified in the NOA. The discharge shall not cause the calculated massbased effluent limitations to be exceeded.
- ^{3.} Instantaneous minimum and instantaneous maximum.
- ^{4.} Discharges shall not be greater than 20°F over the natural temperature of the receiving water at any time.
- ^{5.} Discharges shall maintain compliance with the MDEL for chronic toxicity. The MDEL is based on the outcome of the TST approach and the resulting percent effect at the IWC for any sub-lethal endpoint measured in the test. The chronic toxicity MDEL is exceeded when a toxicity test results in a "Fail" and the percent effect is greater than or equal to 50%, as specified in section X.L of this General Order.

B. Discharge Specifications

1. General Discharge Specifications

The discharges of industrial storm water runoff, and floating drydock ballast and flood water shall comply with the following:

- a. The Discharger shall prevent or minimize the discharge of pollutants from any surface of its floating dry dock during submergence by implementing the Storm Water Pollution Prevention Plan (SWPPP) required by section VIII.C.4.a of this General Order.
- b. The Discharger shall prevent or minimize the discharge of pollutants from any surface of its floating drydock (if applicable) during submergence.
- c. Prior to submergence, or flooding, the entire area of the floating drydock deck shall be cleaned by scraping, broom cleaning, and power and pressure washing or other effective best management practices (BMPs) as soon as practical.
- d. Waste management systems must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
- e. Waste discharged must be free of:
 - i. Material that is floatable or will become floatable upon discharge.
 - ii. Settleable material or substances that may form sediments that will degrade benthic communities or other aquatic life.
 - iii. Substances that will accumulate to toxic levels in marine waters, sediments, or biota.

- iv. Substances that significantly decrease the natural light to benthic communities and other marine life.
- v. Materials that result in aesthetically undesirable discoloration of the ocean surface.
- f. Waste effluents shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in treatment.
- g. The location of waste discharges from the facilities shall assure that:
 - i. Pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body contact sports.
 - ii. Maximum protection is provided to the marine environment.
- h. The Discharger shall not cause pollution, contamination, or nuisance, as those terms are defined in Water Code section 13050, as a result of the treatment or discharge of wastes.
- i. Collected screenings, sludges, and other solids removed from liquid wastes, shall be disposed in a manner approved by the San Diego Water Board.
- j. All waste and storm water treatment, containment and disposal facilities shall be protected against regional impacts due to climate change including but not limited to sea level rise, coastal water surges, changes in receiving water chemistry and the gradual warming of water body temperatures.

VI. NUMERIC ACTION LEVELS (NALS)

Numeric Action Levels (NALs) found in Table 7 of this General Order are used as numeric thresholds for corrective action. An exceedance of an NAL is not a violation of this General Order. NALs are only applicable to industrial storm water discharges.

A. NAL Exceedance Determination Method

1. Annual Average NAL Exceedance

An Annual Average NAL exceedance occurs when the average of all the analytical results for a parameter from all samples taken within the reporting year exceeds the Annual Average NAL value for that parameter listed in Table 7.

2. Instantaneous Maximum NAL Exceedance

An instantaneous maximum NAL exceedance occurs when two or more analytical results from samples for any single parameter taken within the reporting year exceed the Instantaneous Maximum NAL value for total suspended solids and total oil and grease or are outside of the Instantaneous Maximum NAL range for pH listed in Table 7 below.

Parameter	Test Method ¹	Detection Limit	Reporting Unit	Annual Average NAL Value	Instantaneous Maximum NAL Value
рН	Field Test with Calibrated Portable Instrument or lab sample in accordance with 40 CFR part 136	N/A	pH units	N/A	Less than 6.0 or greater than 9.0
Total Suspended Solids (TSS)	EPA 160.2 or SM 2540-D	1	mg/L	100	400
Total Oil & Grease (TOG)	EPA 413.2 or EPA 1664	1	mg/L	15	25
Zinc, Total Recoverable	EPA 200.8	0.0005	mg/L	0.26 ²	-
Copper, Total Recoverable	EPA 200.8	0.0005	mg/L	0.0332 ²	-
Lead, Total Recoverable	EPA 200.8	0.0005	mg/L	0.262 ²	-
Chemical Oxygen Demand	SM 5220C	1	mg/L	120	-
Biochemical Oxygen Demand	SM 5210B	3	mg/L	30	-

 Table 7. Numeric Action Levels

 SM – Standard Methods for the Examination of Water and Wastewater, 18th edition. EPA – Environmental Protection Agency test methods.

^{2.} The NAL is the highest value used by EPA based on their hardness table in the 2008 *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.*

B. NAL Exceedance Response Actions

1. No Exceedance – Baseline Status

- a. All Dischargers will automatically be placed in baseline status until they have an exceedance of any Instantaneous Maximum or Annual Average NAL value.
- b. Dischargers in Level 1 or Level 2 status will return to baseline status upon eight (8) consecutive QSEs resulting in no exceedances of Instantaneous Maximum or Annual Average NAL values.
- 2. Level 1 Status Operational Source Control

In the event that sampling results indicate that an Instantaneous Maximum or Annual Average NAL is exceeded, the Discharger shall immediately have Level 1 status for any and all parameters exceeded. Within 60 days of obtaining Level 1 status the Discharger shall do the following:

- a. Evaluate industrial pollutant sources and the Storm Water Pollution Prevention Plan (SWPPP) to identify where additional operational source control BMPs and/or SWPPP implementation measures are necessary to prevent or reduce industrial pollutants in industrial storm water discharges in compliance with best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT).
- b. Based upon the above evaluation:
 - i. Implement additional BMPs and SWPPP implementation measures as soon as practicable; and
 - ii. Revise the SWPPP as soon as practicable, but no later than October 1 of the following reporting year.
- c. Submit by August 1 of the following reporting year, an NAL Level 1 Exceedance Report which includes the following items for each constituent that exceeded an NAL Annual Average:
 - i. A summary of the Level 1 evaluation required in section VI.B.2.a;
 - ii. A description and implementation schedule for additional BMPs and SWPPP revisions including those that have yet to be implemented as of the annual report submittal date; and
 - iii. A certification that all industrial pollutant sources have been evaluated, and all necessary SWPPP BMPs and implementation measures have been identified.

3. Level 2 Status – Treatment / Structural Control

- a. In any subsequent reporting year that sampling indicates a Discharger in Level 1 status exceeds an Instantaneous Maximum or Annual Average NAL the Discharger shall immediately have Level 2 status for all parameters exceeded.
- b. As soon as practicable after obtaining Level 2 status, the Discharger shall evaluate industrial pollutant sources and the SWPPP to identify locations and install structural and/or treatment control BMPs as necessary to prevent or reduce industrial pollutants in industrial storm water discharges in compliance with BAT/BCT.
- c. The Discharger shall prepare, certify, and submit by August 1 of the following reporting year an NAL Level 2 Exceedance Report which shall include:
 - i. A description of treatment and/or structural source control BMPs; and
 - ii. An implementation schedule for the design and construction of the treatment and/or structural source control BMPs.

- d. Certification Reports. At any time in Level 2 status, the Discharger may evaluate industrial pollutant sources, the SWPPP, non-industrial pollutant sources, and the impact of industrial storm water discharges to receiving waters, and prepare a technical report supporting a BAT/BCT Compliance Certification or Non-Industrial Pollutant Certification as detailed below.
- e. BAT/BCT Compliance Certification. The BAT/BCT Certification Report shall include:
 - i. An identification and evaluation of all pollutant source(s) associated with industrial activity that are causing an exceedance of an Annual Average with a discussion of the existing BMPs;
 - ii. A Certification that the Discharger is in compliance with the receiving water limitations in section VII.B of this General Order; and
 - iii. A Certification that no additional operational source control, treatment, or structural source control BMPs are required to reduce or prevent pollutants in industrial storm water discharges in compliance with BAT/BCT. The Discharger shall evaluate each of the following factors, from 40 CFR part 125.3(d), in this report:
 - (a) The total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application;
 - (b) The age of equipment and facilities involved;
 - (c) The process employed;
 - (d) The engineering aspects of the application of various types of control techniques;
 - (e) Process changes; and
 - (f) Non-water quality environmental impact (including energy requirements).
- f. Non-Industrial Pollutant Certification. This Non-Industrial Pollutant Certification Report shall include:
 - i. An identification and evaluation of all industrial and non-industrial related pollutant sources which could cause or are causing an exceedance of an Annual Average;
 - ii. A Certification that the Discharger is in compliance with the receiving water limitations in section VII.B of this General Order;
 - iii. A Certification that the pollutant source(s) causing the exceedance of an Annual Average are not generated, caused, or related to the facility's industrial activities; and
 - iv. A Certification that no additional BMPs are required to reduce or prevent pollutants in industrial storm water discharges in compliance with BAT/BCT.

- g. The technical reports required to support the certifications described in section VI.B.3.e. or f. shall, at a minimum, include the following:
 - i. A description of the industrial pollutant sources and corresponding industrial pollutants that are or may be discharged;
 - ii. A summary of the existing BMPs;
 - iii. An evaluation and determination that industrial pollutants in industrial storm water discharges are not causing or contributing to an exceedance of a water quality standard;
 - iv. Alternate NALs, if applicable;
 - v. An evaluation and determination of the Dischargers alternative NAL(s) related to compliance with BAT/BCT;
 - vi. An analysis documenting the costs of structural and treatment controls that would be effective in further reducing pollutant discharges but that exceed BAT/BCT; and
 - vii. (Applicable to Non-Industrial Pollutant Certification Only) An evaluation of all on-site/off-site analytical monitoring data demonstrating that nonindustrial related pollutant source(s) are causing exceedances of an Instantaneous Maximum or Annual Average NAL. If analytical monitoring data has not been collected to fully support that the source of pollutants in industrial storm water discharges are non-industrial, the technical report shall contain a one-year monitoring program to (1) collect and analyze samples from non-industrial pollutant sources to fully support that exceedances of an Instantaneous Maximum or Annual Average NAL are solely caused by non-industrial based pollutant sources, and (2) to assist in determining, along with monitoring data from industrial storm water associated with industrial activities, the appropriate NAL(s).
 - (a) Upon the certifications described in section VI.B.3.e and f, the Discharger shall have Baseline status unless 1) the San Diego Water Board rejects the certification, 2) the Annual Average NAL exceeds the Dischargers recommended alternative NAL, or 3) the Annual Average NAL exceeds the NAL in Table 7 for a different pollutant.
 - (b) The San Diego Water Board may review any technical reports submitted in connection with Level 2 certification or reporting requirements. Upon review of a Level 2 report or certification, the San Diego Water Board may direct the Discharger to take further action(s) to comply with this General Order.

4. Compliance Storm Events

All treatment BMPs for any pollutant shall be designed for no less than a 5-year frequency, 24-hour storm event. A Compliance Storm Event is a storm event less than a 5-year frequency, 24-hour storm (expressed in tenths of an inch of rainfall), as determined at the National Oceanic and Atmospheric Administration's National

Weather Service Hydrometeorological Design Studies Center website at https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca.

VII. RECEIVING WATER LIMITATIONS

The receiving water limitations set forth below for waters of the United States within the San Diego Region are based on applicable water quality standards contained in water quality control plans and policies and federal regulations and are a required part of this General Order. The discharges of waste regulated under this General Order shall not cause or contribute to violations of these receiving water limitations.

A. Water Quality Objectives and Criteria

The discharge of waste shall not cause violations of water quality objectives, federal pollutant criteria or other provisions applicable to the authorized receiving water as contained in the State water quality control plans and policies and federal regulations set forth below:

- **1.** The Basin Plan, including beneficial uses, water quality objectives, and implementation plans;
- 2. State Water Board water quality control plans and policies including the:
 - a. Water Quality Control Plan for Ocean Waters of California (Ocean Plan);
 - b. Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Bays and Estuaries Policy);
 - Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP)¹;
 - d. Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Part 3 Bacteria Provisions (ISWEBE Plan); and
 - e. Water Quality Control Plan for Enclosed Bays and Estuaries of California Sediment Quality Provisions (Bays and Estuaries Plan).
- **3.** Priority pollutant criteria promulgated by the USEPA through the:
 - a. *National Toxics Rule* (NTR)² (promulgated on December 22, 1992 and amended on May 4, 1995); and
 - b. California Toxics Rule (CTR).^{3,4}

B. Receiving Water Limitations

- 1. Receiving Water Limitations for Bays, Estuaries, and Coastal Lagoons
 - a. Bacterial Characteristics

¹ Applicable to floating drydock ballast and flood water discharges to San Diego Bay.

² 40 CFR section 131.36.

³ 65 Federal Register 31682-31719 (May 18, 2000), adding 40 CFR section 131.38.

⁴ If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.

- i. In waters designated for contact recreation (REC-1), where the salinity is equal to or less than 1 part per thousand (ppt) 95 percent or more of the time during the calendar year, the six-week rolling geometric mean concentration for Escherichia coli (E. coli) shall not exceed 100 colony forming units per 100 milliliters (CFU/100 mL), calculated weekly, and a statistical threshold value (STV) of 320 CFU/100 mL not to be exceeded more than 10 percent of samples in a calendar month, calculated in a static manner. [ISWEBE Plan]
- ii. In waters designated for REC-1, where the salinity is greater than 1 ppt five percent or more of the time during the calendar year, the six week rolling geometric mean concentration for Enterococci shall not exceed 30 CFU/100 mL, calculated weekly, and a STV of 110 CFU/100 mL not to be exceeded more than 10 percent of samples in a calendar month, calculated in a static manner. [ISWEBE Plan]
- iii. In waters where shellfish harvesting for human consumption, commercial, or sports purposes is designated, the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70 organisms per 100 mL nor shall more than 10 percent of the samples collected during any 30-day period exceed 230 per 100 mL for a five-tube decimal dilution test or 330 organisms per 100 mL when a three-tube decimal dilution test is used. [Basin Plan]
- iv. In San Diego Bay where bay waters are used for whole fish handling, the density of E. coli shall not exceed 7 organisms per mL in more than 20 percent of any 20 daily consecutive samples of bay water. [Basin Plan]
- b. Physical Characteristics
 - i. Waters shall not contain oils, greases, waxes, or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses. [Basin Plan]
 - ii. Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses. [Basin Plan]
 - iii. Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses. [Basin Plan]
 - iv. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. [Basin Plan]
 - v. Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses. [Basin Plan]
 - vi. Waters shall not contain taste or odor producing substances at concentrations which cause a nuisance or adversely affect beneficial uses. [Basin Plan]

- vii. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. The transparency of waters in lagoons and estuaries shall not be less than 50% of the depth at locations where measurement is made by means of a standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the San Diego Water Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed 20% over natural turbidity levels at locations with a natural turbidity of 0 to 50 NTU; 10 NTU at locations with a natural turbidity of 50 to 100 NTU; and 10% over the natural turbidity level in locations with a natural turbidity of greater than 100 NTU. [Basin Plan]
- viii. Within San Diego Bay, the transparency of bay waters, insofar as it may be influenced by any controllable factor, either directly or through induced conditions, shall not be less than 8 feet in more than 20 percent of the readings in any zone, as measured by a standard Secchi disk. Wherever the water is less than 10 feet deep, the Secchi disk reading shall not be less than 80 percent of the depth in more than 20 percent of the readings in any zone. [Basin Plan]
- c. Chemical Characteristics
 - i. The dissolved oxygen concentration shall not at any time be less than 5.0 mg/L. The annual mean dissolved oxygen concentration shall not be less than 7 mg/L more than 10% of the time. [Basin Plan]
 - ii. The pH shall not be changed at any time more than 0.2 units from normal ambient pH. The pH shall not be depressed below 7.0 nor raised above 9.0. [Basin Plan]
 - iii. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses. [Basin Plan]
 - iv. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH3) to exceed 0.025 mg/l (as N). [Basin Plan]
 - v. No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife or aquatic organisms. [Basin Plan]
- d. Radioactivity Characteristics
 - i. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal or aquatic life. [Basin Plan]

- ii. The radioactivity in the receiving waters shall not exceed limits specified in title 17, division 1, chapter 5, subchapter 4, group 3, article 1, section 30253 of the CCR.
- e. Toxicity Characteristics
 - i. All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the San Diego Water Board. [Basin Plan]
 - ii. Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities. [Bays and Estuaries Plan]
 - iii. Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health. [Bays and Estuaries Plan]

2. Receiving Water Limitations for Ocean Waters

a. Bacterial Characteristics

For discharges of waste to the Pacific Ocean, within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the San Diego Water Board (waters designated as REC-1), the following bacterial objectives shall be maintained throughout the water column [Ocean Plan]:

- i. 30-day Geometric Mean The following standards are based on the geometric mean of the five most recent samples from each site:
 - (a) Total coliform density shall not exceed 1,000 per 100 ml;
 - (b) Fecal coliform density shall not exceed 200 per 100 ml; and
 - (c) Enterococcus density shall not exceed 35 per 100 ml.
- ii. Single Sample Maximum
 - (a) Total coliform density shall not exceed 10,000 per 100 ml;
 - (b) Fecal coliform density shall not exceed 400 per 100 ml;
 - (c) Enterococcus density shall not exceed 104 per 100 ml; and
 - (d) Total coliform density shall not exceed 1,000 per 100 ml when the fecal coliform/total coliform ratio exceeds 0.1.
- b. Physical Characteristics
 - i. Floating particulates and grease and oil shall not be visible [Ocean Plan].
 - ii. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface [Ocean Plan].

- iii. Natural light shall not be significantly reduced as the result of the discharge of waste. [Ocean Plan]
- iv. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded [Ocean Plan].
- c. Chemical Characteristics
 - i. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials [Ocean Plan].
 - ii. The pH shall not be changed at any time more than 0.2 units which occur naturally [Ocean Plan].
 - iii. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above the present under natural conditions [Ocean Plan].
 - iv. The concentration of substances set forth in Chapter II, Table 1 of the Ocean Plan (2012), in marine sediments shall not be increased to levels which would degrade indigenous biota [Ocean Plan].
 - v. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade marine life [Ocean Plan].
 - vi. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota [Ocean Plan].
 - vii. Ocean Plan Table 1 water quality objectives apply to all discharges within the jurisdiction of this Plan. Unless otherwise specified, all metal concentrations are expressed as total recoverable concentrations. [Ocean Plan]
- d. Biological Characteristics
 - i. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded [Ocean Plan].
 - ii. The natural taste, odor, color of fish, shellfish, or other marine resources used for human consumption shall not be altered [Ocean Plan].
 - iii. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health [Ocean Plan].
- e. Radioactivity Characteristics

The discharge of radioactive waste shall not degrade marine life [Ocean Plan].

VIII. PROVISIONS

A. Standard Provisions

- 1. Federal Standard Provisions. The Discharger shall comply with all Standard Provisions included in Attachment D of this General Order.
- 2. San Diego Water Board Standard Provisions. The Discharger shall comply with the following provisions. In the event that there is any conflict, duplication, or overlap between provisions specified by this General Order, the more stringent provision shall apply:
 - a. The Discharger shall comply with all applicable federal, State, and local laws and regulations for handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the United States in a manner which causes or threatens to cause a condition of pollution, contamination or nuisance as those terms are defined in Water Code section 13050.
 - b. This General Order expires on January 31, 2025, after which, the terms and conditions of this permit are automatically continued pending issuance of a new Order, provided that all requirements of USEPA's NPDES regulations at 40 CFR section 122.6 and the State's regulations at CCR title 23, section 2235.4 regarding the continuation of expired orders and waste discharge requirements are met.
 - c. A copy of this General Order and the NOA shall be maintained onsite at the facility, and shall be available to San Diego Water Board, State Water Board, and USEPA personnel and/or their authorized representative at all times. Electronic copies accessible from a computer located at the facility shall be considered onsite.
 - d. The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this General Order or the NOA, including such accelerated or additional monitoring as may be necessary to determine the nature, and effect of the noncomplying discharge.
 - e. The San Diego Water Board or Director of the USEPA may require a person requesting enrollment under this General Order or subject to WDRs under this General Order to apply for and obtain an individual NPDES permit. Cases where an individual NPDES permit may be required include but are not limited to those described in 40 CFR section 122.28(b)(3)(i) and (b)(3)(ii), and where the volume of a discharge exceeds 10 million gallons per year, or the duration of a discharge exceeds 3 years.

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this General Order, and any additional monitoring requirements specified in the NOA.

C. Special Provisions

1. Reopener Provisions

This General Order, or coverage under this General Order, may be amended, modified, revoked and/or reissued, or terminated for cause at any time prior to its

expiration in accordance with the provisions of 40 CFR parts 122, 124, and 125, including, but not limited to, any of the following circumstances:

- a. Violation of any terms or conditions of this General Order or the NOA from the San Diego Water Board;
- b. Obtaining enrollment under this General Order, or an NOA from the San Diego Water Board, by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires or results in either a temporary or permanent reduction or elimination of the authorized discharge;
- d. A finding based on data or other sources, by the San Diego Water Board, that continued discharges may cause unreasonable degradation of the aquatic environment;
- e. Modification is warranted to address toxicity in discharges or receiving waters through new or revised effluent limitations or other permit toxicity requirements or to implement new, revised, or newly interpreted water quality standards applicable to toxicity;
- f. Modification is warranted to address an applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) promulgated under section 307 (a) of the CWA for a toxic pollutant where that standard or prohibition is more stringent than any limitation on the pollutant in this General Order;
- g. Modification is warranted to include new Minimum Levels (MLs) in accordance with the provisions set forth in 40 CFR parts 122 and 124;
- Modification is warranted to incorporate a new or revised water quality objective that has come into effect or applicable requirements of a total maximum daily load (TMDL) that is adopted or revised;
- i. Modification is warranted to incorporate additional effluent limitations, prohibitions, and requirements, based on the results of additional monitoring required by the MRP (Attachment E) of this General Order; or
- j. Modification of the receiving waters MRP and/or special studies requirements of this General Order is necessary for cause, including but not limited to a) revisions necessary to implement recommendations from Southern California Coastal Water Research Project (SCCWRP); b) revisions necessary to develop, refine, implement, and/or coordinate a regional monitoring program; and/or c) revisions necessary to develop and implement improved monitoring and assessment programs in keeping with San Diego Water Board Resolution No. R9-2012-0069, Resolution in Support of a Regional Monitoring Framework.

The filing of a request by the Discharger for modifications, revocation and reissuance, or termination of this General Order, or a notification of planned change in or anticipated noncompliance with this General Order does not stay any condition of this General Order.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

If the discharge causes or contributes to chronic toxicity in the effluent, a Toxicity Reduction Evaluation (TRE) shall be required as defined in section III.B of the MRP. The San Diego Water Board shall require the Discharger to conduct a TRE if repeated tests reveal toxicity as a result of waste discharge under this General Order. The Discharger shall take all reasonable steps to control toxicity once the source of toxicity is identified. Failure to conduct the required toxicity tests or a TRE is a violation of this General Order and will result in appropriate enforcement action(s).

3. Other Special Provisions

- a. The Discharger shall dispose of solids removed from liquid wastes in a manner that is consistent with title 27 of the CCR and approved by the San Diego Water Board.
- b. This General Order expires on January 31, 2025, after which, the terms and conditions of this permit are automatically continued pending issuance of a new General Order, provided that all requirements of USEPA's NPDES regulations at 40 CFR section 122.6 and the State's regulations at CCR title 23, section 2235.4 regarding the continuation of expired NPDES Permits and waste discharge requirements are met.
- c. The San Diego Water Board or Director of the USEPA may require a person requesting coverage under this General Order or subject to waste discharge requirements under this General Order to apply for and obtain an individual NPDES permit. Cases where an individual NPDES permit may be required include, but are not limited to, those described in 40 CFR sections 122.28(b)(3)(i) and (b)(3)(ii).

4. Best Management Practices and Pollution Prevention

a. Industrial Storm Water Discharge Requirements and Industrial BMPs

- i. The Discharger shall eliminate the discharge of the first-flush (0.25 inch) of industrial storm water runoff for each storm event from the Facility maintenance and repair areas to surface waters or storm drains, and shall appropriately maintain all means by which this is accomplished
- ii. The Discharger shall develop, implement, and maintain a Storm Water Pollution Prevention Plan (SWPPP) consistent with the requirements of Attachment J of this General Order. The SWPPP shall address all areas on which industrial activities occur (including floating drydocks, if any). In addition to addressing industrial storm water discharges, the SWPPP shall also contain BMPs for industrial process performed on-site (pier, float, dock, or other leasehold areas where work may occur directly over or on the receiving water) such as hydrowashing and sand blasting. Dischargers that previously implemented a SWPPP during the permit term of Order No. R9-2013-0026, shall ensure the SWPPP satisfies the requirements of Attachment J.

- iii. The SWPPP shall contain adequate BMPs to prevent the discharge of any ship repair or other pollutants generated on floating drydocks, if any, as well as BMPs for floating drydock ballast water discharges and vessel cooling water discharges. The Discharger shall incorporate applicable BMPs from USEPA's Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (Vessel General Permit or VGP), effective December 19, 2013, into the SWPPP.
- iv. A completed copy of the SWPPP shall be submitted to the San Diego Water Board within 90 days of the effective date for this General Order or of submission of an NOA. The Discharger shall amend its SWPPP 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.
- v. Treatment systems and related collection and conveyance facilities shall be constructed and maintained to prevent the discharge of pollutants to surface waters during and after collection in those facilities.
- vi. Appropriate means, such as but not limited to berms, shall be used to isolate the Facility's maintenance/repair area(s) to prevent storm water run-on from commingling with the industrial storm water discharge from the maintenance/repair area, and to prevent storm water runoff to offsite areas.

b. Vessel Owner/Operator Notifications

The Discharger shall develop and implement a method of notifying the owner/operator of each vessel at the Dischargers leasehold of their obligation to prevent the discharge of waste and to comply with Basin Plan Prohibitions regarding the discharge of sewage from vessels as stated below. The Discharger shall have a method of enforcing these requirements as well as the prohibitions listed below:

- i. The discharge of untreated sewage from land, docks, or vessels to San Diego Bay is prohibited.
- ii. The discharge of treated sewage from land, docks, or vessels to portions of San Diego Bay that are less than 30 feet deep at MLLW is prohibited.
- iii. The discharge of treated sewage from land, docks, or vessels, which do not have a properly functioning United States Coast Guard (USCG) certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at MLLW is prohibited.
- iv. The discharge of untreated or treated sewage from land, docks, or vessels to Mission Bay, Oceanside Harbor or Dana Point Harbor is prohibited, regardless of vessel size or water depth. This prohibition of sewage discharges to Mission Bay, Oceanside Harbor or Dana Point Harbor, includes discharges these waterbodies from a properly

functioning United States Coast Guard (USCG) certified marine sanitation device.

If the Discharger previously implemented the notification system required under General Order R9-2013-0026, the Discharger shall ensure the notification system meets the above requirements.

5. Special Provisions for Wastewater Facilities (POTWs Only) – Not Applicable

6. Compliance Schedules – Not Applicable

IX. CONDITIONAL EXCLUSION – NO EXPOSURE CERTIFICATION (NEC) REQUIREMENTS

Discharges composed entirely of storm water which have not been exposed to industrial activity are not industrial storm water discharges. These discharges are conditionally excluded from requirements to implement BMPs, to meet Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT), and monitoring requirements of this General Order so long as the following conditions are met: (1) there is no exposure of Industrial Materials and Activities to rain, snow, snowmelt, and/or runoff; (2) all unauthorized non-storm water discharges have been eliminated and all authorized non-storm water discharges satisfy the conditions of an applicable NPDES Permit; (3) the Discharger satisfies all other requirements of this Section; and (4) the Discharger has received a NEC approval letter from the San Diego Water Board. A SWPPP and BMPs are required if secondary containment is used to satisfy NEC requirements to prevent non-storm water discharges of industrial material such as by the wind. Dischargers that do not satisfy all conditional exclusion requirements are required to submit an NOI for coverage under this General Order.

A. NEC Specific Definitions

- 1. No Exposure all Industrial Materials and Activities are protected by a stormresistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff.
- 2. Industrial Materials and Activities includes, but is not limited to, material handling activities or equipment, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products.
- **3.** Material Handling Activities includes the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, or waste product.
- 4. Sealed banded or otherwise secured, but without operational taps or valves.
- 5. Storm-Resistant Shelters includes completely roofed and walled buildings or structures. They also include structures with only a top cover supported by permanent supports but with no side coverings, provided material within the structure is not subject to wind dispersion (sawdust, powders, etc.), track-out, and there is no storm water discharged from within the structure that has come into contact with any materials.

B. NEC Qualifications

To qualify for an NEC, Dischargers shall:

- 6. Provide a Storm-Resistant Shelter to protect Industrial Materials and Activities from exposure to rain, snow, snowmelt, run-on, and runoff.
- 7. Inspect and evaluate the facility annually to determine that storm water exposed to industrial materials or equipment has not and will not be discharged to waters of the United States. Evaluation records shall be maintained for five (5) years.
- 8. Register for NEC coverage by certifying that there are no discharges of storm water contaminated by exposure to Industrial Materials and Activities from areas of the facility subject to this General Order, and certify that all unauthorized non-storm water discharges have been eliminated and all authorized non-storm water discharges satisfy the conditions of an applicable NPDES Permit. NEC coverage and annual renewal requires payment of an annual fee in accordance with section 13260 of the Water Code.
- **9.** NEC registration documents shall be prepared and submitted in accordance with the certification requirements in section IX.E.2.
- **10.** NEC coverage shall become effective when the San Diego Water Board issues the Discharger a NEC approval letter.

C. NEC Industrial Materials and Activities – Storm-Resistant Shelter Not Required

To qualify for NEC coverage, a storm-resistant shelter is not required for the following:

- 1. Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated, do not contain residual industrial materials on the outside surfaces, and do not leak;
- 2. Adequately maintained vehicles used in material handling;
- **3.** Final products, other than products that would be mobilized in storm water discharge (e.g., rock salt);
- **4.** Any Industrial Materials and Activities that are protected by a temporary shelter for a period of no more than ninety (90) days due to facility construction or remodeling; and
- **5.** Any Industrial Materials and Activities that are protected within a secondary containment structure that will not discharge storm water to waters of the United States (based on the historical rainfall record).

D. NEC Limitations

1. NEC coverage is available on a facility-wide basis only, not for individual outfalls. If a facility has industrial storm water discharges from one or more drainage areas that require NOI coverage, the Discharger shall submit an NOI for the entire facility in accordance with section II.A of this General Order. Any drainage areas on that facility that would otherwise qualify for NEC coverage may be specially addressed in the facility SWPPP by including an NEC Report and a certification statement demonstrating that those drainage areas of the facility have been evaluated; and that none of the Industrial Materials or Activities listed in section IX.E.2.a of this General Order are, or will be in the foreseeable future, exposed to precipitation and discharged to surface waters.

- 2. If circumstances change and Industrial Materials and Activities become exposed to rain, snow, snowmelt, and/or runoff, the conditions for this exclusion shall no longer apply. In such cases, the Discharger shall become subject to enforcement for discharging without a permit. Any Discharger with NEC coverage that anticipates changes in circumstances should submit an NOI to the San Diego Water Board before anticipated exposure.
- **3.** The San Diego Water Board may deny NEC coverage and require NOI coverage upon determining that:
 - a. The discharge is exposed to industrial materials and activities; or
 - b. The discharge would have a reasonable potential to cause or contribute to an exceedance of an applicable water quality standards.

E. NEC Permit Registration Documents Required for Initial NEC Coverage

Dischargers shall file for NEC coverage by submitting the following items to the San Diego Water Board:

- 1. The completed NEC form, which includes:
 - a. The legal name, mailing address, contact information, and billing information of the Discharger who operates the facility.
 - b. The facility business name and physical address, the county name, facility contact information, latitude and longitude and information about the facility's industrial activity.
 - c. NEC Report Information.
 - d. Certification by the Discharger that all documents submitted are correct and true and that the conditions of no-exposure have been met.
- 2. An NEC Report prepared and certified by a California licensed professional engineer, competent and proficient in the fields pertinent to the report and qualified to prepare such report. The NEC Report shall include the following information:
 - a. An evaluation of the facility and whether the following materials or activities are, or will be in the foreseeable future, exposed to precipitation and have the potential to be discharged in storm water, aerially, or by other means:
 - i. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed;
 - ii. Materials or residuals on the ground or in storm water inlets from spills/leaks;
 - iii. Materials or products from past industrial activity;
 - iv. Material handling equipment (except adequately maintained vehicles);
 - v. Materials or products during loading/unloading or transporting activities;

- vi. Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to storm water does not result in the discharge of pollutants);
- vii. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;
- viii. Materials or products handled/stored on roads or railways owned or maintained by the Discharger;
- ix. Waste material (except waste in covered, non-leaking containers, e.g., dumpsters);
- x. Application or disposal of processed wastewater (unless already covered by an_NPDES Permit); and
- xi. Particulate matter or visible deposits of residuals from roof stacks/vents evident in the storm water outflow.
- b. A technical description of any secondary containment and the capacity of the secondary containment.
- c. A site map of the facility including any structural BMPs such as treatment facilities and/or secondary containment facilities.
- d. A statement of qualifications of the responsible lead professional who prepared the report.
- **3.** Annual fee pursuant to California Code of Regulations section 2200.5 for new dischargers. Existing dischargers will be invoiced appropriately.

F. Requirements for Annual NEC Coverage Recertification

By August 1 of each reporting year beginning in 2020, any Discharger who has previously registered for NEC coverage shall annually submit and certify an NEC Annual Certification Report prepared and certified by a California licensed professional engineer, competent and proficient in the fields pertinent to the report and qualified to prepare such report, demonstrating that the facility has been evaluated, and that none of the Industrial Materials or Activities described above are, or will be in the foreseeable future, exposed to precipitation and have the potential to be discharged in storm water, aerially, or by other means. The NEC Annual Certification Report shall include a statement of qualifications of the responsible lead professional who prepared the report.

G. NEC Certification Statement

All NEC certifications and recertifications shall include the following certification statement:

"I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of 'no exposure' and obtaining an exclusion from NPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document. I understand that I am obligated to submit a no exposure certification form annually to the San Diego Water Board and, if requested, to the operator of the local Municipal Separate Storm Sewer System (MS4) into which this facility discharges (where applicable). I understand that I must allow the San Diego Water Board, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

X. COMPLIANCE DETERMINATION

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

A. Compliance with Average Monthly Effluent Limitation (AMEL)

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of noncompliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for the month only. 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 the month only if only a single sample is taken AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

B. Compliance with Average Weekly Effluent Limitation (AWEL)

If the average of daily discharges over a calendar week (Sunday through Saturday) exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in seven days of noncompliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. 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. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

C. Compliance with Maximum Daily Effluent Limitation (MDEL)

The MDEL shall apply to flow weighted 24-hour composite samples, or grab, as specified in the MRP (Attachment E). If a daily discharge exceeds the MDEL for a

given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day.

D. Compliance with Instantaneous Maximum Effluent Limitation

The instantaneous maximum effluent concentration limitation shall apply to grab sample determinations. If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of noncompliance with the instantaneous maximum effluent limitation).

E. Compliance with Instantaneous Minimum Effluent Limitation

The instantaneous minimum effluent concentration limitation shall apply to grab sample determinations. If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of noncompliance with the instantaneous minimum effluent limitation).

F. Compliance with Single-Constituent Effluent Limitations

The Discharger shall be deemed out of compliance with an effluent limitation or discharge specification if the concentration of the constituent in the monitoring sample is greater than the effluent limitation or discharge specification and greater than or equal to the Minimum Level (ML).

G. Mass and Concentration Limitations

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be "Not Detected" (ND) or "Detectable but not quantified" (DNQ), the corresponding mass emission rate (MER) determined from that sample concentration shall also be reported as "ND" or "DNQ".

H. Mass Emission Rate (MER)

The MER, in pounds per day, shall be obtained from the following calculation for any calendar day:

MER (lbs/day) = $8.34 \times Q$ (MGD) x C (mg/L)

Where C is the concentration measured in the sample and Q is the average flow rate occurring during the monitoring period. For ballast and flood water discharges, Q shall be the total volume (in millions of gallons) of ballast and flood water released per submergence event.

I. Multiple Sample Date Reduction

The concentration of the pollutant in the effluent may be estimated from the result of a single sample analysis or by a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses when all sample results are quantifiable (i.e., greater than or equal to the reported ML). When one or more sample results are reported as ND or DNQ, the central tendency concentration of the pollutant shall be the median (middle) value of the multiple samples. If, in an even number of samples, one or both of the middle values is ND or DNQ, the median will be the lower of the two middle values.

J. Bacterial Standards and Analysis

1. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

Geometric Mean = $(C_1 \times C_2 \times ... \times C_n)^{1/n}$

Where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL) found on each day of sampling.

2. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 CFU (colony-forming units). The detection methods used for each analysis shall be reported with the results of the analysis. Detection methods used for coliforms (total and fecal) shall be those listed in 40 CFR part 136 or any improved method determined by the San Diego Water Board (and approved by USEPA) to be appropriate. Detection methods used for enterococcus shall be those presented in USEPA publication USEPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water by Membrane Filter Procedure, listed under 40 CFR part 136 or by any other method approved by the San Diego Water Board.

K. Single Operational Upset (SOU)

- 1. A SOU is broadly defined as a single unusual event that temporarily disrupts the usually satisfactory operation of a system in such a way that it results in violation of multiple pollutant parameters.
- 2. A Discharger may assert SOU to limit liability only for those violations which the Discharger submitted notice of the upset as required in section I.H of Attachment D of this General Order.
- **3.** For purposes outside of Water Code sections 13385(h) and (i), determination of compliance and civil liability (including any more specific definition of SOU), the requirements for Dischargers to assert the SOU limitation of liability, and the manner of counting violations, shall be in accordance with the USEPA Memorandum Issuance of Guidance Interpreting Single Operational Upset (September 27, 1989).
- **4.** For purposes of Water Code sections 13385(h) and (i), determination of compliance and civil liability (including any more specific definition of SOU), the requirements for Dischargers to assert the SOU limitation of liability, and the

manner of counting violations shall be in accordance with Water Code section 13385(f)(2).

L. Chronic Toxicity

The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833-R-10-004, 2010), Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1. The null hypothesis (Ho) for the TST statistical approach is:

Mean discharge "in-stream" waste concentration (IWC) response ≤0.75 × Mean control response.

A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail." This is a t-test (formally Student's t-test), a statistical analysis comparing two sets of replicate observations—in the case of whole effluent toxicity (WET) test, only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail")). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances.

The MDEL for chronic toxicity is exceeded and a violation will be flagged when a chronic toxicity test, analyzed using the TST statistical approach, results in "Fail" and the percent effect is greater than or equal to 50%.

The chronic toxicity MDEL is set at the IWC for the discharge (100% effluent) and expressed in units of the TST statistical approach ("Pass" or "Fail") and percent effect. All NPDES effluent compliance monitoring for the chronic toxicity MDEL shall be reported using the IWC effluent concentration and negative control, expressed in units of the TST. The TST hypothesis (Ho) (see above) is statistically analyzed using the IWC and a negative control. Effluent toxicity tests shall be run using Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine Estuarine Organisms (EPA/600/R-95/136, 1995). The San Diego Water Board's review of reported toxicity test results will include review of concentrationresponse patterns as appropriate. SOPs used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent (and receiving water) toxicity test measurement results from the TST statistical approach, including those that incorporate a consideration of concentration-response patterns, must be submitted to the San Diego Water Board. The San Diego Water Board will make a final determination as to whether a toxicity test result is valid, and may consult with the Discharger, USEPA, the State Water Board's Quality Assurance Officer, or the State Water Board, Division of Drinking Water (DDW) Environmental Laboratory Accreditation Program (ELAP) as needed.

ATTACHMENT A – ABBREVIATIONS AND GLOSSARY

Part 1. – Abbreviati	ons		
Abbreviation	Definition		
40 CFR	Code of Federal Regulations, title 40		
AMEL	Average Monthly Effluent Limitation		
AWEL	Average Weekly Effluent Limitation		
Basin Plan	Water Quality Control Plan for the San Diego Basin		
BAT	Best Available Technology		
BMPs	Best Management Practices		
CBOD ₅	Carbonaceous Biochemical Oxygen Demand (5-Day at 20°C)		
CCR	California Code of Regulations		
CEQA	California Environmental Quality Act		
CFR	Code of Federal Regulations		
CFU	Colony Forming Units		
CIWQS	California Integrated Water Quality System		
CTR	California Toxics Rule		
CV	Coefficient of Variation		
CWA	Clean Water Act		
DDT	Dichlorodiphenyltrichloroethane		
Discharger	City of Escondido (Discharger)		
DMRs	Discharge Monitoring Reports		
DNQ	Detected, but Not Quantified		
DO	Dissolved Oxygen		
°F	Degrees Fahrenheit		
GPS	Global Positioning System		
Но	Null Hypothesis		
HSA	Hydrologic Subareas		
HCH	Hexachlorocyclohexane		
IWC	In-Stream Waste Concentration		
lbs/day	Pounds per Day		
LTA	Long-Term Average		
MBAS	Methylene Blue Active Substances		
MCL	Maximum Contaminant Level		
MDEL	Maximum Daily Effluent Limitation		
MDL	Method Detection Limit		
MEC	Maximum Effluent Concentration		
MG	Million Gallons		
MGD	Million Gallons per Day		
mg/L	Milligrams per Liter		
ML	Minimal Level		
MLLW	Mean Lower Low Water		
MPN	Most Probable Number		
MPN/100ml	Most Probable Number per 100 milliliters		
MRP	Monitoring and Reporting Program		

Abbreviation	iation Definition		
MS4	Municipal Separate Storm Sewer System		
MTBE	Methyl-tert-butyl-ether		
ND	Not Detected		
NEC			
NH ₃	No Exposure Certification		
NOI	un-ionized ammonia Notice of Intent		
NOT	Notice of Termination		
NPDES			
	National Pollutant Discharge Elimination System		
NTR	National Toxics Rule		
NTU	Nephelometric Turbidity Unit		
OAL	Office of Administrative Law		
PCB	Polychlorinated Biphenyls		
pCi/L	Picocuries per Liter		
PAH	Polynuclear Aromatic Hydrocarbons		
PMP	Pollutant Minimization Program		
POTWs	Publicly-Owned Treatment Works		
QA	Quality Assurance		
QC	Quality Control		
RL	Reporting Level		
RMDs	Regulatory Management Decisions		
ROWD	Report of Waste Discharge		
RPA	Reasonable Potential Analysis		
San Diego Water	California Regional Water Quality Control Board, San Diego Region		
Board	California Regional Water Quality Control Board, San Diego Region		
SIP	State Implementation Policy		
	Standard Methods, Policy for Implementation of Toxics Standards		
SM	for Inland Surface Waters, and Enclosed Bays, and Estuaries of		
	California		
SMR	Self-monitoring Report		
SOU	Single Operational Upset		
State Implementation	Policy for Implementation of Toxics Standards for Inland Surface		
Plan	Waters, and Enclosed Bays, and Estuaries of California		
State Water Board	Water Board State Water Resources Control Board		
SWAMP	IP Surface Water Ambient Monitoring Program		
TBELs	Technology-Based Effluent Limitations		
TDS	Total Dissolved Solids		
TIE	Toxicity Identification Evaluation		
TMDL	Total Maximum Daily Load		
TRE	Toxicity Reduction Evaluation		
TSS	Total Suspended Solids		
TST	Test of Significant Toxicity		
TUc	Chronic Toxicity Unit		
µg/L	Micrograms per Liter		
	U.S. Coast Guard		

Abbreviation	Definition		
USEPA	U.S. Environmental Protection Agency		
Water Code	California Water Code		
WDRs	Waste Discharge Requirements		
WET	Whole Effluent Toxicity		
WLA	Waste Load Allocation		
WMMP	Watercourse Monitoring and Management Plan		
WQBELs	Water Quality-Based Effluent Limitations		
WQOs	Water Quality Objectives		

Part 2. – Glossary of Common Terms

Acute Toxicity

The ability of a substance to cause severe biological harm or death soon after a single exposure or dose. The term acute toxicity also encompasses any poisonous effect resulting from a single short-term exposure to a toxic substance.

Anti-Backsliding

Provisions in the Clean Water Act (CWA) and United States Environmental Protection Agency regulations [CWA part 303 (d) (4); CWA part 402 (c); CFR section 122.44 (1)] that require a reissued permit to be as stringent as the previous permit with some exceptions.

Antidegradation

Policies which ensure protection of water quality for a particular body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation plans are adopted by the State to minimize adverse effects on water.

Arithmetic Mean (µ)

Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = μ = $\Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Beneficial Uses

The Beneficial Uses of waters of the State may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Best Available Technology Economically Achievable (BAT)

The best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

Best Conventional Pollutant Control Technology (BCT)

The control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in

effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond best practicable treatment control technology (BPT).

Best Management Practices (BMPs)

Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Best practicable treatment control technology (BPT)

The average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

Best Professional Judgment (BPJ)

The method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data.

Bioaccumulative Pollutants

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Biochemical Oxygen Demand (BOD)

A measurement of the amount of oxygen utilized by the decomposition of organic material, over a specified time period (usually 5 days) in a wastewater sample; it is used as a measurement of the readily decomposable organic content of a wastewater.

Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

Chlordane

Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordane-alpha, chlordane-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity

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

- a. Chronic Toxicity (TUc)
 Expressed as Toxic Units Chronic (TUc)
 TUc = 100/NOEL
- b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Ocean Plan Appendix III.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Certifying Official

All applications must be signed as follows:

For a corporation: By a responsible corporate officer, which means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. A principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Chlordane

The sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

Chronic Toxicity

Chronic toxicity is the measure of the sub-lethal effects of a discharge or ambient water sample (e.g. reduced growth or reproduction.) Certain chronic toxicity tests include an additional measurement of lethality.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Composite Sample

Sample composed of two or more discrete samples of at least 100 milliliters collected at periodic intervals during the operating hours of a facility over a 24-hour period. The aggregate sample will reflect the average water quality covering the compositing or sample period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

Conventional Pollutants

Pollutants typical of municipal sewage, and for which municipal secondary treatment plants are typically designed; defined at 40 CFR section 401.16 as BOD, TSS, fecal coliform bacteria, oil and grease, and pH.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Degrade (Degradation)

Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dichlorobenzenes

The sum of 1,2- and 1,3-dichlorobenzene.

Dilution Credit

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Discharge Monitoring Report (DMR)

Means the USEPA uniform form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. DMRs must be used by approved states as well as by USEPA. The USEPA will supply DMRs to any approved state upon request. The USEPA national forms may be modified to substitute the state agency name, address, logo, and other similar information, as appropriate, in place of USEPA's.

Dredged Material

Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

Effluent Concentration Allowance (ECA)

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The

ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (*Technical Support Document for Water Quality-based Toxics Control*, March 1991, second printing, EPA/505/2-90-001).

Effluent Limitation

Any restriction imposed by an Order on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources into waters of the United States, the waters of the contiguous zone, or the ocean.

Estuaries and Coastal Lagoons

Waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by section 12220 of the Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

Enclosed Bays

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Endosulfan

The sum of endosulfan-alpha and -beta and endosulfan sulfate.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

First Flush

Storm water runoff that occurs between the time a storm event begins and when a minimum of 0.25 inches of precipitation has been collected in a rain gauge or equivalent measurement

device at a location on the site which is representative of precipitation at the site. A storm event is a period of rainfall that is preceded by at least seven days without rainfall.

Grab Sample

An individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes. The sample is taken from a waste stream on a one-time basis without consideration of the flow rate of the waste stream and without consideration of time of day.

Halomethanes

The sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

Hexachlorocyclohexane (HCH)

The sum of the alpha, beta, gamma (lindane) and delta isomers of HCH.

Impervious Factor

Impervious factor is calculated by the following equation:

Impervious factor = (square feet of impervious surface within the facility) / (total square feet of the facility)

Impervious Surface

Areas that are covered by impenetrable materials such as asphalt, concrete, brick, stone and rooftops.

Industrial Storm Water

Storm water which has the potential to come in contact with areas used for manufacturing, processing, or raw materials storage at an industrial facility. The term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials; manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters (as defined at 40 CFR section 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water

Material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. The term excludes areas located on facility lands separate from the facility's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas.

Inland Surface Waters

All surface waters of the state that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)

The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median

The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the n/2 and n/2+1).

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in in 40 CFR part 136, Appendix B.

Minimum Level (ML)

ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Natural Light

Reduction of natural light may be determined by the San Diego Water Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the San Diego Water Board.

Nuisance

Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:

- 1. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
- 2. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
- 3. Occurs during, or as a result of, the treatment or disposal of wastes.

Persistent Pollutants

ATTACHMENT A - DEFINITIONS

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Phenolic Compounds (chlorinated)

The sum of 4-chloro-3-methylphenol, 2-chlorophenol, pentachlorophenol, 2,4,5-trichlorophenol, and 2,4,6-trichlorophenol.

Phenolic Compounds (non-chlorinated)

The sum of 2,4-dimethylphenol, 4,6-Dinitro-2-methylphenol, 2,4-dinitrophenol, 2-methylphenol, 4- methylphenol, 2-nitrophenol, 4-nitrophenol, and phenol.

Pollution Prevention

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board (State Water Board) or San Diego Water Board.

Polychlorinated biphenyls (PCBs)

The sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Arolclor-1254, and Arcolor-1260.

Polynuclear Aromatic Hydrocarbons (PAHs)

The sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

Qualifying Storm Events (QSEs)

A qualifying storm event occurs when sufficient precipitation generates runoff from the Facility that is discharged into the receiving water and is preceded by at least 48 hours with no discharge from any drainage area.

Reporting Level (RL)

The RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this General Order, including an additional factor if applicable as discussed herein. The MLs included in this General Order correspond to approved analytical methods for reporting a sample result that are selected by the San Diego Water Board from Appendix 2 of the Ocean Plan, Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP, or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Storm Event

A storm event is a period of rainfall of at least 0.25 inches of rain that is preceded by at least seven days without rainfall.

Storm Water

Storm water runoff, snowmelt runoff, and storm water surface runoff and drainage.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in a San Diego Water Board Basin Plan.

Standard Deviation (o)

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum [(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

- μ is the arithmetic mean of the observed values; and
- n is the number of samples.

Toxicity Identification Evaluation (TIE)

A set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A TIE may be required as part of the TRE, if appropriate.

Technology-Based Effluent Limit

A permit limit for a pollutant that is based on the capability of a treatment method to reduce the pollutant to a certain concentration.

Test of Significant Toxicity (TST)

Test of Significant Toxicity (TST) is a statistical approach used to analyze toxicity test data. The TST incorporates a restated null hypothesis, Welch's t-test, and biological effect thresholds for chronic and acute toxicity.

Toxicity

The aggregate toxic effect of a waste discharge measured directly by a chronic or acute toxicity test. This aggregate effect is frequently referred to as "whole effluent toxicity".

Toxic Pollutant

Pollutants or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator of USEPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring. Toxic pollutants

also include those pollutants listed by the Administrator under CWA section 307(a)(1) or any pollutant listed under section 405 (d) which relates to sludge management.

TCDD equivalents

TCDD equivalents represent the sum of concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown by the table below. USEPA Method 8280 may be used to analyze TCDD equivalents.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8 – tetra CDD	1.0
2,3,7,8 – penta CDD	0.5
2,3,7,8 – hexa CDD	0.1
2,3,7,8 – hepta CDD	0.01
octa CDD	0.001
2,3,7,8 – tetra CDF	0.1
1,2,3,7,8 – penta CDF	0.05
2,3,4,7,8 – penta CDF	0.5
2,3,7,8 – hexa CDFs	0.1
2,3,7,8 – hepta CDFs	0.01
Octa CDF	0.001

Trash

Trash means all improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural materials.

Waste

As used in the Ocean Plan, waste includes a Dischargers total discharge, of whatever origin (i.e., gross, not net, discharge).

Water Quality Control Plan

There are two types of water quality control plans - Basin Plans and Statewide Plans. Regional Boards adopt Basin Plans for each region based upon surface water hydrologic basin boundaries. The Regional Basin Plans designates or describes (1) existing and potential beneficial uses of ground and surface water; (2) water quality objectives to protect the beneficial uses; (3) implementation programs to achieve these objectives; and (4) surveillance and monitoring activities to evaluate the effectiveness of the water quality control plan. The Statewide Plans address water quality concerns for surface waters that overlap Regional Board boundaries, are statewide in scope, or are otherwise considered significant and contain the same four elements. Statewide Water Quality Control Plans include the Ocean Plan, the Enclosed Bays and Estuaries Plan, the Inland Surface Waters Plan, and the Thermal Plan. A water quality control plan consists of a designation or establishment for the waters within a specified area of (1) beneficial uses to be protected, (2) water quality objectives, and (3) a program of implementation needed for achieving water quality objectives [Water Code section 13050(j)].

Water Quality Objectives

Numerical or narrative limits on constituents or characteristics of water designed to protect designated beneficial uses of the water. [Water Code section 13050(h)]. California's water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans

Water Quality Standards

Provisions of State or federal law which consist of a designated use or uses for waters of the United States and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act [40 CFR section 131.3(i)]. Under State law, the Water Boards establish beneficial uses and water quality objectives in their water quality control plans or basin plans. Together with an antidegradation policy, these beneficial uses and water quality objectives serve as water quality standards under the Clean Water Act. In Clean Water Act parlance, state beneficial uses are called "designated uses" and state water quality objectives are called "criteria." Throughout this General Order, the relevant term is used depending on the statutory scheme

Whole Effluent Toxicity (WET)

The aggregate toxic effect of an effluent measured directly by a chronic or acute toxicity tes

ATTACHMENT B – MAPS OF CURRENTLY REGULATED BOATYARDS

Figure B-1. Boatyard Locations in San Diego Bay and Mission Bay (See Figure B-3. for a depiction of South San Diego Bay boatyards, B-4. for a depiction of Shelter Island boatyards and Figure B-5. for a depiction of Mission Bay boatyard)

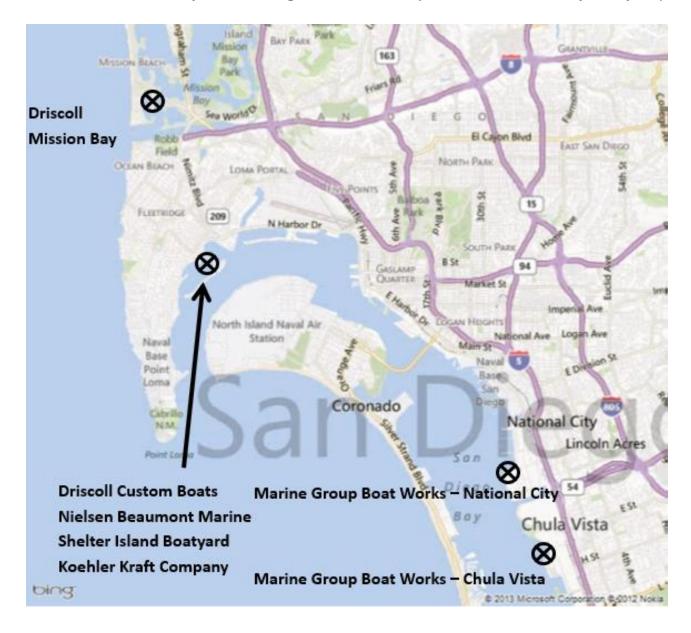
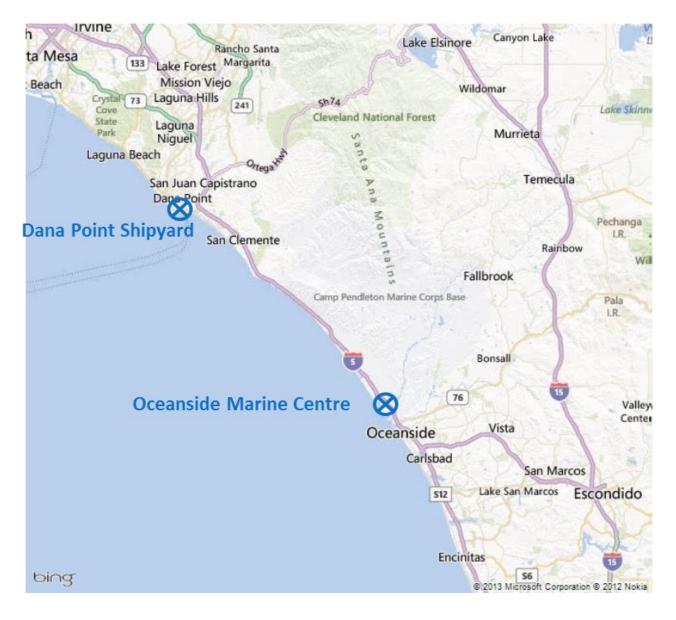


Figure B-2. Dana Point Shipyard and Oceanside Marine Centre, Inc Locations (See Figure B-6. for a depiction of Oceanside Marine Centre and Figure B-7. for a depiction of Dana Point Shipyard)



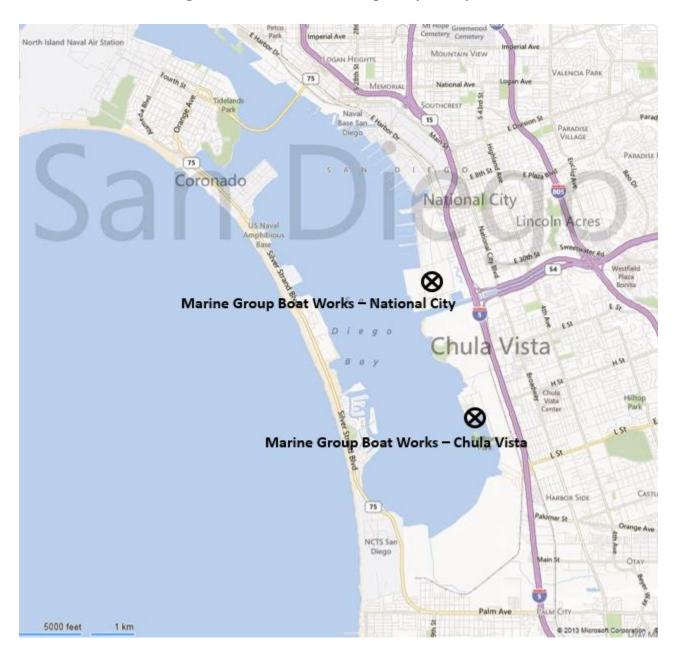


Figure B-3. South San Diego Bay Boatyards



Figure B-4. Shelter Island Boatyards

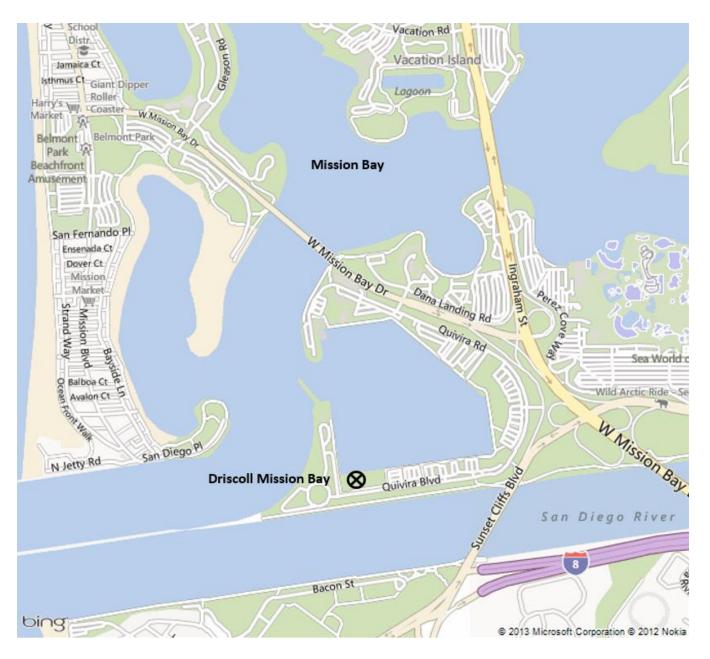


Figure B-5. Driscoll Mission Bay

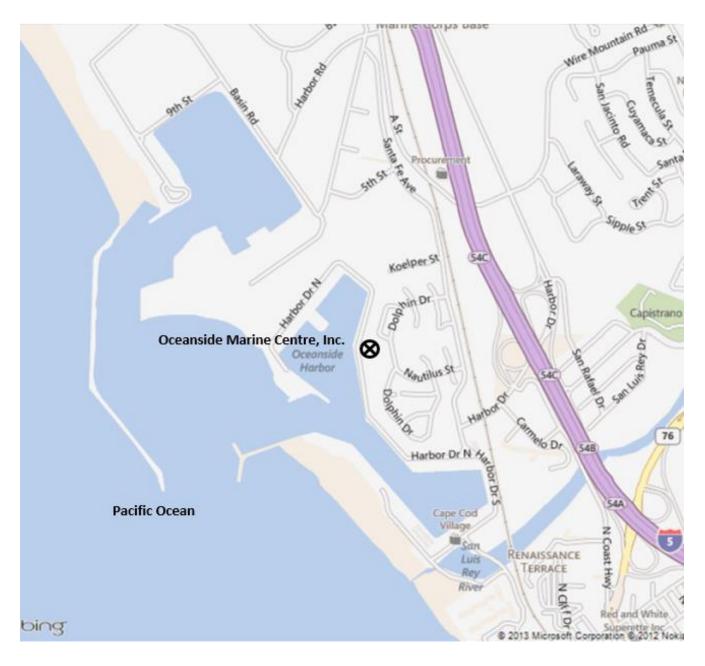


Figure B-6. Oceanside Marine Centre, Inc.

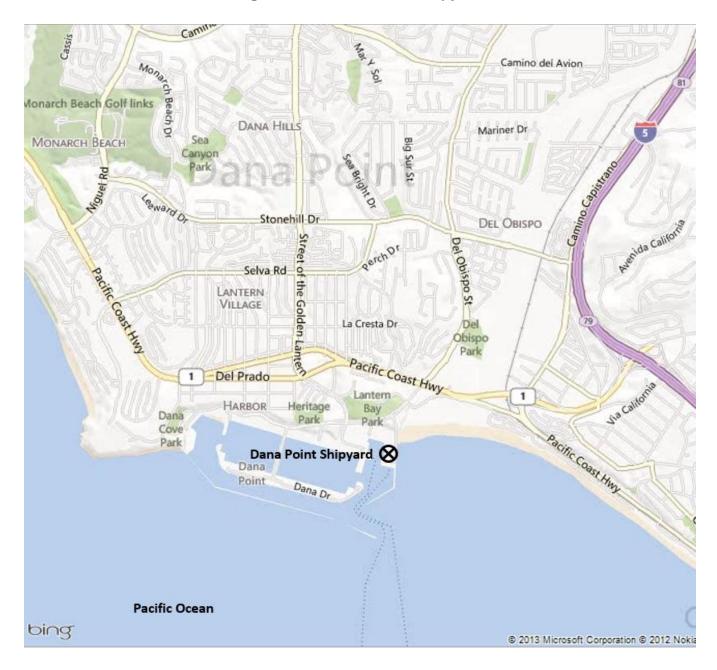


Figure B-7. Dana Point Shipyard

ATTACHMENT C – DISCHARGE PROHIBITIONS CONTAINED IN THE OCEAN PLAN AND BASIN PLAN

I. Ocean Plan Discharge Prohibitions

- **A.** The Discharge of any radiological chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.
- **B.** Waste shall not be discharged to designated Areas of Special Biological Significance except as provided in chapter III.E. of the Ocean Plan.
- **C.** Pipeline discharge of sludge to the ocean is prohibited by federal law; the discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited. The discharge of sludge digester supernatant directly to the ocean, or to a waste stream that discharges to the ocean without further treatment, is prohibited.
- **D.** The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Table 1 or Table 2 [of the Ocean Plan] is prohibited, except as allowed by Federal Standard Provisions I.G and I.H (Attachment D).

II. Basin Plan Discharge Prohibitions

- **A.** The discharge of waste to waters of the State in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in Water Code section 13050, is prohibited.
- **B.** The discharge of waste to land, except as authorized by WDRs of the terms described in Water Code section 13264 is prohibited.
- **C.** The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredged or fill material permit (subject to the exemption described in Water Code section 13376) is prohibited.
- D. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this San Diego Water Board issues an NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State of California Department of Public Health and the operating agency of the impacted reservoir; and the discharger has an approved failsafe long-term disposal alternative.
- E. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.
- **F.** The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.

- **G.** The dumping, deposition, or discharge of waste directly into waters of the State, or adjacent to such waters in any manner which may permit it's being transported into the waters, is prohibited unless authorized by the San Diego Water Board.
- H. Any discharge to a storm water conveyance system that is not composed entirely of storm water is prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR section 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR section 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to an NPDES permit and discharges resulting from firefighting activities.] [section 122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].
- I. The unauthorized discharge of treated or untreated sewage to waters of the State or to a storm water conveyance system is prohibited.
- J. The discharge of industrial wastes to conventional septic tank/ subsurface disposal systems, except as authorized by the terms described in Water Code section 13264, is prohibited.
- **K.** The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the State is prohibited.
- L. The discharge of any radiological, chemical, or biological warfare agent into waters of the State is prohibited.
- **M.** The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.
- N. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the State or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.
- **O.** The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

- The Discharger must comply with all of the conditions of this General Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (Title 40, Code of Federal Regulations (40 CFR) section 122.41(a).)
- 2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this General Order has not yet been modified to incorporate the requirement. (40 CFR section 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Order. (40 CFR section 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this General Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR section 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this General Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this General Order. (40 CFR section 122.41(e).)

E. Property Rights

- 1. This General Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR section 122.41(g).)
- 2. The issuance of this General Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR section 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the San Diego Water Board, State Water Board, USEPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR section 122.41(i); Water Code, section 13383):

- 1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this General Order (40 CFR section 122.41(i)(1));
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Order (40 CFR section 122.41(i)(2));
- **3.** Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Order. (40 CFR section 122.41(i)(3)); and
- **4.** Sample or monitor, at reasonable times, for the purposes of assuring General Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR section 122.41(i)(4).)

G. Bypass

- 1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR section 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR section 122.41(m)(1)(ii).)
- Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR section 122.41(m)(2).)
- Prohibition of bypass. Bypass is prohibited, and the San Diego Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR section 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR section 122.41(m)(4)(i)(A));
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during

normal periods of equipment downtime or preventive maintenance (40 CFR section 122.41(m)(4)(i)(B)); and

- c. The Discharger submitted notice to the San Diego Water Boards required under Standard Provisions Permit Compliance I.G.5 below. (40 CFR section 122.41(m)(4)(i)(C).)
- 4. The San Diego Water Board may approve an anticipated bypass, after considering its adverse effects, if the San Diego Water Board determines that it will meet the three conditions listed in Standard Provisions Permit Compliance I.G.3 above. (40 CFR section 122.41(m)(4)(ii).)
- 5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR section 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR section 122.41(m)(3)(ii).)
- H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based effluent limitations (TBELs) because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 CFR section 122.41(n)(1).)

- Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such TBELs if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 CFR section 122.41(n)(2).)
- 2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 CFR section 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR section 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 CFR section 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR section 122.41(n)(3)(iii)); and

- d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR section 122.41(n)(3)(iv).)
- **3.** Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR section 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This General Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR section 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this General Order after the expiration date of this General Order, the Discharger must apply for and obtain a new permit. (40 CFR section 122.41(b).)

C. Transfers

This General Order is not transferable to any person except after notice to the San Diego Water Board. The San Diego Water Board may require modification or revocation and reissuance of the General Order or NOA to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR section 122.41(I)(3); section 122.61.)

III. STANDARD PROVISIONS – MONITORING

- **A.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR section 122.41(j)(1).)
- B. Monitoring must be conducted according to test procedures approved under 40 CFR part 136 for the analyses of pollutants unless another method is required under 40 CFR chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 CFR part 136 for the analysis of pollutants or pollutant parameters or as required under 40 CFR chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:
 - 1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
 - 2. The method has the lowest ML of the analytical methods approved under 40 CFR part 136 or required under 40 CFR chapter 1, subchapter N for the measured

pollutant or pollutant parameter. In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this General Order for such pollutants or pollutant parameters. (40 CFR sections 122.21(e)(3),122.41(j)(4), 122.44(i)(1)(iv).)

In the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR part 136 or otherwise required under 40 CFR chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this General Order for such pollutants or pollutant parameters. (40 CFR sections 122.21(e)(3),122.41(j)(4), 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

- A. Except for records of monitoring information required by this General Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this General Order, and records of all data used to complete the application for this General Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board Executive Officer at any time. (40 CFR section 122.41(j)(2).)
- **B.** Records of monitoring information shall include:
 - The date, exact place, and time of sampling or measurements (40 CFR section 122.41(j)(3)(i));
 - 2. The individual(s) who performed the sampling or measurements (40 CFR section 122.41(j)(3)(ii));
 - 3. The date(s) analyses were performed (40 CFR section 122.41(j)(3)(iii));
 - 4. The individual(s) who performed the analyses (40 CFR section 122.41(j)(3)(iv));
 - 5. The analytical techniques or methods used (40 CFR section 122.41(j)(3)(v)); and
 - 6. The results of such analyses. (40 CFR section 122.41(j)(3)(vi).)
- **C.** Claims of confidentiality for the following information will be denied (40 CFR section 122.7(b)):
 - 1. The name and address of any permit applicant or Discharger (40 CFR section 122.7(b)(1)); and
 - 2. Permit applications and attachments, permits and effluent data. (40 CFR section 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the San Diego Water Board, State Water Board, or USEPA within a reasonable time, any information which the San Diego Water Board,

State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this General Order or to determine compliance with this General Order. Upon request, the Discharger shall also furnish to the San Diego Water Board, State Water Board, or USEPA copies of records required to be kept by this General Order. (40 CFR section 122.41(h); Water Code, section 13267.)

B. Signatory and Certification Requirements

- All applications, reports, or information submitted to the San Diego Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR section 122.41(k).)
- All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR section 122.22(a)(3).).
- 3. All reports required by this General Order and other information requested by the San Diego Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions Reporting V.B.2 above (40 CFR section 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR section 122.22(b)(2)); and
 - c. The written authorization is submitted to the San Diego Water Board and State Water Board. (40 CFR section 122.22(b)(3).)
- 4. If an authorization under Standard Provisions Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions Reporting V.B.3 above must be submitted to the San Diego Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR section 122.22(c).)
- **5.** Any person signing a document under Standard Provisions Reporting V.B.2 or V.B.3 above shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." (40 CFR section 122.22(d).)

C. Monitoring Reports

- Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this General Order. (40 CFR section 122.41(l)(4).)
- Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the San Diego Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR section 122.41(I)(4)(i).)
- 3. If the Discharger monitors any pollutant more frequently than required by this General Order using test procedures approved under 40 CFR part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the San Diego Water Board. (40 CFR section 122.41(I)(4)(ii).)
- **4.** Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this General Order. (40 CFR section 122.41(I)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this General Order, shall be submitted no later than 14 days following each schedule date. (40 CFR section 122.41(I)(5).)

E. Twenty-Four Hour Reporting

- 1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR section 122.41(I)(6)(i).)
- 2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR section 122.41(I)(6)(ii)):

- a. Any unanticipated bypass that exceeds any effluent limitation in this General Order. (40 CFR section 122.41(I)(6)(ii)(A).)
- b. Any upset that exceeds any effluent limitation in this General Order. (40 CFR section 122.41(l)(6)(ii)(B).)
- **3.** The San Diego Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR section 122.41(I)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the San Diego Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR section 122.41(l)(1)):

- The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR section 122.41(l)(1)(i)); or
- 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this General Order. (40 CFR section 122.41(l)(1)(ii).)
- **3.** The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR section 122.41(l)(1)(iii).

G. Anticipated Noncompliance

The Discharger shall give advance notice to the San Diego Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this General Order's requirements. (40 CFR section 122.41(I)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR section 122.41(I)(7).)

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the San Diego Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR section 122.41(I)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

The San Diego Water Board is authorized to enforce the terms of this General Order under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the San Diego Water Board as soon as they know or have reason to believe (40 CFR section 122.42(a)):

- That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this General Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR section 122.42(a)(1)):
 - a. 100 micrograms per liter (μ g/L) (40 CFR section 122.42(a)(1)(i));
 - b. 200 μg/L for acrolein and acrylonitrile; 500 μg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 CFR section 122.42(a)(1)(ii));
 - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR section 122.42(a)(1)(iii)); or
 - d. The level established by the San Diego Water Board in accordance with section 122.44(f). (40 CFR section 122.42(a)(1)(iv).)
- 2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this General Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR section 122.42(a)(2)):
 - a. 500 micrograms per liter (μ g/L) (40 CFR section 122.42(a)(2)(i));
 - b. 1 milligram per liter (mg/L) for antimony (40 CFR section 122.42(a)(2)(ii));
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR section 122.42(a)(2)(iii)); or
 - d. The level established by the San Diego Water Board in accordance with section 122.44(f). (40 CFR section 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Section 308 of the federal Clean Water Act (CWA) and sections 122.41(h), (j)-(l), 122.44(i), and 122.48 of the Code of Federal Regulations, title 40 (40 CFR) require that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. California Water Code (Water Code) sections 13267 and 13383 also authorize the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. Pursuant to this authority, this Monitoring and Reporting Program (MRP) establishes conditions for the Discharger to conduct routine or episodic self-monitoring of the discharges regulated under this General Order at specified effluent and receiving water monitoring locations. The MRP requires the Discharger to report the results to the San Diego Water Board with information necessary to evaluate discharge characteristics and compliance status.

The purpose of the MRP is to determine and ensure compliance with effluent limitations and other requirements established in this General Order, assess treatment efficiency, characterize effluents, and characterize the receiving water and the effects of the discharge on the receiving water. The MRP also specifies requirements concerning the proper use, maintenance, and installation of monitoring equipment and methods, and the monitoring type intervals and frequency necessary to yield data that are representative of the activities and discharges regulated under this General Order.

Each monitoring section contains an introductory paragraph summarizing why the monitoring is needed and the key management questions the monitoring is designed to answer. In developing the list of key management questions, the San Diego Water Board considered four basic types of information for each question:

- 1) Management Information Need Why does the San Diego Water Board need to know the answer?
- 2) Monitoring Criteria What monitoring will be conducted for deriving an answer to the question?
- 3) Expected Product How should the answer be expressed and reported?
- 4) Possible Management Actions What actions will be potentially influenced by the answer?

The framework for this monitoring program has three components that comprise a range of spatial and temporal scales, namely: core monitoring, regional monitoring, and special studies.

- 1. Core monitoring consists of the basic site-specific monitoring necessary to measure compliance with individual effluent limits and/or impacts to receiving water quality. Core monitoring is typically conducted in the immediate vicinity of the discharge by examining local scale spatial effects.
- 2. Regional monitoring provides information necessary to make assessments over large areas and serves to evaluate cumulative effects of all anthropogenic inputs. Regional monitoring data also assists in the interpretation of core monitoring studies. If a regional monitoring effort takes place during the permit cycle in which the MRP does not specifically address regional monitoring, the San Diego Water Board may allow relief from aspects of core monitoring components in order to encourage participation pursuant to section V of this MRP.

3. Special studies are directed monitoring efforts designed in response to specific management or research questions identified through either core or regional monitoring programs. Often, they are used to help understand core or regional monitoring results, where a specific environmental process is not well understood, or to address unique issues of local importance.

I. GENERAL MONITORING PROVISIONS

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitoring discharge. All samples shall be taken at the monitoring points specified in the Notice of Applicability (NOA), Table E-1, and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the San Diego Water Board.
- B. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurement is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ±5 percent from true discharge rates throughout the range of expected discharge volumes.
- **C.** Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved at 40 CFR part 136, *Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act* as amended, or unless other test procedures are specified in this General Order and/or in this MRP and/or by the San Diego Water Board.
- D. Self-Monitoring Reports (SMRs) shall be certified as required by Standard Provisions (Attachment D), section V.B of this General Order and submitted to the San Diego Water Board as described in section VII.B of this MRP.
- E. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring, instrumentation, copies of all reports required by this General Order and this MRP, and records of all data used to complete the application for this General Order. Records shall be maintained for a minimum of five years from the date of sample, measurement, report, or application. This period may be extended by request of this San Diego Water Board or by the USEPA at any time.
- F. All analyses shall be performed in a laboratory certified to perform such analyses by the State Water Resource Control Board (State Water Board), Division of Drinking Water (DDW) or a laboratory approved by the San Diego Water Board. The laboratory must be accredited under the DDW Environmental Laboratory Accreditation Program (ELAP) to ensure the quality of analytical data used for regulatory purposes to meet the requirements of this General Order. Additional information on ELAP can be accessed at

http://www.waterboards.ca.gov/drinking_water/certlic/labs/index.shtml.

G. Records of monitoring information shall include information and be retained as required under Standard Provision (Attachment D), section IV.A of this General Order.

- **H.** The Discharger shall report in its cover letter all instances of noncompliance not reported under Standard Provisions (Attachment D), section V.H of this General Order at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provisions (Attachment D), section V.E of this General Order.
- I. All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices (i.e., no more than 12 months between calibrations for the flow measurement devises).
- J. The Discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. Duplicate chemical analyses must be conducted on a minimum of 10 percent of the samples unless otherwise specified by the San Diego Water Board. A similar frequency shall be maintained for analyzing spiked samples. The Discharger should have a success rate equal to or greater than 80 percent.
- K. When requested by USEPA or the San Diego Water Board, the Discharger will participate in the NPDES Discharge Monitoring Report QA (DMR-QA) performance study. If the DMR-QA is not requested, the Discharger shall submit the most recent Water Pollution Performance Evaluation Study. The Discharger shall ensure that the results of the DMR-QA Study or the most recent Water Pollution Performance Evaluation Study are submitted annually by December 31 to the State Water Resources Control Board at the following address:

State Water Resources Control Board Quality Assurance Program Officer Office of Information Management and Analysis State Water Resources Control Board 1001 I Street, Sacramento, CA 95814

L. Analysis for toxic pollutants, including chronic toxicity, with effluent limitations or performance goals based on water quality objectives and criteria of the Water Quality Control Plan for the San Diego Basin (Basin Plan), Water Quality Control Plan for Ocean Waters of California (Ocean Plan), and California Toxics Rule (CTR) shall be conducted in accordance with procedures described in the Basin Plan, the Ocean Plan, and the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP) and restated in this MRP.

II. MONITORING LOCATIONS

The Discharger shall establish industrial storm water effluent monitoring locations that are representative of the discharge prior to commingling with other discharges. The NOA will identify the approved industrial storm water effluent monitoring location(s) for the facility.

A. Industrial Storm Water Monitoring Locations

The Discharger shall establish industrial storm water effluent monitoring locations as specified in the NOA and Table E-1 below:

Discharge Point	Discharge Point Monitoring Manitoring Logation Description			
Name	Location Name	Monitoring Location Description		
Driscoll Boat Works/Driscoll Custom Boats	SW-SDDRIS	A representative sample location for the discharge of industrial storm water to America's Cup Harbor, San Diego Bay.		
Marine Group Boat Works – National City	SW-KAC	A representative sample location for the discharge of industrial storm water to San Diego Bay.		
Koehler Kraft Company, Inc.	SW-KKC	A representative sample location for the discharge of industrial storm water to America's Cup Harbor, San Diego Bay.		
Nielsen Beaumont Marine, Inc.	SW-NBM	A representative sample location for the discharge of industrial storm water to America's Cup Harbor, San Diego Bay.		
Shelter Island Boatyard	SW-SIB-01	A representative sample location for the discharge of industrial storm water to Shelter Island Yacht Basin.		
Shelter Island Boatyard	SW-SIB-02	A representative sample location for the discharge of industrial storm water to Shelter Island Yacht Basin.		
Marine Group Boat Works – Chula Vista	SW-MGBW	A representative sample location for the discharge of industrial storm water to San Diego Bay.		
Dana Point Shipyard	SW-DANA-01	A representative sample location for the discharge of industrial storm water to the Dana Point Harbor located on the south end of the Facility.		
Driscoll Mission Bay, LLC	SW-MDRIS	A representative sample location for the discharge of industrial storm water to Mission Bay.		
Oceanside Marine Centre, Inc.	SW-OMC-01	A representative sample location for the discharge of industrial storm water to Oceanside Harbor located on the southwest end of the Facility.		
Oceanside Marine Centre, Inc.	SW-OMC-02	A representative sample location for the discharge of industrial storm water to Oceanside Harbor located on the southwest end of the Facility.		

 Table E-1.
 Monitoring Station Locations

B. Ballast and Flood Water Monitoring Locations

Dischargers shall monitor the discharge of floating drydock ballast and flood effluent to the San Diego Bay at the monitoring location specified in the NOA and Table E-2.

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Ballast and Flood Water	As Stated in NOA	A location where a representative sample of the floating drydock ballast water can be obtained just prior to, or during, the discharge into San Diego Bay.

 Table E-2.
 Ballast and Flood Water Monitoring Location

III. CORE MONITORING REQUIREMENTS

A. Effluent Monitoring Requirements

Effluent monitoring is the collection and analysis of samples or measurements of effluents, after all treatment processes, to determine and quantify contaminants and to demonstrate compliance with applicable effluent limitations, standards, and other requirements of this General Order.

Effluent monitoring is necessary to address the following questions:

- (1) Does the effluent comply with permit effluent limitations and other requirements of this General Order, thereby ensuring that water quality standards are achieved in the receiving water?
- (2) Is the effluent quality changing over time?
- (3) Is the facility being properly operated and maintained to ensure compliance with the conditions of the General Order?

1. Industrial Storm Water Monitoring Requirements

Dischargers shall monitor industrial storm water effluent at the monitoring location(s) specified in the NOA and Table E-1 as described in Table E-3 and section V.D of this MRP. Industrial storm water monitoring is only required if there is discharge to the receiving water.

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Volume of Discharge	Gallons	Estimate ²	2 QSEs per year ^{3,4,5}	
Oil and Grease	milligrams per liter (mg/L)	Grab	2 QSEs per year ^{3,4,5}	6
Total Suspended Solids (TSS)	mg/L	Grab	2 QSEs per year ^{3,4,5}	6
Chemical Oxygen Demand (COD)	mg/L	Grab or Composite	2 QSEs per year ^{3,4,5}	6

Table E 2	Inductrial Starm	Water Discharg	a Manitarina	Doguiromontol
I able E-3.	Industrial Storm	water Discharg		I Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Settleable Solids	ml/L	Grab	2 QSEs per year ^{3,4,5}	6
рН	Standard Units	Grab	2 QSEs per year ^{3,4,5}	6
Copper, Total Recoverable	microgram s per liter (µg/L)	Grab or Composite	2 QSEs per year ^{3,4,5}	6
Lead, Total Recoverable	µg/L	Grab or Composite	2 QSEs per year ^{3,4,5}	6
Zinc, Total Recoverable	µg/L	Grab or Composite	2 QSEs per year ^{3,4,5}	6
Tributyltin (TBT)	µg/L	Grab or Composite	2 QSEs per year ^{3,4,5}	6
Chronic Toxicity	Pass/Fail and % Effect	Grab or Composite	2 QSEs per year ^{3,4,5}	7
PARAMETER	RS FOR PRO	TECTION OF MAI	RINE AQUATIC LI	-E
Arsenic, Total Recoverable	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Chromium (VI), Total Recoverable	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Selenium, Total Recoverable	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Silver, Total Recoverable	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Cyanide, Total	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Chlorine, Total Residual	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1 QSE per year ^{3,4,5}	6
Phenolic Compounds (nonchlorinated) ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Phenolic Compounds (chlorinated) ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Endosulfan ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Endrin	µg/L	Grab	1 QSE per year ^{3,4,5}	6

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
HCH ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Radioactivity	picocuries per liter (pCi/L)	Grab	1 QSE per year ^{3,4,5}	6
PARAMETERS FOR	PROTECTIO	N OF HUMAN HE	ALTH – NONCARC	
Acrolein	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Antimony, Total Recoverable	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Bis (2-chloroethoxy) Methane	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Bis (2-chloroisopropyl) Ether	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Chlorobenzene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Chromium (III), Total Recoverable	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Chromium (VI)	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Di-n-butyl Phthalate	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Dichlorobenzenes ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Diethyl Phthalate	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Dimethyl Phthalate	µg/L	Grab	1 QSE per year ^{3,4,5}	6
4,6-dinitro-2- methylphenol	µg/L	Grab	1 QSE per year ^{3,4,5}	6
2,4-dinitrophenol	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Ethylbenzene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Fluoranthene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Hexachlorocyclopenta diene	µg/L	Grab	1 QSE per year ^{3,4,5}	6

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nitrobenzene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Thallium, Total Recoverable	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Toluene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Tributyltin	µg/L	Grab	1 QSE per year ^{3,4,5}	6
1,1,1-trichloroethane	µg/L	Grab	1 QSE per year ^{3,4,5}	6
PARAMETERS FO	R PROTECT	ION OF HUMAN H	IEALTH – CARCIN	OGENS
Acrylonitrile	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Aldrin	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Asbestos	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Benzene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Benzidine	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Beryllium, Total Recoverable	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Bis (2-chloroethyl) Ether	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Bis (2-ethlyhexyl) Phthalate	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Carbon Tetrachloride	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Chlordane ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Chlorodibromomethan e	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Chloroform	µg/L	Grab	1 QSE per year ^{3,4,5}	6
4,4'-DDT	µg/L	Grab	1 QSE per year ^{3,4,5}	6
4,4'-DDE	µg/L	Grab	1 QSE per year ^{3,4,5}	6

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
4,4'-DDD	µg/L	Grab	1 QSE per year ^{3,4,5}	6
1,4-dichlorobenzene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
3,3'-dichlorobenzidine	µg/L	Grab	1 QSE per year ^{3,4,5}	6
1,2-dichloroethane	µg/L	Grab	1 QSE per year ^{3,4,5}	6
1,1-dichloroethylene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Dichlorobromomethan e	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Dichloromethane	µg/L	Grab	1 QSE per year ^{3,4,5}	6
1,3-dichloropropene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Dieldrin	µg/L	Grab	1 QSE per year ^{3,4,5}	6
2,4-dinitrotoluene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
1,2-diphenylhydrazine	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Halomethanes ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Heptachlor	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Heptachlor Epoxide	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Hexachlorobenzene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Hexachlorobutadiene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Hexachloroethane	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Isophorone	µg/L	Grab	1 QSE per year ^{3,4,5}	6
N- nitrosodimethylamine	µg/L	Grab	1 QSE per year ^{3,4,5}	6

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
N-nitrosodi-N- propylamine	µg/L	Grab	1 QSE per year ^{3,4,5}	6
N- nitrosodiphenylamine	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Polynuclear Aromatic Hydrocarbons (PAHs) ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Polychlorinated Biphenyls (PCBs) ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
TCDD equivalents ¹	µg/L	Grab	1 QSE per year ^{3,4,5}	6
1,1,2,2- tetrachloroethane	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Tetrachloroethylene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Toxaphene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Trichloroethylene	µg/L	Grab	1 QSE per year ^{3,4,5}	6
1,1,2-trichloroethane	µg/L	Grab	1 QSE per year ^{3,4,5}	6
2,4,6-trichlorophenol	µg/L	Grab	1 QSE per year ^{3,4,5}	6
Vinyl Chloride	µg/L	Grab	1 QSE per year ^{3,4,5}	6

¹ See Attachment A for definitions of abbreviations and a glossary of common terms used in this General Order.

- ² The volume of storm water discharge can be estimated by multiplying: (amount of rainfall in inches/12) X (square feet of surface area) X (impervious factor). There are 7.48 gallons of water per cubic foot.
- ³ A qualifying storm event (QSE) occurs when sufficient precipitation generates runoff from the Facility that is discharged into the receiving water and is preceded by at least 48 hours with no discharge.
- ⁴ Samples shall be collected within four hours of the start of the discharge if conditions are safe to sample. See Attachment E section V.D.5 of this General Order for examples of unsafe sampling conditions.
- ⁵ If applicable, samples shall be collected concurrently with receiving water samples.
- ⁶ Pollutants shall be analyzed using the analytical methods described in 40 CFR part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, or where no methods are specified for a given pollutant, by methods approved by the San Diego Water Board or the State Water Board.

⁷ As described in section III.B of this MRP.

2. Floating Drydock Ballast and Flood Water Monitoring Requirements

Dischargers shall monitor floating drydock ballast and flood water effluent at the monitoring location(s) specified in the NOA and Table E-2 as described in Table E-4 and section V.E of this MRP.

Parameter	Units	Sample Type	Minimum Sampling Frequency ³	Required Analytical Test Method
Flow Rate	GPD	Estimate	1/Event	
рН	Standard Units	Grab	1/Event	4
Temperature	°F	Grab	1/Event	4
Arsenic, Total Recoverable	µg/L	Grab	1/Event ⁵	4
Copper, Total Recoverable	µg/L	Grab	1/Event ⁵	4, 6
Settleable Solids	ml/L	Grab	1/Event ⁵	4
Turbidity	NTU	Grab	1/Event	4
Total Suspended Solids (TSS)	mg/L	Grab	1/Event ⁵	4
Oil and Grease	mg/L	Grab	1/Event ⁵	4
Total Petroleum Hydrocarbons (TPH)	mg/L	Grab	1/Event ⁵	4
Polynuclear Aromatic Hydrocarbons (PAH)	µg/L	Grab	1/Event ⁵	4
TributyItin (TBT)	µg/L	Grab	1/Event ⁵	4
Chronic Toxicity	Pass/Fail and % Effect	Grab	1/Event	7
Total Residual Chlorine	µg/L	Grab	1/Event ⁵	4
PARAMETERS F	OR PROTECT	ION OF MAR	INE AQUATIC LIF	E
Cadmium, Total Recoverable	µg/L	Grab	5,8	4
Chromium (VI), Total Recoverable	µg/L	Grab	5,8	4
Lead, Total Recoverable	µg/L	Grab	5,8	4
Mercury, Total Recoverable	µg/L	Grab	5,8	4
Nickel, Total Recoverable	µg/L	Grab	5,8	4
Selenium, Total Recoverable	µg/L	Grab	5,8	4

Table E-4. Ballast and Flood Water Monitoring Requirements^{1,2}

Parameter	Units	Sample Type	Minimum Sampling Frequency ³	Required Analytical Test Method
Silver, Total Recoverable	µg/L	Grab	5,8	4
Zinc, Total Recoverable	µg/L	Grab	5,8	4
Cyanide, Total	µg/L	Grab	5,8	4
Chlorine, Total Residual	µg/L	Grab	5,8	4
Ammonia Nitrogen, Total (as N)	mg/L	Grab	5,8	4
Phenolic Compounds (nonchlorinated) ¹	µg/L	Grab	5,8	4
Phenolic Compounds (chlorinated)	µg/L	Grab	5,8	4
Endosulfan ¹	µg/L	Grab	5,8	4
Endrin	µg/L	Grab	5,8	4
HCH ¹	µg/L	Grab	5,8	4
Radioactivity	pCi/L	Grab	5,8	4
PARAMETERS FOR PRO	TECTION OF	HUMAN HEA	LTH - NONCARO	
Acrolein	µg/L	Grab	5,8	4
Antimony, Total Recoverable	µg/L	Grab	5,8	4
Bis (2-chloroethoxy) Methane	µg/L	Grab	5,8	4
Bis (2-chloroisopropyl) Ether	µg/L	Grab	5,8	4
Chlorobenzene	µg/L	Grab	5,8	4
Chromium (III), Total Recoverable	µg/L	Grab	5,8	4
Di-n-butyl Phthalate	µg/L	Grab	5,8	4
Dichlorobenzenes ¹	µg/L	Grab	5,8	4
Diethyl Phthalate	µg/L	Grab	5,8	4
Dimethyl Phthalate	µg/L	Grab	5,8	4
4,6-dinitro-2-methylphenol	µg/L	Grab	5,8	4
2,4-dinitrophenol	µg/L	Grab	5,8	4
Ethylbenzene	µg/L	Grab	5,8	4
Fluoranthene	µg/L	Grab	5,8	4
Hexachlorocyclopentadiene	µg/L	Grab	5,8	4
Nitrobenzene	µg/L	Grab	5,8	4
Thallium, Total Recoverable	µg/L	Grab	5,8	4
Toluene	µg/L	Grab	5,8	4

Parameter	Units	Sample Type	Minimum Sampling Frequency ³	Required Analytical Test Method
1,1,1-trichloroethane	µg/L	Grab	5,8	4
PARAMETERS FOR PE	ROTECTION	OF HUMAN H	EALTH - CARCIN	OGENS
Acrylonitrile	µg/L	Grab	5,8	4
Aldrin	µg/L	Grab	5,8	4
Asbestos	µg/L	Grab	5,8	4
Benzene	µg/L	Grab	5,8	4
Benzidine	µg/L	Grab	5,8	4
Beryllium, Total Recoverable	µg/L	Grab	5,8	4
Bis (2-chloroethyl) Ether	µg/L	Grab	5,8	4
Bis (2-ethlyhexyl) Phthalate	µg/L	Grab	5,8	4
Carbon Tetrachloride	µg/L	Grab	5,8	4
Chlordane ¹	µg/L	Grab	5,8	4
Chlorodibromomethane	µg/L	Grab	5,8	4
Chloroform	µg/L	Grab	5,8	4
4,4'-DDT	µg/L	Grab	5,8	4
4,4'-DDE	µg/L	Grab	5,8	4
4,4'-DDD	µg/L	Grab	5,8	4
1,4-dichlorobenzene	µg/L	Grab	5,8	4
3,3'-dichlorobenzidine	µg/L	Grab	5,8	4
1,2-dichloroethane	µg/L	Grab	5,8	4
1,1-dichloroethylene	µg/L	Grab	5,8	4
Dichlorobromomethane	µg/L	Grab	5,8	4
Dichloromethane	µg/L	Grab	5,8	4
1,3-dichloropropene	µg/L	Grab	5,8	4
Dieldrin	µg/L	Grab	5,8	4
2,4-dinitrotoluene	µg/L	Grab	5,8	4
1,2-diphenylhydrazine	µg/L	Grab	5,8	4
Halomethanes ¹	µg/L	Grab	5,8	4
Heptachlor	µg/L	Grab	5,8	4
Heptachlor Epoxide	µg/L	Grab	5,8	4
Hexachlorobenzene	µg/L	Grab	5,8	4
Hexachlorobutadiene	µg/L	Grab	5,8	4
Hexachloroethane	µg/L	Grab	5,8	4
Isophorone	µg/L	Grab	5,8	4
N-nitrosodimethylamine	µg/L	Grab	5,8	4

Parameter	Units	Sample Type	Minimum Sampling Frequency ³	Required Analytical Test Method
N-nitrosodi-N-propylamine	μg/L	Grab	5,8	4
N-nitrosodiphenylamine	μg/L	Grab	5,8	4
Polychlorinated Biphenyls (PCBs) ¹	μg/L	Grab	5,8	4
TCDD equivalents ¹	μg/L	Grab	5,8	4
1,1,2,2-tetrachloroethane	µg/L	Grab	5,8	4
Tetrachloroethylene	µg/L	Grab	5,8	4
Toxaphene	μg/L	Grab	5,8	4
Trichloroethylene	µg/L	Grab	5,8	4
1,1,2-trichloroethane	µg/L	Grab	5,8	4
2,4,6-trichlorophenol	µg/L	Grab	5,8	4
Vinyl Chloride	µg/L	Grab	5,8	4

¹ See Attachment A for definitions of abbreviations and a glossary of common terms used in this General Order.

- ² Monitoring for ballast water is required only when the discharge is not regulated by the USEPA's Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (Vessel General Permit or VGP).
- ³ The NOA may specify more frequent monitoring.
- ⁴ As specified in 40 CFR part 136, for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, or where no methods are specified for a given pollutant, by methods approved by the San Diego Water Board or the State Water Board.
- ⁵ The Discharger shall calculate and report the MER of the constituent for each sample taken. The MER shall be calculated in accordance with section X,H of this General Order.
- ⁶ Samples shall be analyzed for copper according to method 1638 or 1640. The commonly used method 200.7 has been found to give inaccurate copper reading in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper.
- ⁷ As described in section III.B of this MRP.
- ⁸ Samples shall be collected and analyzed once in year one and once in year four of the permit.

B. Whole Effluent Toxicity (WET) Testing Requirements

Whole Effluent Toxicity (WET) refers to the overall aggregate toxic effect to aquatic organisms from all pollutants contained in a facility's wastewater (effluent). The control of WET is one approach this General Order uses to control the discharge of toxic pollutants. WET tests evaluate the1) aggregate toxic effects of all chemicals in the effluent including additive, synergistic, or antagonistic effects; 2) effects of

unmeasured chemicals in the effluent; and 3) variability in bioavailability of the chemicals in the effluent.

Monitoring to assess the overall toxicity of the effluent is required to answer the following questions:

- (1) Does the effluent comply with permit effluent limitations for chronic toxicity thereby ensuring that water quality standards are achieved in the receiving water?
- (2) If the effluent does not comply with permit effluent limitations for chronic toxicity, are unmeasured pollutants causing risk to aquatic life?
- (3) If the effluent does not comply with permit effluent limitations for chronic toxicity, are pollutants in combinations causing risk to aquatic life?

1. Discharge In-stream Waste Concentration (IWC) for Chronic Toxicity

The chronic IWC is calculated by dividing 100 percent by the dilution ratio. The chronic toxicity IWC is 100 percent effluent.

2. Sample Volume and Holding Time

The total sample volume shall be determined by the specific toxicity test method used. Sufficient sample volume of the effluent shall be collected to perform the required toxicity test. Sufficient sample volume shall also be collected during accelerated monitoring for subsequent Toxicity Identification Evaluation (TIE) studies, if necessary, at each sampling event. All toxicity tests shall be conducted as soon as possible following sample collection. The 36-hour sample holding time for test initiation shall be targeted. However, no more than 72 hours shall elapse between the conclusion of sample collection and test initiation.

3. Chronic Marine Species and Test Methods

If effluent samples are collected from outfalls discharging to receiving waters with salinity greater than one parts per thousand (ppt), the Discharger shall conduct the following chronic toxicity tests on effluent samples, at the in-stream waste concentration for the discharge, in accordance with species and test methods in *Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine Estuarine Organisms* (EPA/600/R-95/136, 1995). Artificial sea salts or hypersaline brine shall be used to increase sample salinity if needed. In no case shall these species be substituted with another test species unless written authorization from the San Diego Water Board is received.

- a. A static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.01).
- A static non-renewal toxicity test with the purple sea urchin, Strongylocentrotus purpuratus or sand dollar, Dendraster excentricus (Fertilization Test Method 1008.0 or Larval Development Test Method); or a static non-renewal toxicity test with the red abalone, Haliotis rufescens (Larval Shell Development Test Method).

c. A static non-renewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0).

4. Species Sensitivity Screening

Species sensitivity screening shall be conducted during this General Order's first required sample collection, or within 24 months of the most recent screening. The Discharger shall collect a single effluent sample to initiate and concurrently conduct three toxicity tests using the fish, an invertebrate, and the alga species previously referenced. This sample shall also be analyzed for the parameters required on a monthly frequency for the discharge, during that given month. The Discharger shall collect enough sample volume to conduct the entire topsmelt (Atherinops affinis) larval survival and growth chronic toxicity test (Test Method 1006.01). The second and third samples used for test solution renewal water, as stipulated in the method, are not required under this General Order due to the intermittent nature of storm water and ballast and flood water discharges. If the result of all three species is "Pass," then the species that exhibits the highest "Percent Effect" at the discharge IWC during species sensitivity screening shall be used for routine monitoring during this General Order cycle. If only one species 'Fails', then that species shall be used for routine monitoring during this General Order cycle. Likewise, if two or more species result in "Fail," then the species that exhibits the highest "Percent Effect" at the discharge IWC during the suite of species sensitivity screening shall be used for routine monitoring during this General Order cycle, until such time as a rescreening is required.

Species sensitivity rescreening is required every 24 months. The Discharger shall rescreen with the marine vertebrate species, a marine invertebrate species, and the alga species previously referenced, and continue to monitor with the most sensitive species. If the first suite of rescreening tests demonstrates that the same species is the most sensitive, then the rescreening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

The species used to conduct the receiving water monitoring shall be the most sensitive species from the most recent species sensitivity screening.

During the calendar month, toxicity tests used to determine the most sensitive test species shall be reported as effluent compliance monitoring results for the chronic toxicity maximum daily effluent limitation (MDEL).

5. Quality Assurance (QA) and Additional Requirements

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

a. The discharge is subject to determination of "Pass" or "Fail" from a chronic toxicity test using the Test of Significant Toxicity (TST) statistical t-test approach described in *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document* (EPA 833- R-10-003, 2010), Appendix A, Figure A-1 and Table A-1 and Appendix B, Table B-1. The null

hypothesis (Ho) for the TST statistical approach is: Mean discharge IWC response $\leq 0.75 \times$ Mean control response. A test result that rejects this null hypothesis is reported as "Pass." A test result that does not reject this null hypothesis is reported as "Fail." This is a t-test (formally Student's t-test), a statistical analysis comparing two sets of replicate observations—in the case of WET, only two test concentrations (i.e., a control and IWC). The purpose of this statistical test is to determine if the means of the two sets of observations are different (i.e., if the IWC or receiving water concentration differs from the control (the test result is "Pass" or "Fail"). The Welch's t-test employed by the TST statistical approach is an adaptation of Student's t-test and is used with two samples having unequal variances. The relative "Percent Effect" at the discharge IWC response) \div Mean control response) \times 100.

- b. If the effluent toxicity test does not meet all test acceptability criteria (TAC) specified in the referenced test method, *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), the test should be declared invalid, then the Discharger must resample and re-test within 14 days of test termination.
- c. Dilution water and control water, including brine controls, shall be uncontaminated natural water, as specified in the test methods manual. If dilution water and control water is different from test organism culture water, then a second control using culture water shall also be used.
- d. Monthly reference toxicant testing is sufficient. All reference toxicant test results should be reviewed and reported using the effects concentration at 25 percent (EC25).
- e. The Discharger shall perform toxicity tests on final effluent samples. Chlorine and ammonia shall not be removed from the effluent sample prior to toxicity testing, unless explicitly authorized under this section of this MRP and the rationale is explained in the Fact Sheet (Attachment F).

6. Preparation of an Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan

The Discharger shall prepare and submit a copy of the Discharger's Initial Investigation TRE Work Plan to the San Diego Water Board within 90 days of the effective date of this General Order. The work plan shall become effective 60 days following submittal unless the San Diego Water Board provides written notification that the plan is not accepted. The Discharger shall use USEPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600-2-88/070) or the most current version, as guidance.

The TRE Work Plan shall not be required for facilities that have NEC coverage. When a facility ceases NEC coverage, the Discharger shall prepare and submit a copy of the Discharger's Initial Investigation TRE Work Plan to the San Diego Water Board within 90 days of the facility ceasing NEC coverage. The work plan shall become effective 60 days following submittal unless the San Diego Water Board provides written notification that the plan is not accepted. The Discharger shall use USEPA manual Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600-2-88/070) or the most current version, as guidance.

The TRE Work Plan shall describe the steps that the Discharger intends to follow if toxicity is detected, and shall include, at a minimum:

- a. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;
- b. 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 the operation of the Facility; and,
- c. 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).

7. Accelerated Monitoring Schedule for Maximum Daily Single Result: "Fail" and Greater Than or Equal to 50% Effect

The Maximum Daily single result of a "Fail" and greater than or equal to 50% effect shall be used to determine if accelerated testing needs to be conducted.

Once the Discharger becomes aware of this result, the Discharger shall notify the San Diego Water Board and implement an accelerated monitoring schedule within seven calendar days of the receipt of the result. For industrial storm water discharges, the accelerated monitoring schedule shall consist of conducting one chronic toxicity test on the next qualifying storm event. For ballast and flood water discharges, the accelerated monitoring schedule shall consist of conducting one chronic toxicity test on the next floating drydock submergence event. During the accelerated monitoring schedule, the Discharger shall collect enough sample volume to conduct a subsequent TRE, if required. In preparation for the TRE process and associated reporting, results to the accelerated toxicity tests shall also be reported using the EC25. If the accelerated toxicity tests results in "Pass," the Discharger shall return to routine monitoring for the next monitoring period. If the accelerated toxicity tests results in "Fail" and the percent effect is greater than or equal to 50%, the Discharger shall immediately implement the TRE Process conditions set forth below. During accelerated monitoring schedules, TST results ("Pass" or "Fail") and percent effect for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

8. TRE Process

During the TRE Process, effluent monitoring shall resume and TST results ("Pass" or "Fail") and percent effect for chronic toxicity tests shall be reported as effluent compliance monitoring results for the chronic toxicity MDEL.

a. Preparation and Implementation of Detailed TRE Work Plan. The Discharger shall immediately initiate a TRE using, according to the type of treatment facility, USEPA manual, *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989), or most current

version, and, within 15 days of receiving validated results, submit to the San Diego Water Board a detailed TRE Work Plan, which shall follow the Initial Investigation TRE Work Plan revised as appropriate for this toxicity event. It shall include the following information, and comply with additional conditions set by the San Diego Water Board:

- i. Further actions by the Discharger to investigate, identify, and correct the causes of toxicity;
- ii. Actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and
- iii. A schedule for these actions, progress reports, and the final report.
- b. TIE Implementation. The Discharger may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, USEPA manuals: Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003, 1991); Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I (EPA/600/6-91/005, 1991); Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Procedures for Samples for Samples Exhibiting Acute and Chronic Toxicity Identification Procedures for Samples III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity Identification Procedures for Samples III Toxicity Identification Evaluation, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity Identification Procedures for Samples III Toxicity Identification Procedures for Samples III Toxicity Identification Evaluation, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081, 1993); and Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996). The TIE should be conducted on the species demonstrating the most sensitive toxicity response.
- c. Many recommended TRE elements parallel required or recommended efforts for source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the sources and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with toxicity evaluation parameters.
- d. The Discharger shall continue to conduct routine effluent monitoring for compliance determination purposes while the TRE and/or TIE process is taking place. Additional accelerated monitoring and TRE Work Plans are not required once a TRE is begun.
- e. The San Diego Water Board recognizes that toxicity may be episodic and identification of causes and reduction of sources of toxicity may not be successful in all cases. The TRE may be ended at any stage if monitoring finds there is no longer toxicity.

9. Reporting

The SMR shall include a full laboratory report for each toxicity test. This report shall be prepared using the format and content of the test methods manual chapter called Report Preparation, and shall include:

- a. The valid toxicity test results for the TST statistical approach, reported as "Pass" or "Fail" and "Percent Effect" at the chronic toxicity IWC for the discharge. All toxicity test results (whether identified as valid or otherwise) conducted during the calendar month shall be reported on the SMR due date specified in Table E-6.
- b. Summary water quality measurements for each toxicity test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, chlorine, ammonia).
- c. The statistical analysis used in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010) Appendix A, Figure A-1 and Table A-1, and Appendix B, Table B-1.
- d. TRE/TIE results. The San Diego Water Board shall be notified no later than 30 days from completion of each aspect of TRE/TIE analyses. Prior to the completion of the final TRE/TIE report, the Discharger shall provide status updates in the monthly monitoring reports, indicating which TRE/TIE steps are underway and which steps have been completed.
- e. Statistical program (e.g., TST calculator, CETIS, etc.) output results, including graphical plots, for each toxicity test.
- f. Graphical plots and tables clearly showing the laboratory's performance for the reference toxicant for the previous 20 tests and the laboratory's performance for the control mean, control standard deviation, and control coefficient of variation for the previous 12-month period.
- g. Any additional quality assurance/quality control (QA/QC) documentation or any additional chronic toxicity-related information, upon written request from the San Diego Water Board.

C. Land Discharge Monitoring Requirements – Not Applicable

D. Recycling Monitoring Requirements – Not Applicable

IV. RECEIVING WATER MONITORING REQUIREMENTS

The receiving water monitoring requirements set forth below are designed to measure the effects of the Facility discharge on the receiving waters. The overall receiving water monitoring program is intended to answer the following questions:

- Does the receiving water meet water quality standards?
- Are the receiving water conditions getting better or worse over time?
- What is the relative contribution of the Facility discharge to pollution in the receiving water?

This program is intended to document conditions in area possibly impacted by the discharge. Station location, sampling, sample preservation and analyses, when not specified, shall be by methods approved by the San Diego Water Board. The monitoring program may be modified by the San Diego Water Board at any time. The Discharger may also submit a list of and rationale for any reductions in or other changes to these monitoring requirements that it considers to be appropriate to the San Diego Water Board for approval.

If the Discharger is unable to obtain a sample from a monitoring station(s) due to safety, legal, or other reasons, collection of samples at such station(s) can be omitted. Unsafe sampling conditions include, but are not limited, electrical storms and large ocean swells. If a monitoring location is omitted, the Discharger shall submit a statement to the San Diego Water Board containing, at a minimum, the following information:

- (1) The monitoring station(s) that was omitted;
- (2) The date the monitoring station was omitted; and
- (3) A description of the circumstances for omitting the collection of data at the monitoring station.

All receiving water monitoring shall be conducted in accordance with restrictions and requirements established by the State of California Department of Fish and Wildlife. During monitoring events, sample stations shall be located using a land-based microwave positioning system or a satellite positioning system such as global positioning system (GPS).

A. Category 1 Receiving Water and Sediment Monitoring

1. Category 1 Discharger Criteria.

Boatyards that discharge industrial storm water from storms smaller than a 5-year, 24-hour storm are Category 1. The 5-year frequency, 24-hour storm event can be determined at the National Oceanic and Atmospheric Administration's National Weather Service Hydrometeorological Design Studies Center website at: https://hdsc.nws.noaa.gov/hdsc/pfds_map_cont.html?bkmrk=ca.

Receiving water and sediment monitoring shall be performed by all Category 1 Dischargers to assess compliance with receiving water limits. The monitoring may be performed either by individual Dischargers to assess compliance with receiving water limits, or through participation in a water body monitoring coalition or both as determined by the San Diego Water Board.

2. Category 1 Receiving Water and Sediment Monitoring Plan and Requirements

- a. **Monitoring Questions.** The receiving water and sediment monitoring shall be designed and conducted to address the following primary questions:
 - i. Does the discharge cause or contribute to violations of the Receiving Water Limitations in section VII.B of this General Order?
 - ii. Does the receiving water meet the water quality standards?
 - iii. Are the receiving water conditions getting better or worse over time?

- iv. What is the relative contribution of the discharge to pollution in the receiving water?
- v. Is the concentration of pollutants at levels in marine sediments that would degrade the benthic community?
- vi. Are benthic communities degraded as a result of the discharge?
- vii. Is the sediment condition changing over time?
- b. **Monitoring Responsibility.** Receiving water and sediment monitoring shall be performed individually by the Discharger to assess compliance with receiving water limits or through the Discharger's participation in a regional or water body monitoring coalition or both as determined by the San Diego Water Board.
- c. **Monitoring Coalition Reopener.** To achieve maximum efficiency and economy of resources, the Discharger may establish or join a San Diego Bay water body monitoring coalition. If a monitoring coalition is formed, revised monitoring requirements will be established to ensure that appropriate monitoring is conducted in a timely manner.
- d. **Receiving Water and Sediment Monitoring Plan.** The Discharger shall prepare and submit a Water and Sediment Monitoring Plan to assess compliance with Receiving Water Limitations of this General Order. The Water and Sediment Monitoring Plan shall be submitted within 12 months of the effective date of this General Order. The Water and Sediment Monitoring Plan shall contain the following elements:
 - i. Quality Assurance Project Plan (QAPP). A QAPP describing the project objectives and organization, functional activities, and quality assurance/quality control (QA/QC) protocols for the water and sediment monitoring.
 - ii. Sampling and Analysis Plan. A Sampling and Analysis Plan based on methods or metrics described in 40 CFR part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act and the State Water Board's Water Quality Control Plan for Enclosed Bays and Estuaries of California – Sediment Quality Provisions (Bays and Estuaries Plan) as amended on April 6, 2011 and June 5, 2018. The Sampling and Analysis Plan shall include a list of chemical analytes for the water column and sediment as well as the monitoring frequency and sample station locations.

(a) Receiving Water Column Monitoring

The Sampling and Analysis Plan shall propose the pollutants to be monitored, sampling locations, and the frequency and timing for water column sampling to be performed in receiving water. At a minimum, monitoring shall include the pollutants and frequency in Table E-5 below.

Table E-5. Minimum Receiving Water Monitoring Requirements					
Parameter	Units	Sample Type	Minimum Sampling Frequency ²	Required Analytical Test Method	
Temperature	۴F	Grab	2/Permit Term	3	
Cadmium, Total Recoverable	microgram per liter (µg/L)	Grab	2/Permit Term	3	
Copper, Total Recoverable	µg/L	Grab	2/Permit Term	3,4	
Mercury, Total Recoverable	µg/L	Grab	2/Permit Term	3	
Nickel, Total Recoverable	µg/L	Grab	2/Permit Term	3	
Zinc, Total Recoverable	µg/L	Grab	2/Permit Term	3	
Chronic Toxicity	Pass/Fail and % Effect	Grab	2/Permit Term	5	
PARAMETERS FOR	PROTECTION	OF MARINE	AQUATIC LIF	E	
Arsenic, Total Recoverable	µg/L	Grab	1/Permit Term	3	
Chromium (VI), Total Recoverable	µg/L	Grab	1/Permit Term	3	
Lead, Total Recoverable	µg/L	Grab	1/Permit Term	3	
Selenium, Total Recoverable	µg/L	Grab	1/Permit Term	3	
Silver, Total Recoverable	µg/L	Grab	1/Permit Term	3	
Cyanide, Total	µg/L	Grab	1/Permit Term	3	
Chlorine, Total Residual	µg/L	Grab	1/Permit Term	3	
Ammonia Nitrogen, Total (as N)	mg/L	Grab	1/Permit Term	3	
Phenolic Compounds (nonchlorinated) ¹	µg/L	Grab	1/Permit Term	3	
Phenolic Compounds (chlorinated) ¹	µg/L	Grab	1/Permit Term	3	
Endosulfan ¹	µg/L	Grab	1/Permit Term	3	
Endrin	µg/L	Grab	1/Permit Term	3	

Table E-5. Minimum Receiving Water Monitoring Requirements¹

Parameter	Units	Sample Type	Minimum Sampling Frequency ²	Required Analytical Test Method
HCH ¹	µg/L	Grab	1/Permit Term	3
Radioactivity	picocuries per liter (pCi/L)	Grab	1/Permit Term	3
PARAMETERS FOR PROTE	CTION OF HUI	MAN HEALTH	I – NONCARC	INOGENS
Acrolein	µg/L	Grab	1/Permit Term	3
Antimony, Total Recoverable	µg/L	Grab	1/Permit Term	3
Bis (2-chloroethoxy) Methane	µg/L	Grab	1/Permit Term	3
Bis (2-chloroisopropyl) Ether	µg/L	Grab	1/Permit Term	3
Chlorobenzene	µg/L	Grab	1/Permit Term	3
Chromium (III), Total Recoverable	µg/L	Grab	1/Permit Term	3
Chromium (VI)	µg/L	Grab	1/Permit Term	3
Di-n-butyl Phthalate	µg/L	Grab	1/Permit Term	3
Dichlorobenzenes ¹	µg/L	Grab	1/Permit Term	3
Diethyl Phthalate	µg/L	Grab	1/Permit Term	3
Dimethyl Phthalate	µg/L	Grab	1/Permit Term	3
4,6-dinitro-2-methylphenol	µg/L	Grab	1/Permit Term	3
2,4-dinitrophenol	µg/L	Grab	1/Permit Term	3
Ethylbenzene	µg/L	Grab	1/Permit Term	3
Fluoranthene	µg/L	Grab	1/Permit Term	3
Hexachlorocyclopentadiene	µg/L	Grab	1/Permit Term	3
Nitrobenzene	µg/L	Grab	1/Permit Term	3
Thallium, Total Recoverable	µg/L	Grab	1/Permit Term	3

Parameter	Units	Sample Type	Minimum Sampling Frequency ²	Required Analytical Test Method
Toluene	µg/L	Grab	1/Permit Term	3
Tributyltin	µg/L	Grab	1/Permit Term	3
1,1,1-trichloroethane	µg/L	Grab	1/Permit Term	3
PARAMETERS FOR PRO	TECTION OF H	UMAN HEAL		OGENS
Acrylonitrile	µg/L	Grab	1/Permit Term	3
Aldrin	µg/L	Grab	1/Permit Term	3
Asbestos	μg/L	Grab	1/Permit Term	3
Benzene	µg/L	Grab	1/Permit Term	3
Benzidine	µg/L	Grab	1/Permit Term	3
Beryllium, Total Recoverable	µg/L	Grab	1/Permit Term	3
Bis (2-chloroethyl) Ether	µg/L	Grab	1/Permit Term	3
Bis (2-ethlyhexyl) Phthalate	µg/L	Grab	1/Permit Term	3
Carbon Tetrachloride	µg/L	Grab	1/Permit Term	3
Chlordane ¹	µg/L	Grab	1/Permit Term	3
Chlorodibromomethane	µg/L	Grab	1/Permit Term	3
Chloroform	μg/L	Grab	1/Permit Term	3
4,4'-DDT	μg/L	Grab	1/Permit Term	3
4,4'-DDE	μg/L	Grab	1/Permit Term	3
4,4'-DDD	μg/L	Grab	1/Permit Term	3
1,4-dichlorobenzene	μg/L	Grab	1/Permit Term	3
3,3'-dichlorobenzidine	μg/L	Grab	1/Permit Term	3

Parameter	Units	Sample Type	Minimum Sampling Frequency ²	Required Analytical Test Method
1,2-dichloroethane	µg/L	Grab	1/Permit Term	3
1,1-dichloroethylene	µg/L	Grab	1/Permit Term	3
Dichlorobromomethane	µg/L	Grab	1/Permit Term	3
Dichloromethane	µg/L	Grab	1/Permit Term	3
1,3-dichloropropene	µg/L	Grab	1/Permit Term	3
Dieldrin	µg/L	Grab	1/Permit Term	3
2,4-dinitrotoluene	µg/L	Grab	1/Permit Term	3
1,2-diphenylhydrazine	µg/L	Grab	1/Permit Term	3
Halomethanes ¹	µg/L	Grab	1/Permit Term	3
Heptachlor	µg/L	Grab	1/Permit Term	3
Heptachlor Epoxide	µg/L	Grab	1/Permit Term	3
Hexachlorobenzene	µg/L	Grab	1/Permit Term	3
Hexachlorobutadiene	µg/L	Grab	1/Permit Term	3
Hexachloroethane	µg/L	Grab	1/Permit Term	3
Isophorone	µg/L	Grab	1/Permit Term	3
N-nitrosodimethylamine	µg/L	Grab	1/Permit Term	3
N-nitrosodi-N-propylamine	µg/L	Grab	1/Permit Term	3
N-nitrosodiphenylamine	µg/L	Grab	1/Permit Term	3
Polynuclear Aromatic Hydrocarbons (PAHs) ¹	µg/L	Grab	1/Permit Term	3
Polychlorinated Biphenyls (PCBs) ¹	µg/L	Grab	1/Permit Term	3
TCDD equivalents ¹	µg/L	Grab	1/Permit Term	3

Parameter	Units	Sample Type	Minimum Sampling Frequency ²	Required Analytical Test Method
1,1,2,2-tetrachloroethane	µg/L	Grab	1/Permit Term	3
Tetrachloroethylene	µg/L	Grab	1/Permit Term	3
Toxaphene	µg/L	Grab	1/Permit Term	3
Trichloroethylene	µg/L	Grab	1/Permit Term	3
1,1,2-trichloroethane	µg/L	Grab	1/Permit Term	3
2,4,6-trichlorophenol	µg/L	Grab	1/Permit Term	3
Vinyl Chloride	µg/L	Grab	1/Permit Term	3

¹ See Attachment A for definitions of abbreviations and a glossary of common terms used in this General Order.

- ² Samples shall be collected concurrently with the industrial storm water samples specified in section III.A.1 of this MRP if sampling conditions are safe.
- ³ As specified in 40 CFR part 136, for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP, where no methods are specified for a given pollutant, by methods approved by the San Diego Water Board or the State Water Board.
- ⁴ Samples shall be analyzed for copper according to method 1638 or 1640. The commonly used method 200.7 (Trace Elements-ICP) has 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 analyzed by method 200.7 are known.
- ⁵ As described in section III.B of this MRP.

(b) Sediment Monitoring

- (1) **Frequency**. Sediment chemistry, toxicity and benthic community monitoring shall be done at least once during the term of this General Order.
- (2) **Sampling Locations.** Sampling shall occur at the monitoring locations proposed in the sampling and analyses plan.
- (3) **Sampling Period.** All sediment stations shall be sampled between the months of June through September to correspond with the benthic community index period.

- (4) Sediment Chemistry, Toxicity, and Benthic Community Condition. Sediment chemistry, toxicity and benthic community monitoring shall be done in accordance with, at a minimum, the requirements set forth in the Bays and Estuaries Plan. The proposal must also include the following:
 - (i) **Sediment Chemistry**. Bulk sediment chemical analysis shall include at a minimum the pollutants identified in Attachment A-3 of the Bays and Estuaries Plan.
 - (ii) Sediment Toxicity. Short term survival tests and sublethal tests shall be performed as specified in section IV.A.1.f of the Bays and Estuaries Plan. The results shall be recorded as "Percent of control response".
 - (iii) **Benthic Community Condition**. The benthic community shall be evaluated using the line of evidence approach described in section IV.A.1.g of the Bays and Estuaries Plan.
- (c) **Conceptual Site Model**. A Conceptual Site Model identifying the physical and chemical factors that control the fate and transport of pollutants and receptors that could be exposed to pollutants in the water and sediment shall be used to develop the Receiving Water and Sediment Monitoring Plan. The Conceptual Site Model will serve as the basis for assessing the appropriateness of the Receiving Water and Sediment Monitoring Plan design. The Conceptual Site Model shall consider:
 - Points of discharge into the segment of the water body or region of interest;
 - (2) Tidal flow and/or direction of predominant currents;
 - (3) Historic or legacy conditions in the vicinity;
 - (4) Nearby land and marine uses or actions;
 - (5) Beneficial Uses;
 - (6) Potential receptors of concern;
 - (7) Change in grain size salinity water depth and organic matter; and
 - (8) Other sources or discharges in the immediate vicinity.
- (d) **Spatial Representation**. The Receiving Water and Sediment Monitoring Plan shall be designed to ensure that the sample stations are spatially representative of the water and sediment within the water body segment or region of interest.
- (e) **Existing Data and Information**. The Receiving Water and Sediment Monitoring Plan design shall take into consideration existing data and information of appropriate quality including ongoing monitoring programs conducted by other entities.

- (f) **Strata.** Identification of appropriate strata shall consider characteristics of the water body including sediment transport, hydrodynamics, depth, salinity, land uses, inputs (both natural and anthropogenic) and other factors that could affect the physical, chemical, or biological condition of the sediment.
- e. **Receiving Water and Sediment Monitoring Plan Implementation**. The Discharger shall implement the Receiving Water and Sediment Monitoring Plan in accordance with the schedule contained in the Receiving Water and Sediment Monitoring Plan unless otherwise directed in writing by the San Diego Water Board. Before beginning sample collection activities, the Discharger or water body monitoring coalition shall comply with any conditions set by the San Diego Water Board with respect to sample collection methods such as providing split samples.
- f. **Monitoring Reports.** The Discharger shall submit a Receiving Water and Sediment Monitoring Report no later than 180 days before the expiration date of this General Order. Only one Receiving Water and Sediment Monitoring Report is required per permit term. The Receiving Water and Sediment Monitoring Reports shall include the following information:
 - i. **Analysis.** An evaluation, interpretation and tabulation of the water and sediment monitoring data including interpretations and conclusions as to whether applicable Receiving Water Limitations in this General Order have been attained at each sample station;
 - ii. **Sample Location Map.** The locations, type, and number of samples shall be identified and shown on a site map;
 - iii. **Laboratory Reports.** The reports from laboratories with the original analysis results including any quality assurance / quality control information; and
 - iv. California Environmental Data Exchange Network (CEDEN). The Discharger shall upload receiving water and sediment monitoring results to CEDEN no later than 90 days after the completion of monitoring. The Discharger shall submit a statement certifying that the monitoring results have been timely uploaded into CEDEN with the Receiving Water and Sediment Monitoring Report. CEDEN can be found at http://ceden.org/.

B. Category 2 Receiving Water and Sediment Monitoring

1. Category 2 Discharger Criteria.

Boatyards that only discharge industrial storm water to waters of the United States from a 5-year frequency, 24-hour storm event or larger are classified as Category 2 under this General Order. The 5-year frequency, 24-hour storm event can be determined at the National Oceanic and Atmospheric Administration's National Weather Service Hydrometeorological Design Studies Center website at: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca.

Category 2 Dischargers must submit an engineering report certifying that the facility is engineered and constructed to only discharge industrial storm water from

a 5-year frequency, 24-hour storm event or larger to waters of the United States. The engineering report shall be prepared and signed by a California licensed professional engineer competent and proficient in the field pertinent to the report and qualified to prepare the report. A statement of qualifications of the responsible lead professional engineer shall be included in the engineering report submitted by the Discharger. The lead professional engineer shall also affix his/her signature and engineering license number to the report. The engineering report is not required if the Discharger previously submitted an engineering report under General Order No. R9-2013-0026 that was subsequently approved by the San Diego Board, unless directed in writing by the San Diego Water Board.

2. Category 2 Receiving Water and Sediment Monitoring Plan and Requirements

Receiving water and sediment monitoring by Category 2 dischargers is not required unless otherwise determined by the San Diego Water Board based on the following considerations:

- a. Receiving water body characteristics including circulation, depth, assimilative capacity; CWA 303(d) listed impairments, and beneficial uses;
- b. The frequency of storm water discharge events into the receiving water;
- c. The compliance of the boatyard with provisions of this General Order;
- d. Any other relevant water quality factors; or
- e. Proximity of the boatyard to existing or proposed State Water Quality Protection Areas, inclusive of Areas of Special Biological Significance (ASBS) or other environmental sensitive receiving waters.
- 3. Monitoring Coalition. If monitoring is required, the monitoring may be performed by individual Dischargers to assess compliance with receiving water limits, or through participation in a water body monitoring coalition meeting the criteria for a coalition as determined by the San Diego Water Board, or both. If a monitoring coalition is formed, revised monitoring requirements will be established to ensure that appropriate monitoring is conducted in a timely manner.
- 4. Water and Sediment Monitoring Plan. If monitoring is required, the Discharger or water body monitoring coalition shall prepare and submit a Water and Sediment Monitoring Plan to assess compliance with Receiving Water Limitations of this General Order. The Water and Sediment Monitoring Plan shall be prepared and implemented in conformance with the requirements described in section IV.A.2.d of this MRP.

V. OTHER MONITORING REQUIREMENTS

A. Annual Boatyard Checklist

The Discharger shall complete and submit the Annual Boatyard Checklist (Attachment I) to the San Diego Water Board annually on August 1. The certification statement shall be signed by an authorized person as required in Standard Provisions (Attachment D), section V.B. The Annual Boatyard Checklist is used to ensure the

Discharger has complied with this General Order. The Annual Boatyard Checklist includes the following:

- 1. Annual Compliance Certification that certifies the following:
 - a. The Discharger has complied with all applicable conditions of this General Order;
 - The Discharger has eliminated industrial process water discharges to waters of the United States in accordance with Discharge Prohibition III.C of this General Order;
 - c. The Discharger has a storm water diversion system that will eliminate the discharge of the first-flush storm water runoff for each storm event, as defined in Attachment A, from its maintenance and repair area(s) to storm drains or surface water in accordance with Discharge Prohibition III. B of this General Order;
 - d. The Discharger has implemented BMPs in accordance with its SWPPP, and the SWPPP has been amended in accordance with the SWPPP requirements, section VIII.C.4.a and Attachment J of this General Order;
 - e. The Discharger has isolated its maintenance/repair areas in accordance with sections VIII.C.4.a.i. and sections VIII.C.4.a.vi. of this General Order;
 - f. The Discharger has not discharged any liquids other than storm water pursuant to Discharge Prohibition III.C of the General Order; and
 - g. The Discharger has notified each owner/operator of each vessel at the Discharger's leasehold of their obligation to prevent the discharge of waste and to comply with Basin Plan prohibitions regarding the discharge of sewage from vessels as stated in section VIII.C.4.b of the General Order. In addition, the Discharger shall briefly report on any corrective actions taken against any vessel owner/operator(s).
 - h. The Discharger has maintained records of hazardous materials used at the facility over the previous 5 years.
- 2. Submission of the Spill/Illicit Discharge Log
- 3. An overview of industrial storm water and non-storm water monitoring.
- 4. An overview of industrial storm water sampling.
- 5. An overview of the receiving water and sediment monitoring, if applicable.
- 6. An overview of floating drydock monitoring, if applicable.

B. Spill / Illicit Discharge Log

The Discharger shall log and report all spills and illicit discharges to surface water originating within and/or from its leasehold. The Spill/ Illicit Discharge Log shall be submitted annually in accordance with Table E-6 of this MRP. The spill/illicit discharge reports shall identify:

1. The time and date of the spill or illicit discharge;

- 2. The cause of the spill or illicit discharge;
- 3. The materials or wastes involved in the spill or illicit discharge;
- 4. The estimated volume of the spill or illicit discharge;
- 5. The specific location where the spill or illicit discharge originated;
- 6. The fate of the spill or illicit discharge (e.g., Mission Bay, hydrowash area, or other location(s) that the spill or illicit discharge was able to reach);
- 7. The physical extent or size of the problem area(s);
- 8. Whether the spill or illicit discharge contained pollutants;
- 9. The public agencies notified;
- 10. The corrective action taken; and
- **11.** The actions taken to prevent or minimize future spills or illicit discharges.

C. Chemical Utilization Records

The Discharger shall maintain records of the hazardous materials used at its Facility over the previous 5-year period and make these records available to the San Diego Water Board upon request. Acceptable records would include, but is not limited to, purchase receipts, delivery manifests, chemical use inventories, disposal manifests, and records and reports maintained for other state or local regulatory agencies (e.g. the Air Pollution Control District). The chemical usage records should, at a minimum, include the following information:

- 1. The name of the product and common trade name, if applicable;
- 2. The primary component/chemical contained in the product;
- 3. The quantity of the product purchased or disposed with a date; and
- **4.** Any additional comments that may assist in characterizing a product or its use (e.g., chemical was/is only used during particular seasons, indoors only).

Material Safety Data Sheets (MSDS) should not be submitted to the San Diego Water Board. MSDS for all products used by the Discharger must be available for submittal to the San Diego Water Board upon request.

D. Industrial Storm Water and Non-Storm Water Monitoring Requirements

1. BMP Inspections

a. The Discharger shall conduct BMP Inspections of all work areas within its Facility for the proper implementation of BMPs and the presence of unauthorized non-storm water discharges to waters of the United States other than those to the sanitary sewer system. BMP Inspections shall be conducted on a weekly basis all year round. The BMP Inspections should include all work areas within the Discharger's leasehold that may drain to or have the potential to discharge through wind or other means to waters of the United States, including all piers, dock, float, or other areas where work may occur directly over or on the receiving water. b. BMP Inspections shall document the presence of any discolorations, stains, floating or suspended material, etc., as well as the source of any discharge (if known). The presence of any odors shall be documented at the time visual observations are documented. Records shall be maintained of the BMP Inspection dates, specific leasehold/facility locations observed, specific observations detailing what was or was not observed, and response(s) taken to eliminate unauthorized non-storm water discharges. The Discharger shall also respond by revising its SWPPP, as necessary, and implementing and reporting the appropriate changes in accordance with this General Order. Dischargers shall summarize BMP Inspections with their Annual Storm Water Monitoring Report, as specified in Table E-6 of this MRP.

2. Industrial Storm Water Discharge Visual Observations

- a. The Discharger shall visually observe storm water discharges from the first QSE in each month of the wet season (October 1 through April 30). These visual observations shall occur at all discharge locations during the first hour of discharge. A summary of storm water visual observations shall be submitted with the Storm Water Annual Report as specified in section V.D.8 of this MRP.
- b. A QSE occurs when sufficient precipitation generates runoff from the Facility that is discharged into the receiving water and is preceded by at least 48 hours with no discharge from any drainage area.
- c. The Discharger shall visually observe the discharge of stored or contained storm water at the time of discharge to surface waters.
- d. The Discharger shall observe and document the presence or absence of floating and suspended materials, oil and grease, discoloration, turbidity, odors, and source of any observed pollutants.
- e. Monthly, the Discharger shall visually observe storm water storage and containment areas to detect leaks and ensure appropriate maintenance.
- f. The Discharger shall record all storm events that that do not produce a discharge to surface water.
- g. The Discharger shall maintain records of all visual observations, personnel performing the observations, observation dates, observed locations, and corrective actions taken in response to the observations. The SWPPP shall be revised, as necessary.

3. Sampling and Analysis

a. For grab samples, the Discharger shall collect industrial storm water samples during the first four hours of discharge to waters of the United States or to storm water conveyance systems that discharge thereto. For composite samples, the Discharger shall collect flow-weighted composite storm water samples for the duration of the storm. If composite samples are collected, all parameters identified in Table E-3 with a sample type of grab or composite must be analyzed using composite samples. Storm water samples shall be collected from (1) the first qualifying storm event, and (2) at least one other qualifying storm event. All storm water discharge locations shall be sampled. Sampling of stored or contained storm water shall occur at the time the stored or contained storm water is discharged to waters of the United States or to storm water conveyance systems that discharge thereto.

- b. If a sample is not collected from the first QSE, the Discharger shall collect samples from two other qualifying storm events and shall explain in the Annual Storm Water Monitoring Report why the first qualifying storm event was not sampled.
- c. The results of the industrial storm water sample laboratory analyses shall be reported in the Annual Storm Water Monitoring Report and will be submitted with the accompanying visual observations. The samples shall be analyzed in accordance with section III.A.1, Table E-3 of this MRP.

4. Industrial Storm Water Discharge Sampling Location

Monitoring location(s) shall be specified in the SWPPP, depicted on a site map, and shall not be changed without notice to and the approval of the San Diego Water Board. The installation of automatic or mechanical storm water samplers at the monitoring station(s) is recommended.

5. Industrial Storm Water Discharge Sampling Requirements

The Discharger is required to be prepared to collect samples and conduct visual observations at the beginning of the wet season (October 1) and throughout the wet season until minimum requirements of sections III.A.1 and V.D. of this MRP are completed. Dischargers shall be prepared to collect samples and conduct visual observations at any time of day, including hours that the Facility is not operating. The Discharger is not required to collect samples or conduct visual observations in accordance with sections III.A.1 and V.D of this MRP during dangerous weather conditions, such as flooding, electrical storm, etc. Dischargers that do not collect the required samples or visual observations during a wet season due to this exception shall include an explanation in the Storm Water Annual Report describing why the sampling or visual observations could not be conducted.

Preparedness to collect samples includes but is not limited to the following:

- a. On-site personnel with the knowledge of how, when and where to collect samples;
- b. The appropriate sampling equipment on-site (containers, coolers, access to ice, transportation, etc.); and
- c. On-site personnel awareness of what contracted laboratory to the sample(s) to and the applicable holding time for the sample.

The San Diego Water Board recommends that the Discharger contact a laboratory certified in accordance with section I.F of this MRP well in advance of the wet season to discuss the appropriate sampling techniques, equipment, holding time, etc., as necessary. It is the Discharger's responsibility to verify that

the laboratory is capable of meeting all applicable analyses and reporting requirements.

6. Monitoring Methods

All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a Discharger's own field instruments for measuring pH) shall be calibrated and maintained in accordance with manufacturer's specifications to ensure accurate measurements. All laboratory analyses must be conducted according to test procedures pursuant to 40 CFR Part 136, unless other test procedures have been specified in this General Order or by the San Diego Water Board. All metals shall be reported as total metals.

7. Records

In addition to the information required by Attachment D section IV.B, records of storm water monitoring information shall include:

- a. The date, place and time of visual observations;
- b. The individual(s) who performed the visual observations;
- c. Volume estimates;
- d. Method detection limits used;
- e. Quality assurance/quality control records and results;
- f. Non-storm water discharge visual observation and industrial storm water discharge visual observation records (see sections V.D.1 and V.D.2 of this MRP);
- g. Visual observation and sample collection exception records (see sections V.D.3 and V.D.5 of this MRP);
- h. All calibration and maintenance records of on-site instruments used; and
- i. The records of any corrective actions and follow-up activities that resulted from the visual observations.

8. Annual Storm Water Monitoring Report

- a. The Discharger shall submit an Annual Storm Water Monitoring Report by August 1st of each year to the San Diego Water Board. The report shall include:
 - i. A summary and evaluation of visual observations and sampling and analysis re
 - ii. Laboratory reports with the original analysis results including any quality assurance / quality control information; and
 - iii. An explanation of why the Discharger did not implement any activities required by this General Order, if applicable.
 - iv. Records specified in section V.D.7 of this MRP.

b. An authorized person in accordance with Attachment D section V.B of this Order, shall sign the Annual Storm Water Monitoring Report.

E. Floating Drydock Monitoring Requirements

If the Discharger has authorization under an NOA issued by the San Diego Water Board to discharge from a floating dry dock under this General Order, the Discharger shall provide notifications and documentation as provided below:

1. 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 floating drydock has to be flooded on short notice and the 48-hour notification time cannot be met, the Discharger shall notify the San Diego Water Board as early as possible and include information explaining why the Discharger could not meet the notification requirement.

The Discharger shall document the condition of its floating drydock prior to each flooding. The conditions shall 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 the correct 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 of the facility conditions annually to the San Diego Water Board in accordance with Table E-6 of this MRP.

If a floating drydock was not flooded during the year, the Discharger shall document in the Annual Boatyard Checklist described in section V.A of this MRP that no flooding occurred during that period.

2. Floating Drydock Ballast Tank Certification

If the Discharger installs a new floating drydock at the Facility, the Discharger shall submit United States Navy and ASTM reports certifying the integrity of the floating drydock ballast tanks annually, in accordance with Table E-6 of this MRP.

VI. REGIONAL MONITORING REQUIREMENTS

Regional receiving water monitoring provides information about the sources, fates, and effects of anthropogenic contaminants in the receiving water necessary to make assessments over large areas. The large-scale assessments provided by regional monitoring describe and evaluate cumulative effects of all anthropogenic inputs and enable better decision-making regarding protection of beneficial uses of receiving waters. Regional monitoring data assists in the interpretation of core monitoring studies by providing a more accurate and complete characterization of reference conditions and natural variability. Regional monitoring also leads to methods standardization and improved quality control through intercalibration exercise. The coalitions implementing regional monitoring enable sharing of technical resources, trained personnel and

associated costs. Focusing these resources on regional issues and developing a broader understanding of pollutants effects in receiving waters enables the development of more rapid and effective response strategies. Based on all of these considerations, the San Diego Water Board supports regional approaches to monitoring receiving waters.

The Discharger shall, as directed by the San Diego Water Board, participate with other regulated entities, other interested parties, and the San Diego Water Board in development and implementation of new and improved monitoring and assessment programs for receiving waters in the San Diego Region and discharges to those waters. These programs shall be developed and implemented to:

- (1) Determine the status and trends of conditions in ocean waters in the San Diego Region regarding beneficial uses, e.g.,
 - i. Are fish and shellfish safe to eat?
 - ii. Is water quality safe for swimming?
 - iii. Are ecosystems healthy?
- (2) Identify the primary stressors causing or contributing to conditions of concern;
- (3) Identify the major sources of the stressors causing or contributing to conditions of concern; and
- (4) Evaluate the effectiveness (i.e., environmental outcomes) of actions taken to address such stressors and sources.

Development and implementation of new and improved monitoring and assessment programs for receiving waters will be guided by the following:

- (1) San Diego Water Board Resolution No. R9-2012-0069, *Resolution in Support of A Regional Monitoring Framework*;
- (2) San Diego Water Board staff report entitled A Framework for Monitoring and Assessment in the San Diego Region; and
- (3) Other guidance materials, as appropriate.

The San Diego Water Board may modify the receiving waters monitoring and reporting requirements, regional monitoring requirements, and/or special studies requirements of this General Order as necessary for cause, including but not limited to a) revisions necessary to implement recommendations from Southern California Coastal Water Research Project (SCCWRP); b) revisions necessary to develop, refine, implement, and/or coordinate a regional monitoring program; and/or c) revisions necessary to develop and implement improved monitoring and assessment programs in keeping with San Diego Water Board Resolution No. R9-2012-0069, Resolution in Support of a Regional Monitoring Framework.

VII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

- 2. The Discharger shall report all instances of noncompliance not reported under sections V.E, V.G, and V.H of the Standard Provisions (Attachment D) at the time monitoring reports are submitted.
- 3. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the Facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within California Integrated Water Quality System (CIWQS). When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
- 4. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

B. Self-Monitoring Reports (SMRs)

- The Discharger shall electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program website at <u>http://www.waterboards.ca.gov/water_issues/programs/ciwqs/</u>. The CIWQS website will provide additional information for SMR submittal in the event there will be a planned or unplanned service interruption for electronic submittal.
- SMRs must be signed and certified as required by the Standard Provisions (Attachment D), section V.B of this General Order. The Discharger shall maintain sufficient staffing and resources to ensure SMR submittals are complete and timely. This includes provision for training and supervision of individuals on how to prepare and submit SMRs.
- 3. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through V. The Discharger shall submit SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this General Order. SMRs are to include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this General Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
- **4.** Unless otherwise noted in this MRP, monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Report	Report Frequency	Monitoring or Reporting Period	Report Due Date	
Floating Drydock Sample Results (if applicable)	Quarterly	January 1 -March 31 April 1 - June 30 July 1- September 30 October 1 – December 31	May 1 August 1 November 1 February 1	
Floating Drydock Submergence Report and Ballast Tank Certification (if applicable)	Annually	July 1 through June 30	August 1	
Annual Boatyard Checklist (Attachment I)	Annually	July 1 through June 30	August 1	
Spill/ Illicit Discharge Log	Annually	July 1 through June 30	August 1	
Annual Storm Water Report	Annually	July 1 through June 30	August 1	
NEC Annual Recertification (if applicable)	Annual	July 1 through June 30	August 1	

Table E-6. Monitoring Periods and	Reporting Schedule
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- 5. Section III.B of the Standard Provisions (Attachment D) of this General Order includes the standard provisions for test procedures. USEPA published regulations for the Sufficiently Sensitive Methods Rule (SSM Rule) which became effective September 18, 2015. For the purposes of the NPDES program, when more than one test procedure is approved under 40 CFR part 136 for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR sections 122.21(e)(3) and 122.44(i)(1)(iv). Both 40 CFR sections 122.21(e)(3) and 122.44(i)(1)(iv) apply to the selection of a sufficiently sensitive analytical method for the purposes of monitoring and reporting under NPDES permits, including review of permit applications. A USEPA-approved analytical method is sufficiently sensitive where:
 - a. The Reporting Level (RL) is at or below both the level of the applicable water quality criterion/objective and this General Order's limitation for the measured pollutant or pollutant parameter; or
 - b. In permit applications, the RL is above the applicable water quality criterion/objective, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

c. The method has the lowest RL of the USEPA-approved analytical methods where none of the USEPA-approved analytical methods for a pollutant can achieve the RLs necessary to assess the need for effluent limitations or to monitor compliance with a permit limitation.

The RLs in the SIP and Ocean Plan remain applicable. However, there may be situations when analytical methods are published with RLs that are more sensitive than the RLs for analytical methods listed in the SIP.

6. Reporting Protocols. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR part 136.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. Sample results greater than or equal to the reported RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the reported RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, But Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
- d. The Discharger shall instruct laboratories to establish calibration standards so that the RL value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- e. Compliance Determination. Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above. For purposes of reporting and administrative enforcement by the San Diego Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the RL.
- 7. Multiple Sample Data. When determining compliance with an average monthly effluent limitation (AMEL), or maximum daily effluent limitation (MDEL) for priority pollutants and more than one sample result is available, the Discharger shall

compute the arithmetic mean unless the data set contains one or more reported determinations 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:

- a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- b. 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.

8. Discharge Monitoring Reports (DMRs) – Not Applicable

9. Other Reports. The following reports are required under Special Provisions (section VII.C of this General Order), and sections III and VI of this MRP. The reports shall be submitted to the San Diego Water Board using the State Water Board's CIWQS program website. The reports must be signed and certified as required by section V of the Standards Provisions (Attachment D). The CIWQS website will provide additional information for SMR submittal in the event of a planned or unplanned service interruption for electronic submittal.

Document	Permit Section	Date
NAL Level 1 Exceedance Report (if applicable)	Section VI.B.2.c	August 1 of the following reporting year
NAL Level 2 Exceedance Report (if applicable)	Section VI.B.3.c	August 1 of the following reporting year
SWPPP consistent with Attachment J	Section VIII.C.4	90 Days from the Order effective date
Initial Investigation TRE Work Plan	Section III.B.6 of this MRP	90 days from the issuance of the NOA
Detailed TRE Work Plan	Section III.B.8.a of this MRP	15 days from receipt of a third toxicity test which exceeds the limitation
Receiving Water and Sediment Monitoring Plan or Engineering Report	Section IV.A.2.d of this MRP or section IV.B.1 of this MRP	90 days from the issuance of the NOA
Receiving Water and Sediment Monitoring Report (if applicable)	Section IV.A.2.f of this MRP	No later than 180 days before the expiration date of this Order

Table E-7. Other Reporting Requirements

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ATTACHMENT F – FACT SHEET

As described in section I of this General Order, the San Diego Water Board incorporates this Fact Sheet as findings of the San Diego Water Board supporting the issuance of this General Order. This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this General Order.

I. DISCHARGE INFORMATION

A. Introduction

This General Order is a National Pollutant Discharge Elimination System (NPDES) General Order that regulates discharges of industrial storm water to bays and ocean waters in the San Diego Region and ballast and flood water discharges from floating drydocks to San Diego Bay from boatyards and boat maintenance and repair facilities located adjacent to those waters. Dischargers enrolled under this General Order are required to comply with the effluent limitations, discharge prohibitions, receiving water limitations, and monitoring requirements contained in this General Order, and additional requirements established in a Notice of Applicability (NOA).

Title 40 Code of Federal Regulations (CFR) section 122.28 provides for the issuance of General Orders to regulate discharges of waste which result from the same or substantially similar operations, are the same type of waste, require similar permit conditions, and require similar monitoring. Existing and proposed discharges of waste to bay and ocean waters within the San Diego Region from boatyards and boat maintenance and repair facility activities: 1) result from similar operations, 2) are the same type of waste, 3) require similar effluent limitations for the protection of beneficial uses, 4) require similar monitoring, and 5) are more appropriately regulated under a General Order rather than an individual permit.

B. Background

In 1972, the Federal Water Pollution Control Act, currently referred to as the federal Clean Water Act (CWA), was amended to provide that the discharge of pollutants to waters of the United States from any point source is prohibited unless the discharge is in compliance with an NPDES permit. The federal regulations allow authorized states to issue either General Orders or Individual Orders to regulate discharges of pollutants to waters of the United States.

The CWA also prohibits certain discharges of storm water containing pollutants except in compliance with an NPDES permit (United States Code (USC) title 33, sections 1311 and 1342(p); CWA sections 301 and 402(p)). USEPA promulgates federal regulations to implement the CWA's mandate to control pollutants in storm water runoff discharges (40 CFR parts 122, 123, and 124). Facilities that discharge storm water "associated with industrial activity" requiring a permit are listed by Standard Industrial Classification (SIC) code in 40 CFR section 122.26(b)(14). USEPA issued a Multi-Sector General Order (MSGP) in 2008. Ship and boat building or repairing yards (SIC Code 3732) are classified as Sector R—Ship and Boat Building and Repairing Yards in the MSGP. The MSGP provides coverage for industrial facilities that discharge storm water in areas not covered by an approved state NPDES program. On September 22, 1989, USEPA granted the State of California, through the State Water Resources Control Board (State Water Board) and the Regional Water Control Quality Control Boards (Regional Water Boards), authority to issue General Orders pursuant to 40 CFR parts 122 and 123.

The State Water Board adopted a statewide Industrial General Storm Water Permit, Order No. 91-13-DWQ, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities*, on November 19, 1991. Order No. 91-13-DWQ regulated storm water discharges and authorized non-stormwater discharges from industrial facilities in California. On April 17, 1997, the State Water Board adopted Order No. 97-03-DWQ, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, replacing Order No. 91-03-DWQ.

On December 14, 2005, the San Diego Water Board adopted seven individual Orders for discharges of industrial storm water to San Diego Bay from boatyards and boat maintenance and repair facilities within the San Diego Region. On April 12, 2006, the San Diego Water Board adopted an additional three individual Orders for discharges of storm water to Dana Point Harbor, Oceanside Harbor, and Mission Bay from boatyards and boat maintenance and repair facilities within the San Diego Region. Each of the Individual Orders issued in 2005 and 2006 had similar effluent limitations and monitoring requirements, due to the similar operations that take place at these facilities. Rather than requiring the boatyards and boat maintenance and repair facilities within the San Diego Region to apply separately for coverage under the statewide Industrial General Storm Water Permit, Order No. 97-03-DWQ, the individual Orders also incorporated requirements directly from Order No. 97-03-DWQ.

On May 8, 2013, the San Diego Water Board issued Order No. R9-2013-0026, General Waste Discharge Requirements For Discharges From Boatyards And Boat Maintenance And Repair Facilities Adjacent To Surface Waters Within The San Diego Region, a General Order for the discharges of storm water, and ballast and flood water from floating drydocks from boatyards and boat maintenance and repair facilities located adjacent to surface waters in the San Diego Region instead of issuing individual Orders. Rather than requiring the boatyards and boat maintenance and repair facilities within the San Diego Region to apply separately for coverage under the statewide Industrial General Storm Water Permit, Order No. 97-03-DWQ, the General Order incorporated requirements directly from Order No. 97-03-DWQ.

As was done in the past, this General Order incorporates the requirements from the statewide Industrial General Storm Water Permit. These requirements include implementing Best Management Practices (BMPs), developing a Storm Water Pollution Prevention Program (SWPPP), and responding to Numeric Action Level (NAL) exceedances.

This General Order makes the requirements for the discharge of ballast and flood water from floating drydocks applicable to all boatyards and boat maintenance and repair facilities in San Diego Bay if a new floating drydock is installed. Although none of the boatyards and boat maintenance and repair facilities located adjacent to surface waters in the San Diego Region currently has a floating drydock, at least one has expressed an interest in building one in the future.

C. Discharge Description

Boatyards and boat maintenance and repair facilities conduct activities that include but are not limited to exterior/interior surface coating application/removal (e.g., painting and sanding), wood work, metal work, fiberglass work, hydrowashing, hull cleaning, engine repair, general mechanical/fixture repair, and hazardous waste storage. These industrial activities, along with material handling equipment or activities, raw materials, byproducts, waste materials, or industrial machinery, generate pollutants that have the potential to discharge to receiving waters when exposed to storm water or ballast and flood water from floating drydocks. Potential pollutants often associated with boat maintenance and repair operations include: BOD, copper, oil and grease, TOC, TSS, and zinc. These pollutants can be discharged with storm water, floating drydock ballast and flood water, or other non-storm water discharges. Boat maintenance and repair operations also have the potential to alter pH beyond natural background levels, which can cause harm aquatic biota. Changes in pH can alter the chemical form of certain constituents, thereby increasing their bioavailability and toxicity.

The following nine boatyards that were regulated under General Order No. R9-2013-0026 are required to submit an NOI to enroll under this General Order.

1. Driscoll Boat Works/Driscoll Custom Boats

Driscoll Boat Works/Driscoll Custom Boats is located at 2500 Shelter Island Drive in San Diego. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility.

The facility has three travel lifts for removing boats from the water. Boat maintenance and repair activities that occur at the facility include, but are not limited to, fiberglass, metal work, paint and coating application, internal combustion engine rebuilding and repair, shaft and prop repair, woodwork, welding and brazing.

The facility is approximately 35,000 square feet (approximately 0.8 acres), the surface of which is impervious. A 1.5-inch steel berm has been installed across the waterfront to prevent storm water and industrial wastewater discharges from the facility. Storm water is directed to an on-site treatment system and an onsite water system. The treatment system consists of an oil and water separator, a clarifier, a high-capacity 10-micro Hayward filter, and two 10,000-gallon holding tanks. Wastewater from the tanks is discharged to the City of San Diego's sanitary sewer system for treatment at a downstream wastewater treatment plant. The water system can also store up to 1.75 inches of storm water depending on how much water is already stored in the system. If a storm produces greater than 1.75 inches of precipitation, a high-water remote alarm sounds prompting facility personnel to shut off the storm water collection pumps. With the collection pumps are turned off, storm water ponds in a shallow depression at the facility, allow the facility to capture storm water from a storm that produces approximately 2.5 inches of precipitation. Storm water runoff exceeding the capacity of the onsite treatment system and the onsite water system is discharged to San Diego Bay at

America's Cup Harbor, a water of the United States. Oil and solids from the treatment systems are hauled offsite for disposal.

The facility does not have a drydock.

Driscoll Boat Works/Driscoll Custom Boats submitted an engineering report certifying the facility is able to capture storm water from a 5-year frequency, 24hour storm event.

During the permit term of General Order No. R9-2013-0026, the facility reported that no storm water from the facility was discharged to San Diego Bay. The facility had the following violations during the permit term:

• Two deficient reporting violations for not including a weekly BMP visual inspection summary with the 2016 and 2017 annual reports.

2. Marine Group Boat Works – National City

Marine Group Boat Works – National City is located at 1313 Bay Marina Drive in National City. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility.

The facility has one travel lift for removing boats from the water. Boat maintenance and repair activities that occur at this facility include fiber glassing, metal work, painting and coating application, internal combustion engine rebuilding and repair, shaft and prop repair, wood working, welding and brazing.

The facility is approximately 227,000 square feet (approximately 5.2 acres), the surface of which is impervious. Storm water is directed to a 50,000-gallon tank, a collapsible 10,000-gallon tank, or a low area of the facility that can hold approximately 120,000 gallons. Retained storm water is directed to an on-site treatment system that consists of an oil and water separator, a clarifier, and a filter. Effluent from the treatment system is discharged to the City of San Diego's sanitary sewer system for treatment at a downstream wastewater treatment plant. Storm water runoff exceeding the capacity of the holding tank, collapsible tank, and low area of the facility is discharged to San Diego Bay, a water of the United States. Oil and solids from the treatment system are hauled offsite for disposal.

The facility used to have a floating drydock. The Discharger reported that the floating drydock was removed in 2014 and that a new floating drydock may be added to the facility during the term of this General Order.

Marine Group Boat Works – National City submitted an engineering report that certifies the facility is able to capture storm water from a 5-year frequency, 24-hour storm event.

During the permit term of General Order No. R9-2013-0026, the facility did not discharge storm water to San Diego Bay. The facility had the following violations during the permit term:

• One late reporting violation for not submitting an Engineering Certification Report.

- Two late reporting violations for not timely submitting the 2014 and 2015 annual reports.
- Three violations for failure to implement BMPs.
- Two deficient reporting violations for not including a weekly BMP visual inspection summary with the 2016 and 2017 annual reports.

3. Koehler Kraft Company, Inc.

Koehler Kraft Company, Inc. boatyard facility is located at 2302 Shelter Island Drive in San Diego. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility.

The facility employs a winch-driven marine railway system for removing boats from the water and transporting them within the yard. A crane is also available for engine removal and the lifting of small craft from the water with slings. Koehler Kraft is a small boatyard repair facility that specializes in structural work on wooden boats.

The facility is approximately 30,000 square feet (approximately 0.69 acres), the surface of which is impervious. The facility includes a building, parking lot and yard area. Boat repair activities occurring inside the building are not exposed to storm water. Building runoff is directed into a rock lawn between the facility and the sidewalk of Shelter Island Drive for percolation. Parking lot runoff is directed into the containment basin. Boat repair activities that occur in the yard area are exposed to storm water. Storm water and hydrowash water are collected in the containment basin. The total storm water storage capacity at the facility is 24,300 gallons. Storm water runoff exceeding the capacity of the containment basin is discharged to the San Diego Bay at America's Cup Harbor, a water of the United States. Solids from the evaporation basin are swept up and disposed of in the trash.

The facility does not have a drydock.

Koehler Kraft Company, Inc. submitted an engineering report that certifies the facility is able to capture storm water from a 5-year, 24-hour storm.

During the permit term of General Order No. R9-2013-0026, the facility did not discharge storm water to San Diego Bay. The facility had the following violations during the permit term:

- One late reporting violation for not timely submitting a SWPPP and Receiving Water and Sediment Monitoring Plan or Engineering Certification Report.
- Four late reporting violations for not timely submitting 2014, 2015, 2016, and 2017 annual reports.
- Two deficient reporting violations for not including a weekly BMP visual inspection summary with the 2016 and 2017 annual reports.

4. Nielsen Beaumont Marine

Nielsen Beaumont Marine boatyard facility is located at 2420 Shelter Island Drive in San Diego. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility.

The facility has one travel lift for removing boats from the water. Boat maintenance and repair activities that occur at this facility include, but are not limited to, fiberglass, metal work, paint and coating application, internal combustion engine rebuild and repair, shaft and prop repair, woodwork, welding and brazing.

The facility is approximately 33,000 square feet (approximately 0.76 acres), the surface of which is impervious. Storm water is directed to two tanks and additional water is allowed to flood the yard. The Facility can retain storm water from a 4.5-inch storm event. Retained storm water and hydrowash water are directed to an onsite treatment system that consists of screening, settling, media filtration, and ultraviolet light. Treated water is used as hydrowash water or discharged to the City of San Diego's sanitary sewer system for treatment at a downstream wastewater treatment plant. Storm water runoff exceeding the capacity of the holding tanks and area for flooding is discharged to San Diego Bay at America's Cup Harbor, a water of the United States. Solids from the treatment system are removed from the filtered bags and laid out to dry and then disposed of in the trash.

The facility does not have a drydock.

Nielsen Beaumont Marine submitted an engineering report that certifies the facility is able to capture storm water from a 100-year frequency, 24-hour storm event. The facility has also obtained a No Exposure Certification (NEC) that certifies all industrial materials and activities are protected within a secondary containment structures and will not discharge storm water to waters of the United States (based on historical rainfall record).

During the permit term of General Order No. R9-2013-0026, the facility did not discharge storm water to San Diego Bay. The facility had no violations during the permit term.

5. Shelter Island Boatyard

Shelter Island Boatyard is located at 2330 and 2390 Shelter Island Drive in San Diego. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility.

The facility has one travel lift equipped with mechanical backup for removing boats from the water. Maintenance and repair activities that occur at this facility include fiberglass work, metal work, painting and coating work, internal combustion engine repair, shaft and prop installation, woodwork, welding and brazing. Shelter Island Boatyard employees, boat owners/operators and thirdparty businesses accomplish this work. The facility is approximately 97,500 square feet (approximately 2.2 acres), the surface of which is impervious. The facility also includes three acres of docks and slips located in San Diego Bay. During wet weather, storm water and process water are directed to an onsite treatment system that consists of three-stage clarifier units and 800-micron filtrations systems. Treated storm water and process water are stored in four 20,000-gallon storage tanks (80,000 gallons of storage total) and on-call 21,000-gallon portable storage tanks that can be available within 24-hour notice. Treated storm water and process water are discharged to the City of San Diego's sanitary sewer system for treatment at a downstream wastewater treatment plant. Storm water runoff exceeding the capacity of the holding tanks and area for flooding is discharged to San Diego Bay, Shelter Island Yacht Basin, a water of the United States. Solids from the treatment system are hauled offsite for disposal. During dry weather, process water is discharged directly to City of San Diego's sanitary sewer system.

The facility does not have a drydock.

Shelter Island Boatyard submitted an engineering report that certifies the facility is able to capture storm water from a 5-year frequency, 24-hour storm event.

During the permit term of General Order No. R9-2013-0026, the facility did not discharge storm water to San Diego Bay. The facility had no violations during the permit term.

6. The Marine Group, LLC

The Marine Group, LLC boatyard facility is located at 997 G Street in Chula Vista. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility.

The facility has three travel lifts for removing boats from the water. Boat maintenance and repair activities that occur at this facility include fiber glassing, metal work, painting and coating application, internal combustion engine rebuilding and repair, shaft and prop repair, wood working, welding and brazing.

The facility is approximately 400,000 square feet (approximately 9.18 acres), the surface of which is impervious. Storm water is collected in sumps to settle out solids and is then stored in seven 10,000-gallon tanks (70,000 gallons of storage total). Treated storm water is discharged to the City of San Diego's sanitary sewer system for treatment at a downstream wastewater treatment plant. Storm water runoff exceeding the capacity of the sumps is discharged to the San Diego Bay, a water of the United States. Solids from the treatment system are hauled offsite for disposal.

The facility does not have a drydock.

The Marine Group, LLC submitted an engineering report that certifies the facility is able to capture storm water from a 5-year frequency, 24-hour storm event.

During the permit term of General Order No. R9-2013-0026, the facility did not discharge storm water to San Diego Bay. The facility had the following violations during the permit term:

- One late reporting violation for not timely submitting a Receiving Water and Sediment Monitoring Plan or Engineering Certification Report.
- Two late reporting violations for not timely submitting the 2014 and 2015 annual reports.
- Two deficient reporting violations for not including weekly BMP inspection summary in the 2016 and 2017 annual reports.

7. Dana Point Shipyard

The Dana Point Shipyard is located at 34671 Puerto Place in Dana Point. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility

The facility has one travel lift for removing boats from the water. Boat maintenance and repair activities that occur at this facility include hydrowashing, fiberglass repair work, metal work (such as grinding and welding), painting, and electrical and mechanical work

The industrial area of the facility is approximately 43,560 square feet (approximately 1 acre), the surface of which is impervious. Storm water is directed to an onsite treatment system that consists of a clarifier, flocculant injection system, 2,500-gallon storage and settling tank, four bag filter vessel, and single media vessels with metal removing media. By manipulating valves on the treatment system, the Discharger can discharge treated storm water to the South Orange County Wastewater Authority's sanitary sewer system for treatment at a downstream wastewater treatment plant, an onsite recycling system, or the harbor. Storm water runoff exceeding the capacity of the treatment system is discharged to the Dana Point Harbor, a water of the United States. Solids from the treatment system are hauled offsite for disposal.

The facility does not have a drydock.

Dana Point Shipyard submitted an engineering report that certifies the facility is able to capture storm water from a 5-year frequency, 24-hour storm event.

During the permit term of General Order No. R9-2013-0026, the facility did not discharge storm water to Dana Point Harbor. The facility had no violations during the permit term.

8. Driscoll Mission Bay, LLC

The Driscoll Mission Bay, LLC boatyard facility is located at 1500 Quivira Way in San Diego. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility.

The facility has two travel lifts for removing boats from the water. Boat maintenance and repair activities that occur at the facility include, but are not limited to, fiberglass, metal work, paint and coating application, internal combustion engine rebuild and repair, shaft and prop repair, woodwork, welding and brazing.

The industrial area of the facility is approximately 65,000 square feet (approximately 1.5 acres), the surface of which is impervious. The remaining property (approximately 2 acres) consists of office space, parking, storage sheds, and other outbuildings. Storm water and hydrowash water are directed to an on-site treatment system and an on-site water system. The on-site treatment system consists of a clarifier and a series of filters. Treated storm water and hydrowash water are stored in three above ground interconnected 12,000-gallon settling and storage tanks for a total of 36,000 gallons of storage. Treated storm water and hydrowash water are discharged to the City of San Diego's sanitary sewer system for treatment at a downstream wastewater treatment plant. The water system can also store up to 1.75 inches of storm water depending on how much water is already stored in the system. Storm water runoff exceeding the capacity of the onsite treatment system and the on-site water system is discharged to Mission Bay, a water of the United States. Oil and solids from the treatment systems are hauled offsite for disposal.

The facility does not have a drydock.

The facility is not certified to contain storm water from a 5-year frequency, 24-hour storm event. The Discharger conducted receiving water monitoring twice and sediment monitoring once during the permit term. Both receiving water monitoring events show chronic toxicity for the purple sea urchin, and elevated levels of copper and zinc. The sediment monitoring showed the benthic condition near the storm water outfall is likely unimpacted, while the benthic condition near the lift station is likely impacted.

During the permit term of General Order No. R9-2013-0026, the facility did not discharge storm water to Mission Bay. The facility had the following violations during the permit term:

- One late reporting violation for not timely submitting the 2015 annual report.
- Two deficient reporting violations for not submitting a weekly BMP inspection summary with the 2016 and 2017 annual reports.

9. Oceanside Marine Centre, Inc.

The Oceanside Marine Center is located at 1550 North Harbor Drive in Oceanside. See Attachment B for more information about the location of the facility with respect to nearby surface waters potentially receiving discharges from the facility.

The facility has one travel lift for removing boats from the water. Boat maintenance and repair activities that occur at this facility include, but are not limited to, marine growth removal, lube oil replacement, paint application, engine repair and replacement, and fiberglass repair.

The facility is approximately 20,550 square feet (approximately 0.5 acres). Some areas of the facility are paved and some are not. There are two storm water treatment systems, one for the Northern Drainage Area and one for the Southern Drainage Area. Water from the Northern Drainage Area first enters a retaining

pond area with approximately 8,000 gallons capacity with a large-diameter standpipe that can be rotated and sealed to contain water around a clarification unit. Water from the Northern Drainage area then flows into the standpipe to a collection trap for large particles, followed by a below-ground three-stage clarification system to remove finer particles. The treated storm water is then discharged to Oceanside Harbor (Discharge Point No. SW-OMC-02). The Discharger has stated that the facility can contain the first 0.1 inches of storm water for treatment and recycling by plugging the system and rotating the pipe prior to a rain event. Treatment for the Southern Drainage Area consists of an above-ground three-stage clarifier followed by a secondary containment tank. Treated storm water is then used onsite for irrigation. Any storm water exceeding the capacity of the secondary containment tank is discharged to Oceanside Harbor (Discharge Point No. SW-OMC-01), a water of the United States. Solids from the treatment systems are hauled offsite for disposal.

The facility does not have a drydock.

The facility is not certified to contain storm water from a 5-year frequency, 24-hour storm event. The Discharge fulfilled the receiving water and sediment monitoring requirements by participating in the Southern California Bight 2018 Regional Monitoring Program.

During the permit term of General Order No. R9-2013-0026, the discharger sampled one qualifying storm event on February 14, 2019. The sampling results indicated that copper exceeded the Numeric Action Level and the chronic toxicity test for the purple sea urchin failed with 100% effect. However, the sampled storm water included storm water from the facility as well as storm water run-on from the Camp Pendleton residential complex adjacent to the facility. The facility had the following violations during the permit term:

- One late reporting violation for not timely submitting a Receiving Water and Sediment Monitoring Plan.
- Four late reporting violations for not timely submitting the 2014, 2015, 2016, and 2017 annual reports.
- Two deficient reporting violations for not submitting a weekly BMP inspection summary with the 2016 and 2017 annual reports.

II. PERMIT INFORMATION

A. Eligibility Criteria

Discharges covered by this General Order are limited to industrial storm water runoff and ballast and flood water from floating drydocks from boatyard and boat maintenance and repair facilities located adjacent to surface water facilities in the San Diego Region.

B. Notice of Intent (NOI) Application

Any person proposing to discharge industrial storm water runoff, or ballast and flood water from floating drydocks located in San Diego Bay to surface waters from a boatyard or a boat maintenance and repair facility located adjacent to a surface water

in the San Diego Region shall submit a completed NOI Form (Attachment G) with filing fee for coverage under this General Order and obtain authorization from the San Diego Water Board prior to discharging storm water runoff.

Boatyards enrolled under General Order No. R9-2013-0026 and listed in Table F-1 shall submit an NOI to enroll under this General Order and do not need to submit a filing fee. Existing Dischargers will continue to be invoiced annually.

Discharger Name	Facility Address	Receiving Water	Category of Discharge
Driscoll Inc.	2500 Shelter Island Drive, San Diego, CA 92106	San Diego Bay Shoreline at America's Cup Harbor	Category 2
The Marine Group Boat Works, LLC (National City)	1313 Bay Marina Drive, National City, CA 91950	San Diego Bay	Category 2
Koehler Kraft Company, Inc.	L)rive		Category 2
Nielsen Beaumont Marine, Inc.	2420 Shelter Island Drive, San Diego, CA 92106	San Diego Bay Shoreline at America's Cup Harbor	Category 2
Shelter Island Boatyard	Island Drive.		Category 2
The Marine Group Boat Works, LLC (Chula Vista) 997 G Street Chula Vista, CA 91910		San Diego Bay	Category 2
Dana Point Shipyard	34671 Puerto Place, Dana Point, CA 92629	Dana Point Harbor	Category 2
Driscoll Mission Bay, LLC			Category 1
Oceanside Marine Centre, Inc. 1550 North Harbor Drive, Oceanside, CA 92054		Oceanside Harbor	Category 1

Table F-1. Facilities	Enrolled Under	General Order No	R9-2013-0026
Table FIL Facilities	Ellioned Under	General Order No	. KJ-ZUIJ-UUZU

C. No Exposure Certification (NEC) Coverage

In 1999, USEPA adopted additional storm water regulations, known as Phase II. (64 Fed. Reg. 68722.) The Phase II regulations provide for, among other things, exclusions from NPDES permits for industrial activities that have no exposure to storm

water. This General Order applies USEPA's Phase II rules regarding a conditional exclusion for facilities where there is no exposure of industrial activities and materials to storm water. This General Order meets USEPA rules allowing any type of industry to claim the conditional exclusion. In this General Order, the NEC requires enrollment for coverage but conditionally excludes Dischargers from a majority of the requirements.

This General Order requires Dischargers who seek the NEC conditional exclusion to obtain coverage in accordance with section IX of this General Order. Dischargers seeking NEC coverage are required to file the applicable permit registration documents: NEC Form, NEC Report, site map, and annual fee. NEC coverage becomes effective when the San Diego Water Board issues the Discharger a NEC approval letter. Annual inspections, re-certifications, and fees are required in subsequent years. Failure to comply with the Conditional Exclusion conditions listed in this General Order will lead to enforcement for discharging without a permit pursuant to sections 13385 and 13399 of the Water Code. A Discharger that anticipates a change (or changes) in circumstances that would lead to exposure should register for permit coverage prior to the anticipated changes.

Dischargers that certify their facility has no exposure of industrial activities or materials to storm water in accordance with section IX of this General Order are not required to implement a SWPPP or comply with the monitoring requirements of this General Order, except a SWPPP is required if secondary containment is used to satisfy NEC requirements. If the entire facility is protected by secondary containment to prevent a discharge of storm water, a SWPPP and BMPs are required to prevent an airborne or accidental discharge to surface waters. Dischargers are required to conduct an annual facility compliance evaluation as described in section IX.F of this General Order, pay an annual fee, and annually certify that their facilities continue to satisfy the NEC requirements.

Dischargers must file for NEC coverage by submitting the following items to the San Diego Water Board:

- 1. No Exposure Certification Form with Signed Certification Statement (Attachment K).
- 2. No Exposure Certification Report (see section IX.E.2 of this General Order).
- 3. Current site map consistent with requirements in section IX.E.2.c of this General Order included in the NEC Report.
- 4. Annual Fee (Pursuant to Water Code section 2200.5) for new dischargers. Existing dischargers will be invoiced appropriately.

D. Coverage

Boatyards or boat maintenance and repair facilities are required to submit and NOI, as described in section II.A of this General Order. The NOI and each element thereof are subject to San Diego Water Board approval. If the discharge is eligible for coverage under this General Order, the San Diego Water Board will issue an NOA, to the Discharger, authorizing the discharge under the terms and conditions of this General Order. The NOA may prescribe site-specific requirements due to site-specific

circumstances. However, the NOA will not remove or relax any effluent limitations or monitoring requirements contained in this General Order. The San Diego Water Board may issue an NOA and require a Discharger to comply with the conditions of this General Order even if the Discharger has not submitted an NOI to be covered by this General Order.

Boatyards or boat maintenance and repair facilities enrolled under General Order No. R9-2013-0026 (referred to in this General Order as Existing Boatyards) will continue coverage under General Order No. R9-2013-0026 for 180 days following the date of adoption of this General Order. After April 6, 2020, all Notices of Enrollment issued under General Order No. R9-2013-0026 will be terminated. Existing Boatyards shall submit a complete NOI Form (Attachment G) to enroll in this General Order no later than February 6, 2020 or else risk losing permit coverage.

E. Termination of Discharges

Dischargers shall submit a completed Notice of Termination Form (NOT, Attachment H) to the San Diego Water Board when coverage under this General Order is no longer required. Discharger eligibility for termination can be established under the following conditions:

- 1. A new owner or operator has taken over responsibility for the facility; or
- 2. The Discharger has ceased operations at the facility, there are not or no longer will be discharges of storm water associated with boatyard and boat maintenance and repair operations from the facility; or
- **3.** The Discharger has obtained coverage under an individual or alternative Order for all discharges required to be covered by an NPDES permit.

The NOT constitutes a notice that the Discharger (and his/her agent) at the site has ceased the discharge of storm water and ballast or flood water from floating drydocks under this General Order. The Discharger shall continue to comply with the requirements of this General Order until the San Diego Water Board approves the NOT. Submittal of an NOT does not obviate the Discharger's duty to comply with the requirements of this General Order, pay any outstanding invoices of permit fees or submit any outstanding required reports. Submittal of a NOT does not preclude the San Diego Water Board, from taking future enforcement action against the Discharger for any existing violations of the General Order both prior to and after issuance of the notice, including ongoing violations after permit termination and failure to pay any outstanding permit fees.

F. Transferring Ownership

Enrollment under this General Order is not transferable. The enrolled Discharger must submit an NOT to the San Diego Water Board in the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the enrolled Discharger. The new succeeding owner or operator must submit an NOI for application of enrollment under this General Order and obtain authorization from the San Diego Water Board.

G. Fees

The Discharger is required to pay enrollment and annual fees required by this General Order, in accordance with California Code of Regulations (CCR) title 23, division 3, chapter 9, Waste Discharge Reports and Requirements, article 1, Fees. The fee regulations can be accessed at http://www.waterboards.ca.gov/resources/fees/#npdes.

H. Discharge Points and Receiving Waters

Under wet weather conditions, the potential exists for storm water discharges to enclosed bays, harbors, lagoons, estuaries, and/or the ocean. Discharge point(s) are specific to each facility and will be identified in the NOA.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this General Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This General Order serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260). This General Order is also issued pursuant to section 402 of the CWA and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a General NPDES permit for point source discharges from boatyards or boat maintenance to surface waters. States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the State Water Board submitted an application to USEPA requesting revisions to its NPDES Program in accordance with 40 CFR sections 122.28, 123.62, and 403.10. The application included a request to add general NPDES permit authority to its approved NPDES Program. On September 22, 1989, USEPA, Region 9, approved the State Water Board's request and granted authorization for the State of California to issue general NPDES permits.

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt a General NPDES permit is exempt from the provisions of chapter 3 of the CEQA, (commencing with section 21100) of division 13 of the Public Resources Code.

C. State and Federal Laws, Regulations, Policies, and Plans

1. Water Quality Control Plans. The San Diego Water Board adopted *Water Quality Control Plan for the San Diego Basin* (Basin Plan) on September 8, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives. The Basin Plan was subsequently approved by the State Water Board on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the San Diego Water Board and approved by the State Water Board. In addition, State Water Board Resolution No. 88-63 requires that, with certain exceptions, the San Diego Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Because of marine water influence in the potential receiving waters, total dissolved solids (TDS) levels may exceed 3,000 milligrams per liter (mg/L) for some receiving waters, and thereby meet an exception to State Water Board Resolution No. 88-63. The municipal and domestic supply beneficial use designation therefore does not apply to receiving waters that exceed 3,000 mg/L of total dissolved solids for entities permitted under this General Order.

The Basin Plan identifies the beneficial uses of surface waters in the San Diego Region to be protected (not all surface waters have all of the beneficial uses listed below) as summarized in Table F-2 below:

Receiving Water Name	Beneficial Use(s)		
Coastal Surface Waters	Municipal and domestic supply; industrial service and process supply; preservation of rare, threatened or endangered species; navigation; marine habitat; contact water recreation; non-contact water recreation; aquaculture; migration of aquatic organisms; commercial and sport fishing; spawning, reproduction, and/or early development; preservation of areas of special biological significance; shellfish harvesting; estuarine habitat; wildlife habitat		

In order to protect these beneficial uses, the Basin Plan establishes water quality objectives and a program of implementation. Requirements of this General Order implement the Basin Plan.

2. California Ocean Plan. The State Water Board adopted the *Water Quality Control Plan, Ocean Waters of California, California Ocean Plan (Ocean Plan)* in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, 2009, 2012, and 2015. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean.

The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized in Table F-3 below:

Receiving Water Name	Beneficial Use(s)		
Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting		

 Table F-3. Ocean Plan Beneficial Uses

Because boatyards are typically located in enclosed bays, the Ocean Plan may not be directly applicable to all the discharges eligible for coverage under this General Order. However, Table 2 of the Ocean Plan has historically been used to develop appropriate technology-based effluent limitations for discharges to San Diego Bay since bay waters have many of the same characteristics of the ocean. This General Order retains technology-based effluent limitations (TBELs) based on Table 2 of the Ocean Plan for floating drydocks.

- 3. Thermal Plan. The State Water Board adopted the Water Quality Control Plan for Control 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 coastal and interstate waters and enclosed bays and estuaries.
- 4. 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. About forty criteria in the NTR applied in California. 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 federal water quality criteria for priority pollutants which are discharged to inland surface waters, bays, and estuaries.
- 5. State Implementation Policy (SIP). 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 San Diego 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.

The CTR regulations and the SIP are applicable to discharges of ballast and flood water described in this General Order. It is the Dischargers responsibility to provide all data and other information requested by the San Diego Water Board for use in determining whether the proposed discharge may cause, have a reasonable potential to cause, or contribute to an excursion above any applicable priority pollutant criterion or objective. A reasonable potential analysis of the submitted data is required to determine which priority pollutants require effluent limitations.

6. ISWEBE Plan. The State Water Board adopted the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Part 3 Bacteria Provisions* (ISWEBE Plan) was adopted on August 7, 2018 and became effective on February 4, 2019. The ISWEBE Plan supersedes any numeric water quality objective for bacteria for the REC-1 beneficial use contained in Basin Plans and establishes new numeric bacteria objective and related implementation provisions. Requirements of this General Order implement the bacteria objectives in ISWEBE Plan.

- 7. Bays and Estuaries Plan. The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries of California – Sediment Quality Provisions* (Bays and Estuaries Plan) on September 16, 2008, became effective on August 25, 2009, and was amended on April 6, 2011, June 8, 2011, and June 5, 2018. The Bays and Estuaries Plan supersedes other narrative sediment quality objectives and establishes new sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries. Requirements of this General Order implement the sediment quality objectives of this Bays and Estuaries Plan.
- 8. Bays and Estuaries Policy. The State Water Board adopted the *Water Quality Control Policy for Enclosed Bays and Estuaries of California* (Bays and Estuaries Policy) on May 16, 1974. The Bays and Estuaries Policy establishes principles for management of water quality, water 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. These principles, requirements, prohibitions, and provisions have been incorporated into this General Order.

The Bays and Estuaries Policy contains the following principles for management of water quality in enclosed bays and estuaries, which includes San Diego Bay:

"The discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a San Diego Water Board only when the San Diego Water Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge."

For the purpose of this policy, treated ballast waters and innocuous non-municipal wastewater such as clear brines, wash water, and pool drains are not necessarily considered industrial process wastes, and may be allowed under discharge requirements that provide protection to the beneficial uses of the receiving water. For the purpose of the Bays and Estuaries Policy and this General Order, the discharge of reverse osmosis brine concentrate, groundwater well-purge water, plant feed-water dump, and chlorine contact-tank overflow associated with the Facility are considered innocuous non-municipal wastewaters and, as such, will not be considered industrial process wastes. Therefore, the discharges of such wastes may be allowed by this San Diego Water Board under WDRs that provide protection of the beneficial uses of the receiving waters.

The following *Principles for the Management of Water Quality in Enclosed Bays and Estuaries*, as stated in the Bays and Estuaries Policy apply to all of California's enclosed bays and estuaries:

a. Persistent or cumulative toxic substances shall be removed from the waste to the maximum extent practicable through source control or adequate treatment prior to discharge.

- b. Bay or estuarine outfall and diffuser systems shall be designed to achieve the most rapid initial dilution practicable to minimize concentrations of substances not removed by source control or treatment.
- c. Wastes shall not be discharged into or adjacent to areas where the protection of beneficial uses requires spatial separation from waste fields.
- d. Waste discharges shall not cause a blockage of zones of passage required for the migration of anadromous fish.
- e. Nonpoint sources of pollutants shall be controlled to the maximum practicable extent.

As of the date of adoption of this General Order, no segment of the receiving waters where the facilities discharge have been designated as an area where the protection of beneficial uses requires spatial separation from waste fields. The terms and conditions of this General Order are consistent with the *Principles for the Management of Water Quality in Enclosed Bays and Estuaries*.

- 9. Antidegradation Policy. 40 CFR section 131.12 requires that the 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 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The San Diego Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution 68-16. This General Order meets the requirements of the federal and State antidegradation policies. The effluent limitations in this General Order are at least as stringent as the effluent limitations in General Order No. R9-2013-0026, and no degradation of the receiving water is expected.
- **10. Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. This General Order meets all anti-backsliding requirements as this General Order does not remove or relax any effluent limitations in contained General Order No. R9-2013-0026.
- 11. Endangered Species Act Requirements. This General Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This General Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state, including

protecting rare, threatened, or endangered species. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

- 12. Monitoring and Reporting Requirements. Federal regulations at 40 CFR section 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the Water Code authorize the Regional Water Boards to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided as Attachment E.
- 13. Vessel General Permit. USEPA signed the 2008 Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (Vessel General Permit or VGP) on December 18, 2008. The VGP, became effective on February 6, 2009, and was subsequently reissued on December 19, 2013. The VGP regulates discharges incidental to the normal operation of vessels operating in a capacity as a means of transportation. It provides NPDES permit coverage nationwide for discharges incidental to the normal operation of commercial vessels greater than 79 feet in length. Vessels in a drydock are not operating in a capacity as a means of transportation and are not covered by the VGP. Floating drydocks 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 facilities that are not operating as a means of transportation are regulated by this General Order. Discharges at facilities that are regulated by the VGP are not regulated by this General Order. All ballast water discharges from floating drydocks during the docking and undocking of a vessel are regulated by the VGP. However, flood water discharges from floating drydocks are not regulated by the VGP.

D. Impaired Water Bodies on CWA 303(d) List

The CWA requires States to identify and make a list of surface water bodies that are polluted. These water bodies, referred to in law as "water quality limited segments," do not meet water quality standards even after discharges of wastes from point sources have been treated by the minimum required levels of pollution control technology. Wastewater treatment plants, a city's storm drain system, or a boatyard, are a few examples of point sources that discharge wastes to surface waters. States are required to compile the water bodies into a list, referred to as the *Clean Water Act Section 303(d) List of Water Quality Limited Segments* (303(d) List). States must also prioritize the water bodies on the list and develop actions plans, called total maximum daily loads (TMDLs) to improve water quality.

On April 6, 2018, USEPA approved the list of impaired water bodies, prepared by the State Water Board pursuant to CWA section 303(d), which are not expected to meet applicable water quality standards after implementation of technology-based effluent limitations (TBELs) for point sources. Surface waters listed on the 303(d) List that require a TMDL and receive discharges from boatyards and boat maintenance and repair facilities include but not limited to the following: (1) Dana Point Harbor listed for copper, toxicity, and zinc; (2) Oceanside Harbor listed for copper; (3) Mission Bay Quivira Basin listed for copper; (4) San Diego Bay listed for polychlorinated biphenyls (PCBs); and (5) San Diego Bay, America's Cup Harbor listed for copper.

On February 9, 2005, the San Diego Water Board adopted a Basin Plan amendment incorporating Resolution R9-2005-0019, *Dissolved Copper Shelter Island Yacht Basin, San Diego Bay TMDL*. The TMDL was approved by the State Water Board on September 22, 2005, by the Office of Administrative Law on December 2, 2005, and by USEPA on February 8, 2006. The Shelter Island Boatyard is the only boatyard maintenance and repair facility eligible for coverage under the General Order that may discharge to the Shelter Island Yacht Basin. The TMDL does not assign a wasteload allocation (WLA) to the Shelter Island Boatyard or to industrial storm water discharges, but neither does it explicitly exclude such discharges.

The Shelter Island Boatyard retains storm water onsite and is approved to discharge limited volumes of storm water to the municipal sanitary sewer. According to the report of waste discharge submitted by the Shelter Island Boatyard on December 8, 2010, the boatyard has not discharged storm water to surface waters in approximately 22 years.

E. Other Plans, Polices and Regulations - Not Applicable

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the U.S. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the CFR: 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations (TBELs) and standards; and 40 CFR section 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

Shortly after the passage of the CWA, the USEPA promulgated regulations exempting most storm water discharges from the NPDES permit requirements. (40 CFR section 125.4 (1975); see also *Natural Resources Defense Council v. Costle* (D.C. Cir. 1977) 568 F.2d 1369, 1372 (Costle); *Defenders of Wildlife v. Browner* (9th Cir. 1999) 191 F.3d 1159, 1163 (Defenders of Wildlife).) When environmental groups challenged this exemption in federal court, the District of Columbia Court of Appeals invalidated the regulation, holding that the USEPA "*does not have authority to exempt categories of point sources from the permit requirements of [CWA] section 402.*" (Costle, 568 F.2d at 1377.) The Costle court rejected the USEPA's argument that effluent-based storm sewer regulation was administratively infeasible because of the variable nature of storm water pollution and the number of affected storm sewers throughout the country. (Id. at 1377-82.) Although the court acknowledged the practical problems relating to storm sewer regulation, the court found the USEPA had the flexibility under the CWA to design regulations that would overcome these problems. (Id. at 1379-83.) In particular, the court pointed to General Orders and permits based on requiring Best Management Practices (BMPs).

During the next 15 years, the USEPA made numerous attempts to reconcile the statutory requirement of point source regulation with the practical problem of regulating possibly millions of diverse point source discharges of storm water. (See Defenders of Wildlife, 191 F.3d at 1163; see also Gallagher, *Clean Water Act in Environmental Law Handbook*

(Sullivan, edit., 2003) p. 300 (Environmental Law Handbook); Eisen, *Toward a Sustainable Urbanism: Lessons from Federal Regulation of Urban Storm Water Runoff* (1995) 48 Wash. U.J. Urb. & Contemp. L.1, 40-41 [Regulation of Urban Storm Water Runoff].)

In 1987, Congress amended the CWA to require NPDES permits for storm water discharges. (See CWA section 402(p), 33 U.S.C. section 1342(p); 191 F.3d at 1163; *Defenders of Wildlife, Natural Resources Defense Council v. USEPA* (9th Cir. 1992) 966 F.2d 1292, 1296.) In these amendments, enacted as part of the Water Quality Act of 1987, Congress distinguished between industrial and municipal storm water discharges. With respect to industrial storm water discharges, Congress provided that NPDES permits *"shall meet all applicable provisions of this section and section 1311 [requiring the USEPA to establish effluent limitations under specific timetables]."* (CWA section 402(p)(3)(A); see also Defenders of Wildlife, 191 F.3d at 1163-64.)

In 1990, USEPA adopted regulations specifying what activities were considered "industrial" and thus required discharges of storm water associated with those activities to obtain coverage under NPDES permits. (55 Fed. Reg. 47,990 (1990); 40 CFR section 122.26(b)(14).) Ship and boat building and repair activities, deemed a subset of the industrial activities category, must be regulated by an NPDES permit. (40 CFR section 122.26(b)(14)).

The CWA and the USEPA's regulations provide states with the discretion to formulate permit terms, including specifying BMPs, to achieve strict compliance with federal technology-based and water quality-based standards. (*Natural Resources Defense Council v. USEPA* (9th Cir. 1992) 966 F.2d 1292, 1308.). Accordingly, this General Permit retains a chronic toxicity effluent limitation for industrial storm water, and specific BMPs as well as numeric action levels (NALs) in order to achieve these minimum federal standards. In addition, the General Permit requires a SWPPP to be developed and implemented consistent with Attachment J.

A. Discharge Prohibitions

Effluent and receiving water limitations in this General Order are based on the federal CWA, Basin Plan, State Water Board plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology.

The Discharge prohibitions from the previous General Order have been retained in this General Order. These discharge prohibitions are necessary to ensure compliance with applicable water quality objectives, conditions of applicable water quality plans, and ensure proper implementation of BMPs:

- 1. Discharge Prohibitions III.A, III.C, III.G prohibits the dumping, deposition or discharge of wastes from land, docks, or boats and the discharge of specific industrial discharges not authorized under this General Order directly into receiving waters, or adjacent waters and is consistent with the requirements of the Enclosed Bays and Estuaries Policy and the Ocean Plan.
- 2. Discharge Prohibition III.B prohibits the discharge of the first flush (first 0.25 inches of rainfall from each storm) from industrial portions of the facilities. Waste discharges from vessel repair and maintenance activities can cause high concentrations of copper, zinc, other metals, oil and grease, and solids in storm water runoff that can have toxic or negative effects on aquatic life. This discharge

prohibition is consistent with NPDES permit requirements for Naval Base Coronado, Naval Base Point Loma, and Naval Base San Diego, and is representative of the technology-based requirements of the CWA (Best Available Technology/ Best Conventional Pollutant Control Technology) at the eligible facilities.

- **3.** Discharge Prohibitions III.F, III.H, III.J, implement requirements of the Basin Plan and Ocean Plan.
- 4. Discharge Prohibition III.I is consistent with requirements of previous individual NPDES permits for the eligible facilities and is based on 40 CFR section 122.21(a), duty to apply, and Water Code section 13260, which requires filing an application and Report of Waste Discharge (ROWD) before discharges can occur. Discharges not described in the permit application, NOI, NOA, and ROWD, and subsequently not considered for coverage under this General Order, are prohibited.
- 5. Discharge Prohibition III.D is based on 40 CFR section 122.21(a), duty to apply, and Water Code section 13260, which requires filing an application and ROWD before discharges can occur. Discharges not described in the permit application, NOI, NOA, or ROWD, and subsequently not considered for coverage under this General Order, are prohibited.
- 6. Discharge Prohibition III.E is based on requirements in General Order No. R9-2013-0026, which prohibited the discharge of anything other than San Diego Bay water from the ballast tanks of the floating drydock previously located at Marine Group Boat Works National City, including sediment, chlorine, biocides, or other maintenance byproducts. The prohibition has been modified to be applicable to any Discharger that installs a floating drydock in San Diego Bay at their Facility during the term of this General Order.

B. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this General Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR section 125.3. The CWA requires that TBELs be established based on several levels of controls:

- Best practicable treatment control technology (BPT) represents the average of the best performance by facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.
- b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically

achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

- c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including biochemical oxygen demand (BOD), total suspended solids (TSS), fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitation guidelines (ELGs) representing the application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR section 125.3 authorize the use of BPJ to derive TBELs on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR section 125.3.

Further, Table 2 of the Ocean Plan establishes technology-based requirements for conventional pollutants (suspended solids, settleable solids, oil and grease, turbidity, and pH) for industrial dischargers for which ELGs have not been established.

2. Applicable Technology-Based Effluent Limitations (TBELS)

General Order No. R9-2013-0026 established effluent limitations for oil and grease, settleable solids, turbidity, and pH for the discharge of ballast and flood water from the floating dock previously located at Marine Group Boat Works – National City based on these Ocean Plan Table 2 requirements. These limits have been retained from General Order No. R9-2013-0026 to be consistent with anti-backsliding regulations and are made applicable to all Dischargers that discharge ballast and flood water from floating drydocks to San Diego Bay. This General Order does not regulate discharges of ballast and flood water from areas outside San Diego Bay. The TBELs for ballast and flood water discharges to San Diego Bay are summarized in Table F-4 below:

Table F-4. Technology-based Effluent Limitations for Ballast and Flood Water Discharges

		Effluent Limitations			
Parameter	Units	Average Weekly Instantaneous Monthly Average Maximum			
Oil and Grease	mg/L	25	40	75	
Settleable Solids	ml/L	1.0	1.5	3.0	

		Effluent Limitations			
Parameter	Units	Average Monthly	Weekly Average	Instantaneous Maximum	
Total					
Suspended Solids	mg/L	60			
Turbidity	NTU	75	100	225	
рН	Standard Units			$6.0 - 9.0^{1}$	

^{1.} Instantaneous minimum and instantaneous maximum.

C. Water Quality-Based Effluent Limitations (WQBELs)

Water quality-based effluent limitations (WQBELs) have been derived to implement water quality objectives and criteria that protect beneficial uses. Both the beneficial uses and the water quality objectives (WQOs) and criteria have been approved pursuant to federal law. USEPA also approved the SIP and Ocean Plan procedures for calculating individual WQBELs for discharges to inland surface waters (including enclosed bays and estuaries) and to the Pacific Ocean.

1. Scope and Authority

Section 301(b) of the CWA and 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards, including numeric and narrative objectives within a standard.

Section 122.44(d)(1)(i) of 40 CFR requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using (1) USEPA criteria guidance under section 304(a) of the CWA, supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed State criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided in 40 CFR section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs is discussed in sections IV.C.3 and 4 of this Fact Sheet. When necessary, this process is intended to protect the designated uses of the receiving water as specified in the Basin Plan and achieve applicable water quality objectives and criteria that are contained in other State plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

This General Order authorizes certain discharges to enclosed bays and estuaries, and the Pacific Ocean within the San Diego Region. The boatyard and boat

maintenance and repair facilities currently enrolled under this General Order are located adjacent to bays and harbors which are hydrologically connected to the Pacific Ocean. The water quality criteria applicable to these receiving waters are established by the NTR, CTR, the Basin Plan, and the Ocean Plan. Water quality criteria and objectives established in the NTR, CTR, the Basin Plan, and Ocean are applicable to these beneficial uses.

- a. **Basin Plan.** The designated beneficial uses of surface waters throughout the State are summarized in section III.C.1, Table F-2 of this Fact Sheet. The Basin Plan establishes water quality objectives for conventional, non-conventional, and toxic pollutants based on these designated beneficial uses.
- b. **Ocean Plan.** The beneficial uses of the Pacific Ocean are summarized in section III.C.2, Table F-3 of this Fact Sheet.
- c. **Thermal Plan.** The Thermal Plan establishes water quality objectives for inland and coastal waters throughout the State.
- d. **State Implementation Plan (SIP).** The SIP specifies procedures for the implementation of CTR/NTR water quality criteria for the discharge of non-storm water discharges to inland surface waters and enclosed bays and estuaries. Because none of the boatyards and boat maintenance and repair facilities located adjacent to surface waters in the San Diego Region currently have a floating drydock, representative effluent data for the discharge of ballast and flood water from a floating drydock was not available to conduct a reasonable potential analysis (RPA) when developing this General Order. The procedures specified in the SIP are not applicable to the discharge of industrial storm water from boatyards and boat maintenance and repair facilities.

3. Determining the Need for WQBELs

The need for effluent limitations based on water quality objectives in the Basin Plan, CTR criteria, and Ocean Plan was evaluated in accordance with 40 CFR section 122.44(d) and guidance for statistically determining the "reasonable potential" for a discharged pollutant to exceed an objective, as provided in the SIP. SIP methodology specifies determining the maximum effluent concentration (MEC) and projecting receiving water values. When there is no dilution, the projected receiving water concentration is equal to the MEC. The projected receiving water concentrations are then compared to the appropriate objective or criteria to determine the potential for an exceedance of that objective and the need for an effluent limitation.

The San Diego Water Board conducted the reasonable potential analysis (RPA) consistent with section 1.3 of the SIP. Although the SIP applies directly to the implementation of CTR priority pollutants, the State Water Board has held that San Diego Water Boards may use the SIP as guidance for water quality-based toxics control. The SIP states in the introduction, "*The goal of this Policy is to establish a standardized approach for permitting discharges of toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency*".

a. Toxicity. The Basin Plan establishes the following narrative water quality objective for toxicity:

"All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life."

Additionally, Table 1 of the Ocean Plan establishes numeric water quality objectives of 0.3 TUa for acute toxicity and 1 TUc for chronic toxicity.

Materials and operations on-site at boatyards and boat maintenance and repair facilities may contribute to chronic toxicity within storm water runoff and ballast and flood water discharges. Consistent with anti-backsliding requirements, this General Order retains the chronic toxicity effluent limitations for discharges of industrial storm water and ballast and flood water from floating drydocks from General Order No. R9-2013-0026.

b. Temperature. The Thermal Plan water quality objectives for temperature in section 4.B.(1). Consistent with anti-backsliding requirements, this General Order retains temperature effluent limitations for discharges of ballast and flood water from floating drydocks from General Order No. R9-2013-0026.

4. WQBEL Calculations

The procedures for calculating WQBELs for CTR and NTR criteria are specified in the USEPA's *Technical Support Document for Water Quality-Based Toxics Control* (TSD) of 1991 (USEPA/505 /2-90-001) and the SIP. However, these procedures are not applicable to industrial storm water dischargers and there is no data available for the ballast and flood water discharges from floating drydocks. This General Order requires the Discharger to monitor ballast and flood water discharges for CTR priority pollutants twice per permit term to ensure there is enough data to conduct a RPA during the next reissuance of this General Order. This General Order retains a chronic toxicity effluent limitation for industrial storm water and ballast and flood water discharges.

5. Whole Effluent Toxicity (WET)

The Basin Plan defines toxicity as the adverse response to organisms to chemical or physical agents.

The Basin Plan establishes a narrative water quality objective for toxicity:

"All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life."

Additionally, Table 1 of the Ocean Plan establishes numeric water quality objectives of 0.3 TUa for acute toxicity and 1 TUc for chronic toxicity.

Consistent with anti-backsliding requirements, this General Order retains the chronic toxicity effluent limitations from General Order No. R9-2013-0026 for discharges of industrial storm water, and ballast and flood water. This effluent limitation for chronic toxicity ensures the aggregated impacts of pollutants present within the Discharger's industrial storm water and ballast and flood water from

floating drydocks do not result in the presence of toxicity within the receiving water. This General Order also retains an IWC of 100 percent without credit for a dilution factor. This definition of IWC is consistent with other San Diego Water Board's NPDES permitted discharges to bays which do not allow dilution. This General Order specifies that the effluent limitation for chronic toxicity is exceeded when a toxicity test results in a "Fail" in accordance with the Test of Significant Toxicity (TST) approach and a percent effect of greater than or equal to 50%.

For improved WET analysis, the San Diego Water Board is implementing USEPA's TST method for WET effluent limitations within the San Diego Region. As such, a chronic WET effluent limitation has been established to be consistent with the TST method.

USEPA examined the side-by-side comparison of No-Observed-Effect-Concentration (NOEC) and TST results using California chronic toxicity test data (including data from publicly-owned treatment works (POTWs)) for the West Coast marine methods and test species required under this General Order.¹ This comparison shows that while the TST and NOEC statistical approaches perform similarly most of the time, the TST performs better in identifying toxic and nontoxic samples, a desirable characteristic for chronic toxicity testing conducted under this General Order. This examination also signals that the test methods' false positive rate (β no higher than 0.05 at a mean effect of 10%) and false negative rate (α no higher than 0.05 (0.25 for topsmelt) at a mean effect of 25%) are indeed low. This highlights that using the TST in this General Order provides increased assurance that statistical error rates are more directly addressed and accounted for in decisions regarding chronic toxicity in the discharge. As a result, the San Diego Water Board is exercising its discretion to use the TST statistical approach for this discharge.

Compliance with the chronic toxicity requirement contained in this General Order shall be determined in accordance to section X.L of this General Order. Nevertheless, this General Order contains a reopener provision in section VIII.C.1.e of this General Order to modify this General Order, if necessary, to implement new, revised, or newly interpreted water quality standards applicable to toxicity. The chronic toxicity effluent limitation (i.e., determination of "Pass" or "Fail") will be evaluated using the Test of Significant Toxicity (TST) statistical approach at the discharge "in-stream" waste concentration (IWC), as described in section X.L of this General Order and section III.B of the MRP (Attachment E). The TST statistical approach is described in the National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1 and Table A1. The TST null hypothesis shall be "mean discharge IWC response $\leq 0.75 \times$ mean control response." A test that rejects this null hypothesis shall be reported as "Pass." A test that does not reject this null hypothesis shall be reported as "Fail." The Discharger shall also report the "Percent Effect" as part of chronic toxicity result.

¹ See Table 1 (method types 1 through 5) on page 1103 in Diamond D, Denton D, Roberts, J, Zheng L. 2013. Evaluation of the Test of Significant Toxicity for Determining the Toxicity of Effluents and Ambient Water Samples. Environ Toxicol Chem 32:1101-1108

An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a short or a longer exposure period of time and may measure mortality, reproduction, and growth. A chemical at a low concentration could have chronic effects but no acute effects until the chemical was at a higher concentration. Thus, chronic toxicity is a more stringent requirement than acute toxicity. Effluent limitations for chronic toxicity are necessary, feasible, and appropriate because effluent data exhibited reasonable potential to cause or contribute to an exceedance of the toxicity water quality objectives.

In June 2010, USEPA published a guidance document titled, National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10- 003, June 2010), in which the following was recommended: "Permitting authorities should consider adding the TST approach to their implementation procedures for analyzing valid WET data for their current NPDES WET Program." The TST approach is another statistical option for analyzing valid WET test data. Use of the TST approach does not result in any changes to USEPA's WET test methods. Section 9.4.1.2 of USEPA's Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/821/R-02/013, 2002), recognizes that, "the statistical methods in this manual are not the only possible methods of statistical analysis." The TST approach can be applied to acute (survival) and chronic (sublethal) endpoints and is appropriate to use for both freshwater and marine EPA WET test methods.

The USEPA's WET testing program and acute and chronic WET methods rely on the measurement result for a specific test endpoint, not upon achievement of specified concentration-response patterns to determine toxicity. USEPA's WET methods do not require achievement of specified effluent or ambient concentration-response patterns prior to determining that toxicity is present². Nevertheless, USEPA's acute and chronic WET methods require that effluent and ambient concentration-response patterns generated for multi-concentration acute and chronic toxicity tests be reviewed—as a component of test review following statistical analysis-to ensure that the calculated measurement result for the toxicity test is interpreted appropriately. (EPA-821-R-02-012, section 12.2.6.2; EPA-821- R-02-013, section 10.2.6.2). In 2000, USEPA provided guidance for such reviews to ensure that test endpoints for determining toxicity based on the statistical approaches utilized at the time the guidance was written NOEC, percent waste giving 50 percent survival of test organisms (lethal concentration 50, LC 50), effects concentration at 25 percent (EC25) were calculated appropriately (EPA 821-B-00-004).

USEPA designed its 2000 guidance as a standardized step-by step review process that investigates the causes for ten commonly observed concentration-response patterns and provides for the proper interpretation of the test endpoints derived from these patterns for NOECs, LC 50, and EC25, thereby reducing the

² See, Supplementary Information in support of the Final Rule establishing WET test methods at 67 Fed. Reg. 69952, 69963, Nov. 19, 2002.

number of misclassified test results. The guidance provides one of three determinations based on the review steps: that calculated effect concentrations are reliable and should be reported, that calculated effect concentrations are anomalous and should be explained, or that the test was inconclusive and should be repeated with a newly collected sample. The standardized review of the effluent and receiving water concentration-response patterns provided by USEPA's 2000 guidance decreased discrepancies in data interpretation for NOEC, LC 50, and EC25 test results, thereby lowering the chance that a truly nontoxic sample would be misclassified and reported as toxic.

Appropriate interpretation of the measurement result from USEPA's TST statistical approach ("Pass"/"Fail") for effluent and receiving water samples is, by design, independent from the concentration-response patterns of the toxicity tests for those samples. Therefore, when using the TST statistical approach, application of USEPA's 2000 guidance on effluent and receiving waters concentration-response patterns will not improve the appropriate interpretation of TST results as long as all Test Acceptability Criteria and other test review procedures-including those related to quality assurance (QA) for effluent and receiving water toxicity tests, reference toxicity tests, and control performance (mean, standard deviation, and coefficient of variation)-described by the WET test methods manual and TST guidance, are followed. The 2000 guidance may be used to identify reliable, anomalous, or inconclusive concentration-response patterns and associated statistical results to the extent that the guidance recommends review of test procedures and laboratory performance already recommended in the WET test methods manual. The guidance does not apply to single-concentration (IWC) and control statistical t-tests and does not apply to the statistical assumptions on which the TST is based. The San Diego Water Board and USEPA, Region IX will not consider a concentration-response pattern as sufficient basis to determine that a TST t- test result for a toxicity test is anything other than valid, absent other evidence. In a toxicity laboratory, unexpected concentration-response patterns should not occur with any regular frequency and consistent reports of anomalous or inconclusive concentration-response patterns or test results that are not valid will require an investigation of laboratory practices.

Any Data Quality Objectives or Standard Operating Procedure used by the toxicity testing laboratory to identify and report valid, invalid, anomalous, or inconclusive effluent or receiving water toxicity test measurement results from the TST statistical approach which include a consideration of concentration-response patterns and/or Percent Minimum Significant Differences (PMSDs) must be submitted for review by the San Diego Water Board, in consultation with the State Water Board's Quality Assurance Officer and Environmental Laboratory Accreditation Program (ELAP) (40 CFR section 122.44(h)). As described in the bioassay laboratory audit directives to the San Jose Creek Water Quality Laboratory from the State Water Board dated August 7, 2014, and from the USEPA dated December 24, 2013, the PMSD criteria only apply to compliance for NOEC and the sublethal endpoints of the NOEC, and therefore are not used to interpret TST results.

D. Final Effluent Limitation Considerations

1. Satisfaction of Anti-Backsliding Requirements

NPDES permits must conform with Anti-backsliding requirements discussed in section III.C.10 of this Fact Sheet. 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. This General Order complies with all applicable federal Anti-backsliding regulations as this General Order does not remove or relax any effluent limitations contained in General Order No. R9-2013-0026.

2. Antidegradation Policies

The WDRs for the Discharger must conform with antidegradation requirements discussed in section III.C.9 of this Fact Sheet. The antidegradation policies require that beneficial uses and the water quality necessary to maintain those beneficial uses in the receiving waters of the discharge shall be maintained and protected, and, if existing water quality is better than the quality required to maintain beneficial uses, the existing water quality shall be maintained and protected unless allowing a lowering of water quality is necessary to accommodate important economic and social development or consistent with maximum benefit to the people of California. When a significant lowering of water quality is allowed by the San Diego Water Board, an antidegradation analysis is required in accordance with the State Water Board's Administrative Procedures Update (July 2, 1990), Antidegradation Policy Implementation for NPDES Permitting.

This General Order complies with the antidegradation provision of 40 CFR section 131.12 and State Water Board Resolution No. 68-16. The effluent limitations in this General Order are at least as stringent as the effluent limitations in General Order No. R9-2013-0026, and no degradation of the receiving water is expected.

3. Stringency of Requirements for Individual Pollutants

This General Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on oil and grease, settleable solids, turbidity, and pH for ballast and flood water discharges. Restrictions on these pollutants are discussed in section IV.B.2 of this Fact Sheet. This General Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Water quality-based effluent limitations have been 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 water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR implemented by the SIP, which was approved by U.S. EPA 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 U.S. EPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 131.21(c)(1). Collectively, this General Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

4. Mass-based Effluent Limitations

All permit limitations, standards, and prohibitions shall also be expressed in terms of mass except for pH, or other pollutants which cannot appropriately be expressed by mass or under certain circumstances including "when applicable standards and limitations are expressed in terms of other units of measurement" (40 CFR section 122.45(f)(1)). This General Order includes mass-based effluent limitation for ballast and flood water discharges from floating dry docks to San Diego Bay.

5. Final Effluent Limitations

a. Industrial Storm Water

Discharges of industrial storm water to waters of the United States shall maintain compliance with the Maximum Daily Effluent Limitation (MDEL) for chronic toxicity. The MDEL is based on the outcome of the TST approach and the resulting percent effect at the IWC. The MDEL is exceeded when a toxicity test results in a "Fail," and the percent effect is greater than or equal to 50% for chronic toxicity tests in accordance with Compliance Determination section X.L of this General Order.

b. Ballast and Flood Water from Floating Drydocks in San Diego Bay

Effluent limitations for discharges of ballast and flood water from floating drydocks in San Diego Bay are as follows:

		Effluent Limitations			
Parameter	Units	Average Monthly	Maximum Daily	Weekly Average	Instantaneous Maximum
Oil and Grease	mg/L ¹	25		40	75
Settleable Solids	ml/L	1.0		1.5	3.0
Total Suspended Solids	mg/L ¹	60			
Turbidity	NTU	75		100	225
рН	Standard Units				$6.0 - 9.0^2$
Temperature	°F				3

Table F-5. Effluent Limitations for Ballast and Flood Water from Floating Drydocks

	Units	Effluent Limitations				
Parameter		Average Monthly	Maximum Daily	Weekly Average	Instantaneous Maximum	
Chronic Toxicity	Pass/Fail and % Effect		Pass and/or <50% Effect ⁴			

^{1.} The concentration-based effluent limitations stated in the table above are also applicable as mass-based effluent limitations expressed as lbs/day which are calculated as follows: Parameter Concentration (if expressed as mg/L) x Flow Limit (expressed as MGD) x 8.34 (conversion factor) = Mass-based Effluent Limitation expressed as lbs/day. Parameter Concentration (if expressed as µg/L) x Flow Limit (expressed as MGD) x 0.00834 (conversion factor) = Mass-based Effluent Limitation expressed as lbs/day. The Flow Limit (MGD) value used in this equation shall be the maximum volume of the ballast and flood water, as described in the NOA. The discharge shall not cause the calculated mass-based effluent limitations to be exceeded.

- ^{2.} Instantaneous minimum and instantaneous maximum.
- ^{3.} Discharges shall not be greater than 20°F over the natural temperature of the receiving water at any time.
- ^{4.} Discharges shall maintain compliance with the Maximum Daily Effluent Limitation (MDEL) for chronic toxicity. The MDEL is based on the outcome of the Test of Significant Toxicity (TST) approach and the resulting percent effect at the Instream Waste Concentration (IWC). The chronic toxicity MDEL is exceeded when a toxicity test results in a "Fail" and the percent effect is greater than or equal to 50%, as specified in section X.L of this General Order.

6. Numeric Action Levels (NALs)

In addition to toxicity effluent limitations for industrial storm water, this General Order retains Annual Average NAL values and establishes Instantaneous Maximum NAL values. NAL values are summarized in Table F-6 below.

Parameter	Test Method ¹	Detection Limit	Reporting Unit	Annual Average NAL Value	Instantaneous Maximum NAL Value
рН	Field Test with Calibrated Portable Instrument or lab sample in accordance with 40 CFR part 136	N/A	pH units	N/A	Less than 6.0 or greater than 9.0
Total Suspended Solids (TSS)	EPA 160.2 or SM 2540-D	1	mg/L	100	400

Table F-6. Numeric Action Levels

Parameter	Test Method ¹	Detection Limit	Reporting Unit	Annual Average NAL Value	Instantaneous Maximum NAL Value
Total Oil & Grease (TOG)	EPA 413.2 or EPA 1664	1	mg/L	15	25
Zinc, Total Recoverable	EPA 200.8	0.0005	mg/L	0.26 ²	-
Copper, Total Recoverable	EPA 200.8	0.0005	mg/L	0.0332 ²	-
Lead, Total Recoverable	EPA 200.8	0.0005	mg/L	0.262 ²	-
Chemical Oxygen Demand	SM 5220C	1	mg/L	120	-
Biochemical Oxygen Demand	SM 5210B	3	mg/L	30	-

^{1.} SM – Standard Methods for the Examination of Water and Wastewater, 18th edition. EPA – Environmental Protection Agency test methods.

^{2.} The NAL is the highest value used by EPA based on their hardness table in the 2008 *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity*.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

States are required to adopt numeric criteria where they are necessary to protect designated uses. (CWA sections 303(a) – 303(c)). The San Diego Water Board adopted numeric criteria in the Basin Plan. Likewise, the State Water Board adopted numeric criteria in the Ocean Plan, Bays and Estuaries Plan, and ISWEBE Plan. The Basin Plan, Ocean Plan, Bays and Estuaries Plan, and ISWEBE Plan are regulatory references for meeting the State and Federal requirements for water quality control (40 CFR section 131.20). State Water Board Resolution No. 68-16, the Antidegradation Policy, does not allow changes in water quality less than that prescribed in Water Quality Control Plans (Basin Plans). The Basin Plan states that "*The numerical and narrative water quality objectives define the least stringent standards that the San Diego Water Board will apply to regional waters in order to protect the beneficial uses.*"

Receiving water limitations of this General Order are derived from:

- **A.** The Basin Plan, including beneficial uses, water quality objectives, and implementation plans;
- **B.** State Water Board water quality control plans and policies including the:
 - 1. Water Quality Control Plan for Ocean Waters of California (Ocean Plan);
 - 2. Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Bays and Estuaries Policy);

- **3.** Policy for Implementation of Toxics Standards for Inland Surface Waters, and Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP)3;
- 4. Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan).
- 5. Water Quality Control Plan for Enclosed Bays and Estuaries of California Sediment Quality Provisions (Bays and Estuaries Plan);
- **C.** Priority pollutant criteria promulgated by the USEPA through the:
 - 1. National Toxics Rule (NTR)4 (promulgated on December 22, 1992 and amended on May 4, 1995); and
 - 2. California Toxics Rule (CTR).5,6

Typical boatyard operations are in close proximity to receiving waters and create the potential for discharge to surface waters via waterborne runoff from impervious surfaces, airborne transport of particulates, and via accidental/illicit pollutant releases from spills or otherwise. Some work at boatyards is also conducted on vessels that remain in or are returned to the receiving water. This topside or interior work may also result in discharges of wastes or pollutants such as particulates from abrasive blasting, sanding, or spilled paints/solvents to receiving waters.

BMPs implemented by the boatyard industry in San Diego prior to the 1990s were deficient in many respects and led to excessive discharges of waste to San Diego Bay which lead to cleanup and abatement orders for metals in the sediment. BMPs have improved much since the 1990s, but inadequate implementation of BMPs could lead to polluted sediment. This potential for discharge and past elevated sediment concentrations demonstrates that there is reasonable potential to cause or contribute to an exceedance of the Bays and Estuaries Plan sediment quality objectives which have been included as receiving water limitations in section VII.B.1.e.ii and iii of this General Order.

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in the Standard Provisions (Attachment D). The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the order. Section 123.25(a)(12) of 40 CFR allows the State to omit or modify conditions to impose more stringent

³ Applicable to ballast and flood water discharges from floating drydocks.

⁴ 40 CFR section 131.36.

⁵ 65 Federal Register 31682-31719 (May 18, 2000), adding section 131.38 to 40 CFR.

⁶ If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies.

requirements. In accordance with 40 CFR section 123.25, this General Order omits federal conditions that address enforcement authority specified in 40 CFR sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this General Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This General Order may be re-opened and modified, revoked and reissued, or terminated for cause in accordance with the provisions of 40 CFR parts 122, 123, 124, and 125. The San Diego Water Board may reopen this General Order to modify permit conditions and requirements as described by the reopener provision in section VIII.C.1 Causes for modification include, but are not limited to, revisions to effluent limitations, receiving water requirements, monitoring and reporting requirements; participation in the Southern California Coastal Water Research Project (SCCWRP) monitoring program or other regional or water body monitoring coalition as determined by the San Diego Water Board; revisions to sludge use or disposal practices; or adoption of new or revised regulations, water quality control plans, or policies by the State Water Board or the San Diego Water Board, including revisions to the Basin Plan or Ocean Plan.

2. Special Studies, Technical Reports, and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

This General Order requires the Discharger to develop an Initial Investigative TRE Work Plan in accordance with USEPA guidance which shall include steps the Discharger intends to follow if toxicity is measured above the effluent limitation for toxicity. This General Order also includes requirements to initiate the TRE/TIE process if the results of toxicity testing exceed the effluent limitation for chronic toxicity.

Refer to section VIII.C.2.a of the General Order.

3. Best Management Practices and Pollution Prevention

a. Industrial Storm Water Discharge Requirements and Industrial BMPs

Industrial Storm water discharge requirements are based on 40 CFR 122(k)(4), which states that BMPs may be required to control or abate the discharge of pollutants when the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. This General Order retains the requirement for Dischargers to continue to implement and regularly update a SWPPP as specified in Attachment J.

Refer to section VIII.C.4.a of the General Order.

b. **Vessel Owner/Operator** This General Order retains the requirement for dischargers to develop and implement a method of notifying the owner/operator of each vessel at the Discharger's leasehold of their obligation

to prevent the discharge of waste and to comply with Basin Plan Prohibitions regarding the discharge of sewage from vessels. The Discharger must also have a method of enforcing these requirements.

Refer to section VIII.C.4.b of the General Order.

- 4. Construction, Operation, and Maintenance Specifications Not Applicable
- 5. Special Provisions for Municipal Facilities (POTWs Only) Not Applicable
- 6. Other Special Provisions Not Applicable
- 7. Compliance Schedules Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the San Diego Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP (Attachment E), establishes monitoring, reporting, and recordkeeping requirements that implement federal and State requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP (Attachment E) for the Facilities.

A. Core Monitoring Requirements

1. Effluent Monitoring

Effluent monitoring is required to determine compliance with the conditions of this General Order, to identify operational problems, to improve treatment performance, and to conduct reasonable potential analyses for subsequent Orders. Effluent monitoring also provides information on industrial storm water characteristics for use in interpreting water quality and biological data. Effluent monitoring requirements have been carried over from General Order No. R9-2013-0026, with the following exceptions:

- This General Order requires industrial storm water monitoring for all CTR priority pollutants from one Qualifying Storm Event (QSE) per year.
- This General Order increases the monitoring frequency for flow, pH, temperature, arsenic, and copper from once per quarter to once per event, and settleable solids, turbidity, TSS, oil and grease, total petroleum hydrocarbons, polynuclear aromatic hydrocarbons, tributyltin, chronic toxicity, and total residual chlorine from once per year to once per event for ballast and flood water discharges.

Refer to section III.A of the MRP (Attachment E).

2. WET Testing Requirements

This General Order contains chronic toxicity effluent limitations as described in section IV.C.5 of this Fact Sheet. As described in section III.B of the MRP (Attachment E), WET testing of industrial storm water from two QSEs per year is required by this General Order to determine compliance with the effluent limitation for chronic toxicity in the event of a discharge, while annual WET testing is

required in the event of a discharge of ballast water from floating drydocks in San Diego Bay.

Consistent with the requirements of the Ocean Plan, section III.B.6 of the MRP (Attachment E) requires the Discharger to develop an Initial Investigation Toxicity Reduction Evaluation (TRE) Work Plan and submit the Initial Investigation TRE Work Plan within 90 days of the effective date of this General Order. The Initial Investigation TRE Work Plan must describe steps the Discharger intends to follow if the effluent limitation for chronic toxicity is exceeded.

Section III.C.10 of the Ocean Plan requires a TRE if a discharge consistently exceeds an effluent limitation based on a toxicity objective in Table 1 of the Ocean Plan. To determine if the discharge consistently exceeds the toxicity effluent limitation, this General Order requires the Discharger to notify the San Diego Water Board and conduct an accelerated toxicity testing during the next QSE if the effluent limitation for chronic toxicity is exceeded in any one test. If the additional test does not demonstrate toxicity, the Discharger shall return to routine monitoring. If the additional test demonstrates toxicity, in accordance with section III.C.10 of the Ocean Plan, the Discharger is required to submit a Detailed TRE Work Plan in accordance with the its submitted Initial Investigation TRE Work Plan and USEPA guidance which shall include: further steps taken by the Discharger to investigate, identify, and correct the causes of toxicity; actions the Discharger will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions. The Discharger must also implement a Toxicity Identification Evaluation (TIE), as necessary, based upon the magnitude and persistence of toxicity effluent limitation exceedances. Once the source of toxicity is identified, the Discharger must take all reasonable steps to reduce the toxicity to meet the chronic toxicity effluent limitation identified in section V.A of this General Order

Within 30 days of completion of the TRE, the Discharger must submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions taken or planned to achieve consistent compliance with the toxicity effluent limitation of this General Order and prevent recurrence of exceedances of those effluent limitation, and a time schedule for implementation of any planned corrective actions. The Discharger must implement any planned corrective actions in the TRE Final Report in accordance with the specified time schedule, unless otherwise directed in writing by the San Diego Water Board. The corrective actions and time schedule must be modified at the direction of the San Diego Water Board.

Refer to section III.B of the MRP (Attachment E).

3. Surface Water and Sediment Monitoring

This General Order retains monitoring requirements to evaluate compliance with applicable water quality objectives/criteria, and evaluate reasonable potential, if necessary, in the future. Additionally, this General Order requires priority pollutant

monitoring in the receiving water once during the permit term for the purposes of completing a reasonable potential analysis.

The State Water Board's *Water Quality Control Plan for Enclosed Bays and Estuaries of California – Sediment Quality Provisions (Bays and Estuaries Plan) became effective on August 25, 2009, and was amended on April 6, 2011, June 8, 2011, and June 5, 2018.* This plan establishes sediment quality objectives, beneficial uses that these objectives are intended to protect, and a program of implementation including monitoring and analysis requirements. This General Order carries over monitoring and analysis requirements consistent with the Bays and Estuaries Plan.

This General Order retains the requirement for Dischargers that discharge industrial storm water from storms smaller a 5-year frequency, 24-hour storm event to receiving waters conduct receiving water and sediment monitoring individually, or by participating in a monitoring coalition with a group of boatyards or other existing monitoring coalition. Boatyards that only discharge water from a 5-year frequency, 24-hour storm or larger are not required to conduct receiving water monitoring. The 5-year frequency, 24-hour storm event requirement is consistent with State Water Board General Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002, *Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and General Land Disturbance Activities* (Construction General Order). The Construction General Order requires all treatment BMPs to be designed for no less than a 5-year frequency, 24-hour storm event.

This General Order requires a conceptual site model (CSM) to serve as the basis for assessing the appropriateness of the Receiving Water and Sediment Monitoring Plan design. The CSM will identify the physical and chemical factors that control the fate and transport of pollutants and receptors that could be exposed to pollutants in the water and sediment.

Refer to section IV of the MRP (Attachment E).

B. Other Monitoring Requirements

1. Annual Boatyard Checklist

This General Order requires discharger to submit an annual boatyard checklist that includes annual certifications indicating compliance with applicable discharge prohibitions and provisions of this General Order, and an overview of industrial storm water monitoring, receiving water and sediment monitoring, and floating dry dock monitoring.

Refer to section V.A of the MRP (Attachment E).

2. Spill / Illicit Discharge Log

This General Order retains the requirement to maintain and submit annually on August 1 a Spill/Illicit Discharge Log. The Spill/Illicit Discharge Log is used to assist in determining compliance with the requirements of this General Order.

Refer to section V.B of the MRP (Attachment E).

3. Chemical Utilization Records

This General Order retains the requirement for the Dischargers to maintain records of all the hazardous material used at the facility over the previous 5-year period. Records must be available to the San Diego Water Board upon request or during an inspection of the facility.

Refer to section V.C of the MRP (Attachment E).

4. Industrial Storm Water and Non-Storm Water Monitoring Requirements

General Order requires the implementation of a SWPPP and establishes NALs. Industrial storm water and non-storm water monitoring is necessary to evaluate the effective implementation of the Dischargers' SWPPP and determine compliance with NALs.

Refer to section V.D of the MRP (Attachment E).

5. Floating Drydock Monitoring Requirements

Dischargers are required to notify the San Diego Water Board of their intent to flood the floating drydock and document the condition of the floating drydock prior to flooding. Dischargers are also required to submit US Navy and ASTM reports certifying the integrity of the floating drydock ballast tanks annually. This reporting is only required if the Discharger has a floating drydock.

Refer to section V.E of the MRP (Attachment E).

C. Regional Monitoring Requirements

Regional ocean water monitoring provides information about the sources, fates, and effects of anthropogenic contaminants in the coastal marine environment necessary to make assessments over large areas. The large-scale assessments provided by regional monitoring describe and evaluate cumulative effects of all anthropogenic inputs and enable better decision-making regarding protection of beneficial uses of ocean waters. Regional monitoring data assists in the interpretation of core monitoring studies by providing a more accurate and complete characterization of reference conditions and natural variability. Regional monitoring also leads to methods standardization and improved quality control through inter-calibration exercise. The coalitions implementing regional monitoring enable sharing of technical resources, trained personnel, and associated costs. Focusing these resources on regional issues and developing a broader understanding of pollutants effects in ocean waters enables the development of more rapid and effective response strategies. Based on all of these considerations the San Diego Water Board supports regional approaches to monitoring ocean waters.

The Discharger may, upon the approval of the San Diego Water Board, participate with other regulated entities, other interested parties, and the San Diego Water Board in development and implementation of new and improved monitoring and assessment programs for surface waters in the San Diego Region and discharges to those waters.

Refer to section VI of the MRP (Attachment E).

D. Reporting Requirements

1. Self-Monitoring Reports and California Integrated Water Quality System

This General Order requires Boatyards to electronically submit self-monitoring reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program website at

<u>http://www.waterboards.ca.gov/water_issues/programs/ciwqs/</u>. CIWQS is one of the Water Boards' primary regulatory information tracking systems. It is a webbased relational database for core regulatory data for use by staff, management, and the public, and it allows the regulated community to submit certain types of information to the Water Boards in compliance with adopted Orders.

2. Discharge Monitoring Reports

Currently, only major Dischargers are required to submit discharge monitoring reports (DMRs), in addition to self-monitoring reports. The facilities regulated by this General Order have been classified by USEPA and the San Diego Water Board as a minor discharge and therefore is currently not required to submit DMRs. However, DMRs can be required from any Discharger regardless of the major/minor designation. USEPA may be requiring DMRs from all Dischargers in electronic or paper form in the future.

VIII. PUBLIC PARTICIPATION

The San Diego Water Board has considered the issuance of WDRs that will serve as a General NPDES permit for discharges of industrial storm water and ballast and flood water from floating drydocks from boatyards and boat maintenance facilities located adjacent to surface waters in the San Diego Region. As a step in the WDR adoption process, the San Diego Water Board staff has developed tentative WDRs and has encouraged public participation in the WDR adoption process by providing a period of a minimum of 30 days for public review and comment on the Tentative General Order.

A. Notification of Interested Parties

The San Diego Water Board notified existing Dischargers and interested agencies and persons of its intent to prescribe WDRs for the discharge of industrial storm water and ballast and flood water from floating drydocks from boatyards and boat maintenance facilities located adjacent to surface waters in the San Diego Region and provided an opportunity to submit written comments and recommendations. Notification was provided through the San Diego Water Board's website on July 15, 2019. The Tentative General Order was also emailed to the existing Dischargers and all known interested parties on July 15, 2019.

The public also had access to the agenda including all supporting documents and any changes in meeting dates and locations through the San Diego Water Board's website at <u>http://www.waterboards.ca.gov/sandiego/</u>.

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in

person or by mail to the San Diego Water Board office at 2375 Northside Drive, Suite 100, San Diego, CA 92108, or by email at <u>sandiego@waterboards.ca.gov</u>.

To be fully responded to by staff and considered by the San Diego Water Board, the written comments were due at the San Diego Water Board office by 5:00 p.m. on Thursday, August 29, 2019.

C. Public Hearing

The San Diego Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date:October 9, 2019Time:9:00 A.M.Location:California Regional Water Quality Control Board, San Diego Region
Regional Board Meeting Room
2375 Northside Drive, Suite 100, San Diego, CA 92108

Interested persons were invited to attend. At the public hearing, the San Diego Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

D. Petition for Review

Any person aggrieved by this action of the San Diego Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and CCR, title 23, sections 2050. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this General Order at the following address, except that if the thirtieth day following the date of this General Order falls on a Saturday, Sunday, or State holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Petitions may be sent in as follows:

By mail:

State Water Resources Control Board Office of Chief Counsel P.O. Box 100, 1001 I Street Sacramento, CA 95812-0100

By email: waterqualitypetitions@waterboards.c a.gov In Person: State Water Resources Control Board Office of Chief Counsel 1001 I Street Sacramento, California 95814

<u>By fax:</u> (916) 341-5199

For instructions on how to file a petition for review, see: <u>http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml</u>

E. Information and Copying

The ROWD, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the San Diego Water Board by calling (619) 516-1990.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding this General Order should contact the San Diego Water Board, reference this General Order, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this General Order should be directed to Vicente Rodriguez at 619-521-3966 or Vicente.Rodriguez@waterboards.ca.gov

ATTACHMENT G – NOTICE OF INTENT (NOI)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

Notice of Intent to Comply with the Terms of the

General Waste Discharge Requirements for the Discharges of Storm Water Runoff Associated with Boatyards and Boat Maintenance and Repair Facilities, San Diego Region (General Order No. R9-2019-0008, NPDES No. CAG719001)

I. NOI Status

Submittal of this Notice of Intent (NOI) to obtain coverage under the General Order is for (mark only one item):

	A new enrollment for a boatyard and/or boat maintenance and repair facility
	located adjacent to a surface water.
	A renewal of an existing enrollment for a boatyard and/or boat maintenance and
	repair facility located adjacent to a surface water
	Change of information or circumstances including but not limited to:
	1. Material and substantial alterations or additions to the boatyard and/or
	boat maintenance and repair facility,
	2. □ Transfer of permit responsibility, coverage and liability to new owner
	3. Addition of a floating drydock in San Diego Bay
	4. □ Other
1	

II. Items Required for Determining Eligibility for NOI Coverage

The following items must be completed and submitted in order for the San Diego Water Board to determine eligibility for NOI coverage:

- □ A complete NOI signed and certified in accordance with the signatory
 □ requirements of the General Order.
- A map with all information specified in Attachment J Storm Water Pollution Prevention Plan sections IV.A and IV.B.

Application Fee in accordance with California Code of Regulations Title 23. Division 3. Chapter 9. Waste Discharge Reports and Requirements Article 1. section 2200 (b)(3) Annual Fee Schedules.

Make checks payable to the State Water Resources Control Board. The fee regulations can be accessed at

□ <u>http://www.waterboards.ca.gov/resources/fees/#npdes</u>.

The filing fee only applies to new Dischargers. Existing Dischargers will continue to be invoiced annually.

Amount Submitted: \$_

(name of applicant)
Certifies that only storm water runoff from a boatyard will be discharged to surface
waters from the facility.

□ Has reviewed and understands the General Order

□ Will comply with all terms, conditions, and requirements of the General Order.

III. Facility Owner

Company Name:					
Mailing Address					
City	State	Zip	Phone		
Contact Person:		Title:			
e-mail address:		Federal Tax ID:			

IV. Facility Location

Facility Name:					
Street Address:					
City:	State:	Zip:	Phone:		
Latitude:		Longitude:			
Contact Person:		Title:			
e-mail address:					

V. Billing Information

Company Name:					
Mailing Address:					
City:	State:		Zip:	Phone:	
Contact Person:		Tit	le:		
e-mail address:					

VI. Receiving Water Information

Does the facility discharge directly to Waters of the U.S? (e.g., river, lake, creek, ocean, harbor)	Yes	No
Does the facility discharge indirectly to Waters of the U.S?	Yes	No

Does the facility discharge to a storm drain system? If yes state the owner/operator of the storm drain system below.		Yes		No
State the name of the receiving water (i.e. the name of the water body receiving the discharge form the facility) below.				

VII. Activities Performed

Activities performed on the facility property include (check all that apply):

Hydrowashing	Electrical work
Fiberglass work	Wood work
Metal work	Canvas fabrication
Paint/Coating application	Welding/Brazing
Light mechanical work	Hazardous waste storage
Underwater hull cleaning	Engine repair/maintenance
Other (list and describe):	

VIII. Material Handling

Types of materials that will be handled and/or stored on the facility property include (check all that apply):

Petroleum products	Asphalt/Concrete
Hazardous substances	Treated wood products
Metal	Solvents
Paint	Plated products
Other (list and describe):	

IX. Implementation of NPDES Permit Requirements

Check all boxes that apply:

Storm Water Pollution Prevention Plan (SWPPP)

A SWPPP that includes the minimum requirements described in section VIII.C.4.a
 and Attachment J of this General Permit has been prepared for this facility and submitted to the San Diego Water Board.

Monitoring Program

An Engineering Report or Receiving Water and Sediment Monitoring Plan submitted to the San Diego Water Board as described in Attachment E section IV of the General Order.

Permit Compliance Responsibility

 A qualified person is responsible for preparing and submitting all quarterly and annually required reports, data, and observation listed in the Monitoring and Reporting Program of the General Order to the San Diego Water Board.
 A qualified person has been assigned responsibility to ensure full compliance with this General Order and to implement all elements of the SWPPP.
 A qualified person is responsible for eliminating all unauthorized discharges identified in the SWPPP.

X. Map

Is a site map included with this submittal?	Yes	No
Does the facility map clearly indicate all sample locations?	Yes	No

XI. Floating Drydock Information

Does the facility have a floating drydock located in San Diego Bay?	Yes	No
Is a detailed description of the floating drydock included with this submittal that describes the total volume of the ballast and flood area?	Yes	No
Does the facility map clearly indicate the location of the floating dry dock?	Yes	No

XII. Discharge and Monitoring Locations

Complete all applicable spaces. If additional discharge and monitoring locations, provide the information in a supplementary attachment.

Location Name/Number	Latitude	Longitude
Discharge Point(s)		
Discharge Monitoring	Point(s)	

XIII. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. In addition, I certify that the provisions of the permit, including the criteria for eligibility will be complied with."

Printed Name:

Signature:

Date:

Agency and Title:

Submit the NOI, first annual fee (Only applies to new Dischargers. Existing Dischargers will continue to be invoiced annually.), map, and other attachments to the following address:

San Diego Regional Water Quality Control Board 2375 Northside Drive, Suite 100 San Diego, CA 92108

Attn: Boatyards and Boat Maintenance and Repair Facilities Source Control Regulation Unit NOTICE OF INTENT

ATTACHMENT H – NOTICE OF TERMINATION (NOT)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

Notice of Termination for

General Waste Discharge Requirements for the Discharges of Industrial Storm Water Runoff Associated with Boatyards and Boat Maintenance and Repair Facilities, San Diego Region (General Order No. R9-2019-0008, NPDES No. CAG719001)

I. Facility Owner

Company Name:			
Mailing Address			
City	State	Zip	Phone
Contact Person:		Title:	
e-mail address:			

II. Facility Location

Facility Name:			
Street Address:			
City:	State:	Zip:	Phone:
Latitude:	i	Longitude:	
Contact Person:		Title:	
e-mail address:			

III. Billing Information

Company Name:			
Mailing Address:			
City:	State:	Zip:	Phone:
Contact Person:		Title:	
e-mail address:			

IV. Reason for Requesting Termination (see Section II.E of the General Order) Explain Reason for Requesting Termination:

V. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. In addition, I certify that the provisions of the permit, including the criteria for eligibility will be complied with."

Printed Name:

Signature:

Date:

Agency and Title:

Submit the NOT by email to sandiego@waterboards.ca.gov

ATTACHMENT I - ANNUAL BOATYARD CHECKLIST

California Regional Water Quality Control Board San Diego Region

Annual Boatyard Checklist

Boatyard General Order No. R9-2019-0008

This annual report checklist submitted by ______ (Discharger) covers the July 1, _____ (Year) to June 30, _____ (Year) monitoring period, pursuant to the Monitoring and Reporting Program of General Order No. **R9-2019-0008.**

Annual Compliance Certification

Yes No ____ The Discharger has complied with all applicable conditions of this General Order. __Yes No ____ The Discharger has eliminated industrial process water discharges to waters of the United States in accordance with Discharge Prohibition III.C of this General Order. _Yes No ____ The Discharger has a storm water diversion system that will eliminate the discharge of the first-flush storm water runoff for each storm event, as defined in Attachment A, from its maintenance and repair area(s) to storm drains or surface water in accordance with Discharge Prohibition III. B of this General Order. The Discharger has implemented Best Management Practices (BMPs) in __Yes No ____ accordance with its Storm Water Pollution Prevention Plan (SWPPP), and the SWPPP has been amended in accordance with the SWPPP requirements, Section VIII.C.6 and Attachment J, of this General Order. ___Yes No ____ The Discharger has isolated its maintenance/repair areas in accordance with Industrial Storm Water Discharge Requirements in sections VIII.C.4.a and VIII.C.4.f of this General Order. Yes No ____ The Discharger has not discharged any liquids other than storm water pursuant to Discharge Prohibition III.C of the General Order. The Discharger has notified each owner/operator of each vessel at the Yes No Discharger's leasehold of their obligation to prevent the discharge of waste and to comply with Basin Plan prohibitions regarding the discharge of sewage from vessels as stated in section VIII.C.2.a of the General Order. In addition, the Discharger shall briefly report on any corrective actions taken against any vessel owner/operator(s). _Yes No ____ The Discharger has maintained records of hazardous materials used at its Facility over the previous 5-year period.

Attach a discussion of the reasons any of the above are answered "No."

Spill and Illicit Discharge Log

The Discharger is required to log and report all spills and illicit discharges to surface waters. The Spills and Illicit Discharge log is due annually with this checklist (see Attachment E section V.B of the General Order).

____Yes No ____ A log of all spills and illicit discharges to surface waters is attached.

Industrial Storm and Non-Storm Water Monitoring

The Discharger is required to conduct weekly BMP inspections, record the occurrence of storm events, and visually observe and sample industrial storm water discharges (see Attachment E section V.D of the General Order).

- ____Yes No ____ BMP Inspections were conducted weekly and a summary is attached.
- ____Yes No ____ Industrial storm water discharges were visually observed for the first qualifying storm in each month of the wet season from October 1 through April 30 and a summary is attached.
- ____Yes No ____ All stored or contained storm water was visually observed and sampled before discharge to surface waters.
- ____Yes No ____ All storm water storage and containment areas are free of leaks and appropriately maintained based on monthly inspections.
- ____Yes No ____ All storm events that do not produce a discharge to surface water are recorded.

Industrial Storm Water Sampling

Industrial storm water sampling is only required when industrial storm water is discharged to a surface water (see Attachment E sections III.A.1 and V.D of the General Order for industrial storm water monitoring requirements).

Yes No	No discharge to the receiving water. If no, possible reason:
Yes No	Sampling occurred during the first qualifying storm event. If yes, submit sample results. If no, reason:
Yes No	Sampling occurred during the second qualifying storm event. If yes, submit sample results. If no, reason:

Receiving Water and Sediment Monitoring

Boatyards that discharge industrial storm water to waters of the United States from storms smaller than a 5-year frequency, 24-hour storm event are Category 1, while Boatyards that only discharge industrial storm water from a 5-year frequency, 24-hour storm event or larger are classified as Category 2. Category 1 boatyards are required to conduct receiving water and sediment monitoring (see Attachment E section IV of the General Order for definitions of Category 1 and Category 2 and receiving water and sediment monitoring requirements).

Yes No	This facility is classified as Category 1 an water and sediment monitoring.	nd is required to conduct receiving
Yes No	Sampling of year.	was conducted this

Floating Drydock Submergence Monitoring

Floating drydock submergence monitoring is only required for boatyards that are authorized through the Notice of Applicability to discharge ballast and flood water from floating drydocks to San Diego Bay (see Attachment E sections III.A.2 and V.C of the Order for floating drydock monitoring requirements).

- ____Yes No ____ The floating drydock was submerged during the year. If yes, how many times was the floating drydock submerged?
- ____Yes No ____ Sampling occurred during each of the floating drydock submergences. If yes, submit sample results and documents associated with the condition of the floating drydock prior to submergence. If no, reason

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:	Print Name:
Title:	Date:

ATTACHMENT J – STORM WATER POLLUTION PREVENTION PLAN

- I. A Storm Water Pollution Prevention Plan (SWPPP) shall be developed, implemented, and maintained by the Discharger and incorporated into the Discharger's Best Management Practices (BMP) Plan. The SWPPP shall be designed to comply with Best Available Technology (Best Conventional Technology Currently Achievable (BAT/SCT)) and be certified in accordance with Attachment D, Standard Provisions, section V.B. The SWPPP shall be retained at the Discharger's facility and must be submitted to the San Diego Water Board Officer by 90 days from the effective date of this General Order or issuance of a Notice of Enrollment.
- **II.** The San Diego Water Board may notify a Discharger of any deficiencies found in the review of the SWPPP. Within 30 days of receipt of the San Diego Water Board's notification, the Discharger shall submit a time schedule to correct the deficiencies in the SWPPP. After making the required changes, the Discharger shall provide written certification that the changes have been made.
- III. The Discharger shall amend the SWPPP whenever there is a change in operation or maintenance, which may affect the discharge of significant quantities of pollutants to surface waters. The SWPPP should also be amended if it is in violation of conditions of this General Order or has not achieved the general objectives of preventing or reducing pollutants in its storm water discharge(s).
- **IV.** The SWPPP shall include, at a minimum, the following items:
 - **A.** A map extending approximately one-quarter mile beyond the property boundaries of the Discharger showing:
 - **1.** General topography,
 - 2. Surface water bodies, and
 - 3. The discharge points where the storm water discharges to surface waters.

The requirements of this paragraph may be included in the site map required in the following paragraph if appropriate.

- **B.** A site map showing:
 - 1. Storm water conveyance, retention, and/or discharge structures;
 - 2. An outline of the storm water drainage areas for each storm water discharge point and designation of the storm water discharge point where monitoring will be performed;
 - 3. Paved areas, parking areas, and buildings;
 - 4. Areas of pollutant contact, existing or potential;
 - 5. Location of existing storm water structural control measures (i.e., berms, coverings, etc.);
 - 6. Maintenance and repair areas; and
 - 7. Enclosed hazardous materials storage areas.
- **C.** A narrative description of the following:

- 1. Potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in industrial process water discharges to surface waters;
- 2. Significant materials that have been treated, stored, disposed, spilled, or leaked in significant quantities in storm water discharges within the last three years;
- **3.** Materials, equipment, and management practices employed to minimize contact of significant materials with storm water discharges;
- 4. Material loading, unloading, and access areas;
- **5.** Existing structural and non-structural control measures (if any) to reduce pollutants in storm water discharges;
- 6. Methods of on-site storage and disposal of significant materials; and
- **7.** Outdoor storage, manufacturing, and processing activities including activities that generate significant quantities of dust or particulates.
- **D.** A list of pollutants that are likely to be present in storm water discharges in significant quantities and an estimate of the annual quantities of these pollutants in the storm water discharges.
- **E.** An estimate of the size of the facility's maintenance and repair areas (in square feet), and the percent of impervious surface. The volume of storm water discharge can be estimated by multiplying the inches of rainfall (converted to feet by dividing by 12) by the square feet of surface area of the maintenance and repair areas, then multiplying the product by the impervious factor. The volume calculated, now in cubic feet, can be converted to gallons by multiplying by 7.5 (there are 7.5 gallons per cubic foot). For example,
 - (1 inch) / (12 inches per foot) = 0.083 feet
 - $(0.083 \text{ feet}) \times (500 \text{ square feet}) = 41.7 \text{ cubic feet}$
 - If the area under consideration is approximately 90% covered by asphalt, then the impervious factor is 90% or 0.90. Therefore,
 - (41.7 cubic feet) x (0.90) = 37.5 cubic feet, and
 - $(37.5 \text{ cubic feet}) \times (7.5 \text{ gallons per cubic foot}) = 281 \text{ gallons}$
- **F.** A list of significant spills or leaks of toxic or hazardous pollutants that have occurred within the last three years. This shall include:
 - 1. Toxic chemicals (listed in 40 CFR Part 372) that have been discharged to storm water as reported on USEPA Form R; and
 - 2. Oil or hazardous substances in excess of reportable quantities (see 40 CFR Part 110,117, or 302).
- **G.** A summary of existing sampling data (if any) describing pollutants in storm water discharges.
- **H.** A description of the Discharger's storm water pollution prevention and control management measures as follows:

- 1. Storm Water Pollution Prevention Personnel. Identify the specific individuals (and job titles) that are responsible for developing, implementing, and revising the SWPPP.
- 2. Preventive Maintenance. Preventive maintenance involves inspection and maintenance of storm water conveyance system devices (clarifiers, oil water separators, catch basins, containment tanks, pumps/sumps, etc.), and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants in resulting storm water discharges.
- 3. Good Housekeeping. Good housekeeping requires the maintenance of clean and orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter surface waters. The Discharger shall minimize or prevent material tracking and dust generated from industrial materials or activities.
- 4. Spill Prevention and Response. Identification of areas where significant materials may spill into or otherwise enter storm water discharge points. Specific material handling procedures, storage requirements, and cleanup equipment and procedures shall be identified, as appropriate. Internal reporting procedures for spills of significant materials shall be established.
- 5. Storm Water Pollution Prevention Practices. Storm water pollution prevention practices, other than those which control the source of pollutants, include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants to storm water discharges in significant quantities, additional storm water pollution prevention practices to remove pollutants from storm water discharges may need to be implemented.
- I. Pollution prevention measures or BMPs to be considered for implementation in the SWPPP shall include, but are not limited to the following:

Category	Practices			
Hydrowashing	 Collect and contain the discharges from the pressure washing area so they are not co-mingled with storm water discharges. 			
	Use no detergents or additives			
	 Implement diagonal trenches or berms and sumps to collect wash water 			
Surface Preparation, Sanding, and Paint	 Enclose, cover, or contain blasting and sanding activities 			
Removal	 Using the least hazardous blasting media economically available 			

 Table J-1. Potential BMPs for Consideration

Category	Practices			
	 Cover drains, trenches, and drainage channels; prohibit uncontained blasting or sanding activities over open water 			
	 Clean storm water conveyances of deposits of blasting debris and paint chips 			
	 Prohibit blasting or sanding activities during windy conditions 			
	 Inspect and clean sediment traps 			
	 Collect spent abrasives and store under a cover to await proper disposal 			
	Enclose, cover, or contain painting activities			
	 If painting and blasting are performed outside use plastic barriers or tarpaulin curtains to surround the activity to contain debris, overspray, and spillage 			
	Prohibit uncontained spray painting over open water			
	 Prohibit spray painting during windy conditions 			
Painting and Coating	 Mix paints and solvents in designated areas away from drains, ditches, piers, and surface waters, preferable indoors, under a shed 			
	 Have absorbent and other cleanup items readily available for immediate cleanup of spills; allow empty paint cans to dry before disposal; keep paint and paint thinner away from traffic areas 			
	 Train employees on proper painting and spraying techniques 			
Hull Cleaning	 All waste associated with hull maintenance and cleaning shall be collected and disposed of in accordance with all applicable laws and regulations. 			
	Maintain an organized inventory of materials used in the maintenance shop			
Engine Maintenance	 Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers properly 			
and Repairs	 Minimize contamination of precipitation and surface runoff 			
	Perform operations indoors			
	 Label and track the recycling of waste material 			

Category	Practices		
	Drain oil filters before disposal or recycling		
	 Store cracked batteries in non-leaking secondary containers 		
	 Promptly transfer used fluids to proper containers 		
	 Do not leave full drip pans or other open containers around the shop 		
	 Empty and clean drip pans and containers 		
	 Do not pour liquid waste down floor drains, sinks, or outdoor storm drain inlets 		
	 Plug floor drains that are connected to the storm or sanitary sewer 		
	 Inspect maintenance area regularly 		
	 Train employees on proper waste control and disposal procedures 		
	 Prohibit hosing down the shop floor 		
	 Store reactive, ignitable, or flammable liquids in compliance with the local fire code 		
	Label all containerized materials		
	 Identify potentially hazardous materials, their characteristics, and use 		
	 Control excessive purchasing, storage, and handling of potentially hazardous materials 		
	• Keep records to identify quantity, receipt date, service life, users, and disposal routes		
Containerized Material Storage	 Secure and carefully monitor hazardous materials to prevent theft, vandalism, and misuse of materials 		
	 Use temporary containment where required by portable drip pans; use spill troughs for drums with taps 		
	 Mix paints and solvents in designated areas with secondary containment and away from drains, ditches, piers, and surface waters 		
	• Locate designated materials storage areas indoors or under a shed or otherwise minimize the contamination of precipitation and surface runoff		

Category	Practices		
Work Areas for Boat Repair	Clearly mark all work areas and perform work inside when possible		
	 Clean storm water conveyances of deposits of abrasive blasting debris and paint chips. 		

- **J.** A description of the BMPs that includes the following:
 - 1. The pollutant(s) that the BMP is designed to reduce or prevent in industrial storm water discharges;
 - 2. The frequency, time(s) of day, or conditions when the BMP is scheduled for implementation;
 - **3.** The locations within each area of industrial activity or industrial pollutant source where the BMP shall be implemented;
 - 4. The individual and/or position responsible for implementing the BMP;
 - 5. The procedures, including maintenance procedures, and/or instructions to implement the BMP effectively; and
 - 6. The equipment and tools necessary to implement the BMP effectively.
- **K.** A table summarizing each identified area of industrial activity, the associated industrial pollutant sources, the industrial pollutants, and the BMPs being implemented.
- L. The SWPPP may incorporate, by reference, the appropriate elements of other program requirements (e.g. Spill Prevention Control and Countermeasure [SPCC] plans under Section 311 of the CWA).
- M. Employee Training. Employee training programs shall be held with all personnel responsible for implementing the SWPPP. Training shall address pollution prevention, spill response, good housekeeping, and material management practices. Periodic dates for training shall be identified in the SWPPP and shall occur at least annually. Employee training is recommended to occur just prior to the wet season.
- N. Inspections. All inspections, visual observations, and sampling as required in the Monitoring and Reporting Program (Attachment E), shall be done by trained personnel. The SWPPP shall include a tracking or follow-up procedure to address any deficiencies found during the inspections, etc.
- **O.** The SWPPP shall include the signature and title of the person responsible for preparation of the SWPPP and include the date of initial preparation and each amendment thereto.
- V. The SWPPP is considered a report that shall be available to the public under Section 308 (b) of the CWA.

ATTACHMENT K – NO EXPOSURE CERTIFICATION FORM

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

NO EXPOSURE CERTIFICATION FORM				
FAC	LITY OPERA		FORMAT	ION
Name:				
Mailing Address Street:				
City:	State:			ZIP Code:
Operator Contact:			Phone:	
Email:				
FACILI	TY/SITE LOC	ATION		ATION
Facility WDID (if applicab	le):			
Facility Name:				
Facility Address:				
City:	State:			ZIP Code:
County:				
Facility Contact:			Phone:	
Email:				
Latitude:	Lo	ngitude	e:	
Total acreage of facility a	ssociated with	indus	trial activit	:y:
SIC Code (Primary): SIC Code (Secondary, if applicable):			dary, if applicable):	
Brief description of primary industrial activity:				
FACILITY BILLING INFORMATION				
□ Same as Mailing Address □ Same as Facility Address				
Billing Address:				
City:	State:			ZIP Code:
Billing Contact: Phone:				
Email:				

NO EXPOSURE CERTIFICATION REPORT

Note: The No Exposure Certification Report must be prepared and certified by a California licensed professional engineer the first year and any time there is a change at the facility which affects the discharge of storm water exposed to industrial activities or materials

Does the facility have secondary containment that is engineered to always prevent a discharge of collected rainfall (based on the historical rainfall record) and a simultaneous spill of any other industrial materials or liquids? Note: there must be proper disposal of any water or liquids collected from the containment (e.g., discharged in compliance with another NPDES permit, treated and discharged to the sanitary sewer, or trucked offsite to an appropriate disposal/treatment facility).	Yes	□ No
If secondary containment is claimed, how much secondary containment is available?		

The Discharger shall submit a NEC Report prepared by a California licensed professional Engineer that

- A. Evaluates whether the following materials or activities are exposed to precipitation now or in the foreseeable future and have the potential to be discharged in storm water, aerially, or by other means:
 - 1. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water.
 - 2. Materials or residuals on the ground or in storm water inlets from spills/leaks.
 - 3. Materials or products from past industrial activity.
 - 4. Material handling equipment (except adequately maintained vehicles).
 - 5. Materials or products during loading/unloading or transportation activities.
 - 6. Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to storm water does not result in the discharge of pollutants).
 - 7. Materials contained in open, deteriorated or leaking drums, barrels, tanks, and similar containers.
 - 8. Materials or products handled/stored on roads or railways owned or maintained by the discharger.
 - 9. Waste material (except waste in covered, non-leaking containers [e.g., dumpsters]).

- 10. Application or disposal of process wastewater (unless otherwise permitted).
- 11. Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow.
- B. Include a technical description of any secondary containment and the capacity of the secondary containment.
- C. A site map of facility including any structural Best Management Practices such as treatment facilities and/or secondary containment facilities.

CERTIFICATION STATEMENT

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of 'no exposure' and obtaining an exclusion from NPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document.

I understand that I am obligated to submit a no exposure certification form annually to the San Diego Water Board and, if requested, to the operator of the local Municipal Separate Storm Sewer System (MS4) into which this facility discharges (where applicable). I understand that I must allow the San Diego Water Board, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility.

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

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

Print Name:	
Print Title:	
Signature:	
Date:	
Email:	