



**San Francisco Bay Regional Water Quality Control Board**

**TENTATIVE ORDER NO. R2-2012-00XX  
NPDES NO. CAG032012**

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR  
Discharge from Dry Dock Operations**

**Table 1. Administrative Information**

This Order was adopted by the Regional Water Quality Control Board on:	
This Order shall become effective on:	<b>August 1, 2012</b>
This Order shall expire on:	<b>July 31, 2017</b>
Regulatory Measure No.	
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified the discharges under this general National Pollutant Discharge Elimination System (NPDES) permit (General Permit) as a minor discharge based on the discharges' impact to receiving waters.	
To obtain coverage under this General Permit, Dischargers must submit a Notice of Intent (NOI) as shown in Attachment B and a filing fee equivalent to the first year's annual fee. If the NOI is complete, the Regional Water Quality Control Board (Regional Water Board) Executive Officer will issue Authorization to Discharge.	
Authorized Dischargers that intend to continue discharging after June 30, 2017, shall file a new NOI no later than February 1, 2017. Discharges for which coverage is extended will become subject to a reissued Order upon Executive Officer authorization.	

I, Bruce H. Wolfe, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on the date indicated above.

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Bruce H. Wolfe, Executive Officer

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## I. SCOPE OF GENERAL PERMIT

Facilities that qualify for coverage under this Order include floating and graving dry dock facilities located within the San Francisco Bay Region. This includes all parts of the San Francisco Bay, San Pablo Bay, Suisun Bay, and parts of the Sacramento and San Joaquin River Delta, hereafter described as San Francisco Bay. These dry docks are used for repairing, constructing, and dismantling marine vessels. This Order covers discharges of water that wash over the dry docks decks after cleaning when the dry docks are submerged or flooded. It also covers non-contact cooling water from ships awaiting maintenance in the dry docks, integral ballast water discharged from floating dry docks, salt water fire suppression water, and stormwater after dry dock decks are cleaned. This Order does not cover sanitary (sewage) wastewaters, process wastewaters used in ship dismantling operations, seepage water from graving dry dock walls, seepage water from graving dry dock caissons, ballast water from vessels in dry dock, or stormwater runoff from dry dock surfaces prior to cleaning.

## II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), finds:

- A. Background.** Three dry dock dischargers currently discharge pursuant to individual NPDES permits: two with floating dry docks and one with graving dry docks. Regional Water Board Order No. R2-2008-0062 addresses Allied Defense Recycling's discharges from its graving dry docks in Vallejo (Mare Island Shipyard). Order No. R2-2011-0008 addresses Bay Ship & Yacht Company discharges from its floating dry dock in Alameda. Order No. R2-2011-0017 addresses BAE Systems San Francisco Ship Repair discharges from its floating dry docks in San Francisco. This Order will allow more efficient and consistent regulation of these dischargers and any new dry dock operations that require an NPDES permit.
- B. Facility and Discharge Descriptions.** This Order is for dry dock operations located within the San Francisco Bay Region. Site owners or operators who apply for an Authorization to Discharge under this Order and who are granted such authorization are hereinafter called "Dischargers." For purposes of this Order, references to "dischargers" or "permittees" in applicable federal and State laws, regulations, plans, or policies are held to be equivalent to references to "Dischargers" herein.

Dischargers that enroll under this Order use graving dry docks or floating dry docks to get ships and other vessels out of the water. With a floating dry dock, the vessel is moved into position over supports on the dry dock deck, which is partially submerged under the vessel. The water is then pumped out of ballast tanks into adjacent waters to raise the dry dock and vessel out of the water. After work is completed, the process is reversed (ballast tanks are filled) to submerge the dry dock and refloat the vessel.

When a graving dry dock is flooded, a vessel is brought into the dry dock and positioned onto support blocks. The dock end is closed with a caisson (dry dock "door") and the dock is emptied of all water via a sump pump that discharges the water. The vessel is then left standing freely on the support blocks. Water is pumped back into the dry dock when work is completed to refloat the vessel. The caisson is opened, and the vessel may leave the dry dock.

This Order covers the following types of discharges:

1. **Discharges from Dry Dock Surfaces.** Discharges regulated by this Order consist of water that washes over the dry docks when they are submerged or flooded. Water flowing over dry dock surfaces can carry particulates and other residual material. Shipyard activities can involve many sources of pollutants, including blast abrasives, paint chips, cutting and welding slag, paper trash, discarded materials, sediment, marine growth, oil, solvents, and plastics. When work on a vessel is complete, the dry dock deck, or floor, is swept, and debris that ends up on the dry dock floor is removed prior to the next cycling of the dry dock. Any residual particulate matter remaining on the floor of the dry dock after cleanup has the potential to come in contact with water when the dry dock is submerged or flooded.
2. **Integral Ballast Water.** Floating dry docks use integral ballast water to raise and lower vessels into and out of the water. Currently, the largest floating dry dock in the San Francisco Bay Region (operated by BAE Systems San Francisco Ship Repair) requires about 22 million gallons of integral ballast water each time the dry dock is lowered and raised.
3. **Non-Contact Cooling Water.** This Order covers non-contact cooling water associated with vessels undergoing maintenance and repair. Such vessels may have crew living on-board while in dry dock. In those situations, on-board equipment, such as heating, air conditioning, and power generation equipment, continues to operate. This equipment requires cooling water to remove waste heat. This cooling water is pumped from adjacent surface water, through heat exchangers, and then returned back to the same water body.
4. **Salt Water Fire Suppression Water.** This Order covers salt water fire suppression water. Dischargers may occasionally release over-pressure from salt water fire protection systems. The source of this water is the same as the receiving water. The systems circulate salt water for fire suppression when needed. The largest such fire suppression system in the San Francisco Bay Region (at BAE Systems San Francisco Ship Repair) discharges at a rate of about 290,000 gallons per day.
5. **Stormwater from Dry Dock Surfaces *after* Cleaning.** When no shipyard activity is occurring and the dry docks are clean, stormwater runoff from the dry dock surfaces may be discharged.

This Order does *not* cover process water used in ship dismantling operations, seepage water from graving dry dock walls, seepage water from graving dry dock caissons, ballast water from vessels in dry dock, and stormwater runoff from dry dock surfaces is collected in dry dock sumps. This water must be disposed of in compliance with applicable federal, State, and local laws and requirements. This Order also does *not* cover sanitary wastewater or stormwater from onshore facilities, including piers.

The State Water Board developed a statewide NPDES General Permit for stormwater discharges associated with industrial activities (NPDES General Permit CAS000001). Stormwater discharges that are not commingled with other wastewaters may be regulated under the State Water Board General Permit.

- C. **Legal Authorities.** This Order is issued pursuant to Clean Water Act (CWA) Section 402 and implements regulations adopted by the USEPA and California Water Code (CWC) Chapter 5.5, Division 7 (commencing with Section 13370). It shall serve as an NPDES permit for point source discharges to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to CWC Article 4, Chapter 4, Division 7 (commencing with Section 13260).

- D. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on existing individual NPDES permits for existing dry docks. The Fact Sheet (Attachment F), which contains background information and rationales for requirements of this Order, is hereby incorporated into this Order and constitutes part of the findings for this Order. Attachments A through E are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under CWC Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA.
- F. Technology-Based Effluent Limitations.** CWA Section 301(b) and NPDES regulations at Title 40 of the Code of Federal Regulations Section 122.44 (40 CFR 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. Because USEPA has established no technology-based effluent limitations for the ship building and repair industry, the Regional Water Board must use its Best Professional Judgment (BPJ) pursuant to CWA Section 402(a)(1)(B) and 40 CFR 125.3. This Order includes Best Management Practices (BMPs) that the Regional Water Board considers appropriate technology-based limitations based on BPJ.
- G. Water Quality-Based Effluent Limitations.** CWA Section 301(b) and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

NPDES regulations at 40 CFR 122.44(d)(1)(i) mandate 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 (Reasonable Potential). Where Reasonable Potential has been established for a pollutant that has no numeric objective, water quality-based effluent limitations (WQBELs) must be established using (1) USEPA criteria guidance under CWA Section 304(a), 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 122.44(d)(1)(vi).

BMPs are defined by NPDES regulations at 40 CFR 122.2 as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of 'waters of the United States.'" The inclusion of BMPs as permit requirements is required by NPDES regulations at 122.44(k), when applicable, to control or abate the discharge of pollutants in several circumstances, including when numeric effluent limitations are infeasible.

- H. Water Quality Control Plans.** *The Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives (WQOs) for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve WQOs. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board (State Water Board), USEPA, and the Office of Administrative Law, as required. Requirements of this Order implement the Basin Plan.

The Basin Plan identifies beneficial uses for all parts of San Francisco Bay. The table below lists the beneficial uses for the receiving waters as identified in the Basin Plan. The Basin Plan implements

State Water Board Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Because of the marine influence in most parts of San Francisco Bay, total dissolved solids levels exceed 3,000 milligrams per liter (mg/L) and thereby meet an exception to State Water Board Resolution No. 88-63. The MUN designation therefore only applies to the Sacramento-San Joaquin Delta, where dissolved solid concentrations are lower.

**Table 2. Basin Plan Beneficial Uses**

Receiving Waters	Beneficial Uses
Central, Lower, and South San Francisco Bay; San Pablo Bay; Carquinez Strait; Mare Island Strait; Suisun Bay; and Sacramento-San Joaquin Delta	Agriculture (AGR) Industrial Service Supply (IND) Municipal Supply (MUN) Groundwater Recharge (GWR) Ocean Commercial and Sport Fishing (COMM) Estuarine Habitat (EST) Fish Migration (MIGR) Preservation of Rare and Endangered Species (RARE) Fish Spawning (SPWN) Wildlife Habitat (WILD) Water Contact Recreation (REC1) Non-contact water Recreation (REC2) Navigation (NAV) Industrial Process Supply (PROC) Shell Fish Harvesting (SHELL)

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

The State Water Board’s *Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1, Sediment Quality* became effective on August 25, 2009. This 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.

- I. 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 40 criteria in the NTR apply 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 applied in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria USEPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria USEPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became

effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

- K. Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes (65 Fed. Reg. 24641 [April 27, 2000] [codified at 40 CFR 131.21]). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
- L. Stringency of Requirements for Individual Pollutants.** This Order does not contain technology-based or water quality-based numeric effluent limitations for individual pollutants. It adopts the requirements in existing individual dry dock permits to develop and implement an appropriate BMP Program for control of pollutants in dry dock discharges as discussed in the Fact Sheet (Attachment F). Because numeric effluent limitations on dry dock discharges are infeasible, this Order contains BMP requirements to maintain water quality standards. These requirements implement minimum applicable federal requirements.
- M. Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 require that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law and requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in the Fact Sheet, the permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
- N. Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. As discussed in the Fact Sheet, the permitted discharge is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- O. Endangered Species Act.** This 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 Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State. Dischargers are responsible for meeting all requirements of applicable State and federal law pertaining to threatened and endangered species.
- P. Monitoring and Reporting.** NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. CWA Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) in Attachment E contains monitoring and reporting requirements that implement federal and State requirements.

- Q. Standard and Special Provisions.** Attachment D contains standard provisions that apply to all NPDES permits in accordance with 40 CFR 122.41 and additional conditions that apply to specified categories of permits in accordance with 40 CFR 122.42. Dischargers must comply with all standard provisions and with those additional conditions that apply under 40 CFR 122.42. The Regional Water Board has also included in this Order special provisions that apply to Dischargers. The Fact Sheet (Attachment F) provides rationales for this Order's special provisions.
- R. Provisions and Requirements Implementing State Law.** No provisions or requirements in this Order are included to implement State law only. All provisions and requirements are required or authorized under the federal CWA; consequently, violations of these provisions and requirements are subject to the enforcement remedies that are available for NPDES violations.
- S. Notification of Interested Parties.** The Regional Water Board has notified interested organizations, agencies, and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit written comments and recommendations. Details of the notification are provided in the Fact Sheet.
- T. Consideration of Public Comment.** The Regional 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.

IT IS HEREBY ORDERED that, to meet the provisions contained in CWC Division 7 (commencing with section 13000) and regulations adopted thereunder, and the provisions contained in the CWA and regulations and guidelines adopted thereunder, Dischargers shall comply with the requirements in this Order. Except for enforcement purposes, this Order rescinds Order No. R2-2008-0062 (Allied Defense Recycling) as of the effective date of an Authorization to Discharge issued pursuant to this Order covering the same discharges as Order No. R2-2008-0062, rescinds Order No. R2-2011-0008 (Bay Ship & Yacht Company) as of the effective date of an Authorization to Discharge issued pursuant to this Order covering the same discharges as Order No. R2-2011-0008, and rescinds Order No. R2-2011-0017 (BAE Systems San Francisco Ship Repair) as of the effective date of an Authorization to Discharge pursuant to this Order that covers the same discharges as Order No. R2-2011-0017. The requirements of this Order shall supersede the requirements prescribed in those individual permits as of the effective dates the Authorizations to Discharge.

### III. DISCHARGE PROHIBITIONS

- A.** Discharge of wastewater at a location or in a manner different from that described in the Notice of Intent is prohibited.
- B.** Discharge of sanitary wastewater is prohibited.
- C.** Discharge of solid materials and solid wastes, spent abrasive, and paint residues to waters of the State is prohibited.
- D.** Discharge of oil or other petroleum product, or other floating material, from any activity that may cause sheen, deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.
- E.** Discharge of ship ballast water from vessels in dry dock, following docking, is prohibited.



- F. Discharge of any power washing or pressure washing water, boiler drainage, or any process water used or accumulated in the dry dock area is prohibited.
- G. Discharge of seepage water in graving dry docks from the dry dock walls or caisson, or stormwater runoff from the surface of dry docks when a vessel is being processed, is prohibited.

#### **IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

- A. Each Discharger shall prevent or minimize the discharge of pollutants from any surface of its floating dry docks during submergence, or when opening its caisson for a graving dry dock, by implementing a Best Management Practices Program as described in Provisions VI.C.7 and VI.C.8.
- B. As each Discharger performs maintenance and repair work, the Discharger shall remove spent abrasives, paint residues, and other debris, particulate matter, and waste from those portions of its dry dock surfaces that are reasonably accessible to the degree achievable by scraping, broom cleaning, and power washing. Prior to submergence, or flooding, the remaining area of the dry dock deck that was previously inaccessible shall be cleaned by scraping, broom cleaning, and power and pressure washing as soon as practical. The Discharger may then submerge, or flood, the dry dock and bring in another vessel for repair and maintenance. This provision shall not apply in cases wherein a vessel must be introduced into the dry dock on an emergency basis, such as to prevent sinking or leakage of oil or another hazardous material. Dischargers shall notify the Regional Water Board's spill hotline at (510) 622-2369 of such emergency circumstances.
- C. Each Discharger shall perform regular dry dock cleaning while work is being conducted to minimize the potential for pollutants to build up on, or to be released from, its dry dock surfaces.
- D. Each Discharger that discharges non-contact cooling water shall implement a Best Management Practices Program as described in Provision VI.C.9.

#### **V. RECEIVING WATER LIMITATIONS**

Discharges shall not cause the following in the receiving water in the vicinity of any dry dock.

- A. The discharge shall not cause the following conditions to exist in waters of the State:
  - 1. Floating, suspended, or deposited macroscopic particulate matter or foams;
  - 2. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
  - 3. Alteration of turbidity or apparent color beyond present natural background levels;
  - 4. Visible, floating, suspended, or deposited oil and other products or petroleum origin; and
  - 5. Toxic or other substances present in concentrations or quantities that cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

**B.** The discharge of waste shall not cause the following limits to be exceeded in waters of the State within one foot of the water surface:

1. Dissolved Oxygen                      5.0 mg/L, minimum, downstream of Carquinez Bridge  
7.0 mg/L, minimum, upstream of Carquinez Bridge

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation. When natural factors cause concentrations less than those specified above, the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

2. Dissolved Sulfide                      Natural background levels (0.1 mg/L maximum)
3. pH    The pH shall not be depressed below 6.5 or raised above 8.5. The discharge shall not cause changes greater than 0.5 pH units at normal, ambient pH levels.
4. Nutrients                                      Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

**C.** The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Regional or State Water Boards as required by the Clean Water Act (CWA) and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA Section 303, or amendments thereto, the Regional Water Board may revise and modify this Order in accordance with such more stringent standards.

## **VI. PROVISIONS**

### **A. Standard Provisions**

Each Discharger shall comply with the Federal Standard Provisions in Attachment D of this Order.

### **B. MRP Requirements**

Each Discharger shall comply with the MRP (Attachment E) and future revisions thereto, including applicable sampling and reporting requirements in the standard provisions listed in VI.A, above.

### **C. Special Provisions**

#### **1. Reopener Provisions**

The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances as allowed by law:

- a. If present or future investigations demonstrate that the discharges governed by this Order will have, or will cease to have, a reasonable potential to cause or contribute to adverse impacts on water quality or beneficial uses of the receiving waters.
- b. If new or revised WQOs or Total Maximum Daily Loads (TMDLs) come into effect for the San Francisco Bay estuary and contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order may be modified as necessary to reflect updated WQOs and wasteload allocations in TMDLs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs, TMDLs, or as otherwise permitted under federal regulations governing NPDES permit modifications.
- c. If translator or other water quality studies provide a basis for determining that permit conditions should be modified.
- d. If State Water Board precedential decisions, new policies, new laws, or new regulations become available.
- e. If an administrative or judicial decision on a separate NPDES permit or WDR addresses requirements similar to those applicable to these discharges.
- f. Or as otherwise authorized by law.

Dischargers may request permit modification based on any of the circumstances described above. With any such request, the Discharger shall include an antidegradation and anti-backsliding analysis.

## **2. Notice of Intent (NOI)**

Dry dock owners or operators seeking an NPDES permit to discharge shall complete the NOI form in Attachment B. The NOI form shall identify all dry docks to be covered by this Order. The Executive Officer may amend the NOI form in Attachment B.

Upon receiving an NOI for a proposed discharge, Regional Water Board staff will review the NOI to determine if it is complete and if the Discharger is eligible to discharge waste under this Order. If the Executive Officer concludes that the proposed discharge is eligible for coverage under this Order, the Executive Officer will issue a Notice of General Permit Coverage (Authorization to Discharge). Upon the effective date of the Authorization to Discharge, the Discharger shall comply with all applicable conditions and limitations of this Order and its attachments.

## **3. Discharge Termination**

In accordance with 40 CFR 122.28(b)(2)(iv), the Executive Officer may terminate or revoke coverage under this Order for any of the causes specified for an individual permit set forth in 40 CFR 122.28(b)(3). After providing notice and an opportunity for a hearing, coverage of an individual discharge under this Order may be terminated or modified for cause, including but not limited to, the following:

- a. Violation of any term or condition of this Order;

- b. Misrepresentation or failure to disclose all relevant facts in obtaining coverage under this Order; or
- c. Change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

#### **4. Non-Compliance**

Any non-compliance (violation of this Order's requirements) shall constitute a violation of the CWA and CWC and may be grounds for enforcement; termination, revocation and reissuance, or modification of the Authorization to Discharge; issuance of an individual permit; or denial of an application for reissuance.

#### **5. Individual NPDES Permit May Be Required**

The Executive Officer may require any Discharger authorized to discharge pursuant to this Order to subsequently apply for and obtain an individual NPDES permit. An interested person may petition the Executive Officer to take action under this provision. Cases where an individual NPDES permit may be required include the following:

- a. The Discharger is not in compliance with the conditions of this Order or as authorized by the Executive Officer,
- b. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source,
- c. Effluent limitation guidelines are promulgated for point sources covered by this Order,
- d. A water quality control plan containing requirements applicable to the discharge is approved,
- e. The requirements of 40 CFR 122.28(a) (the circumstances under which the Regional Water Board is authorized to issue a general permit) are not met, or
- f. Any other condition specified in 40 CFR 122.28(b)(3) is met.

#### **6. Contingency Plan**

Each Discharger shall maintain a Contingency Plan that describes procedures to ensure that its facilities remain in, or are rapidly returned to, operation in the event of equipment failure or emergency incident, such as employee strike, strike by suppliers or maintenance services, power outage, vandalism, earthquake, or fire. Discharge in violation of this Order where the Discharger has failed to develop and implement a Contingency Plan as described below may be the basis for considering the discharge a willful and negligent violation of the Order pursuant to CWC Section 13387. The Contingency Plan shall, at a minimum, contain the provisions below.

- a. Provision of personnel for cleaning and testing of dry dock surfaces during employee strikes or strikes against contractors providing services.

- b. Maintenance of adequate supplies necessary for cleaning and testing of dry dock surfaces.
- c. Provisions of emergency standby power.
- d. Protection against vandalism.
- e. Expeditious action to repair failures of, or damage to, equipment.
- f. Report of spills and discharges of wastes, including measures taken to clean up the effects of such discharges.

The Discharger shall regularly review, revise, and update, as necessary, its Contingency Plan, so the document remains useful and relevant to current practices. At a minimum, the Discharger shall review the Contingency Plan annually. The Discharger shall include, in each Annual Report, a description or summary of its review and evaluation procedures, recommended or planned actions, and an estimated time schedule for implementing any improvements. The Discharger shall update these documents as necessary.

## **7. Best Management Practices for Cleaning Dry Dock Surfaces**

Each Discharger shall prepare and implement a Best Management Practices (BMPs) Plan that clearly describes its cleaning procedures, which must include sweeping, vacuuming, and power washing. The Discharger shall submit a copy to the Regional Water Board with its Notice of Intent form (Attachment B). The Discharger shall implement its BMPs Program to identify and evaluate sources of wastes and pollutants associated with activities at the facility, and shall continue to identify and implement site-specific BMPs to reduce or prevent the discharge of wastes and pollutants. The BMPs Plan shall include provisions for developing, annually updating, and implementing the BMPs Plan in a manner consistent with the general guidance contained in USEPA's *Guidance Manual for Developing Best Management Practices* (EPA 833-B-93-004). The BMPs Plan shall address potential discharges from all discharge points and must include the following elements.

### **a. Characterization of Discharges**

The BMPs Plan shall include a narrative assessment of all individual activities conducted at the site, potential pollutant sources associated with each activity, and the nature of the pollutants that could be discharged.

### **b. Identification of BMPs**

The BMPs Plan shall include a narrative description of the BMPs to be implemented at the site to control the discharge of pollutants. BMPs shall be identified and described for each potential source of pollutant, including the anticipated effectiveness of each BMP. Dischargers shall consider the following:

- i. Preventative BMPs – measures to reduce or eliminate the generation of pollutants and waste;

- ii. Control BMPs – measures to control or manage pollutants and waste after they are generated and before they come into contact with water, including measures to prevent leaks and spills, and measures to contain dust and particulate material;
- iii. Response to release BMPs – measures to respond to leaks, spills, and other releases with containment, control, and cleanup measures to prevent or minimize the potential for pollutant discharge and to minimize any adverse effects of such discharges;
- iv. Dry dock surface monitoring – measures to monitor dry dock surfaces for metals, oil and grease, polychlorinated biphenyls (PCBs), and tributyltin as described in the MRP (Attachment E); and
- v. Response to trigger exceedance BMPs – measures to be taken in response to dry dock surface monitoring results that exceed the triggers in Table 3 (see provision VI.C.8 below).

The BMPs Plan shall address the following shipyard activities, if applicable:

- Control of large solid materials;
- Abrasive blasting;
- Oil, grease, and fuel transfers;
- Paint and solvent use;
- Dust and overspray;
- Over-water or near-shore activities;
- Storm drain inlet protection;
- Hose, piping, and fitting use and maintenance;
- Segregation of water from debris;
- Hydro-blasting;
- Material and waste storage;
- Sewage disposal;
- Gray water disposal;
- Oily bilge and ballast water disposal;
- Floating dry dock cleanup;
- Graving dock cleanup;
- Discharges resulting from wind, tidal action, and site runoff;
- Leaks and spills;
- Waste disposal;
- Recovery of ship launch grease/wax;
- Hull cleaning; and
- Other activities with potential to result in discharge of wastes or pollutants to the receiving water.

**c. Site Map**

The BMPs Plan shall include a site map that includes:

- i. Site boundaries and structures;

- ii.** Locations of site runoff collection and conveyance systems, and points of discharge; and
- iii.** Areas of industrial activity where discharges originate.

The site map shall include the locations of material handling and processing areas; waste treatment, storage, and disposal areas; dust or particulate generating areas; cleaning and rinsing areas; and other areas of industrial activity that are potential sources.

**d.** Annual Comprehensive Site Compliance Evaluation

Each Discharger shall conduct at least one comprehensive site compliance evaluation per calendar year to determine the effectiveness of its BMPs Program, and submit an evaluation report (see Provision VI.C.2.d.v, below) as part of this Order's requirement for an annual report (see MRP [Attachment E] Section VI). Evaluations shall be conducted not less than 8 months, nor more than 16 months, apart. The Discharger shall revise its BMPs Plan as appropriate. The Discharger shall submit a description of the revisions to the Executive Officer and implement them within 30 days of the evaluation. Evaluations shall include the following:

- i.** A review of all visual observation records, inspection records, and sampling and analysis records.
- ii.** A visual inspection of all potential pollutant sources for, or the potential for, the discharge of pollutants.
- iii.** A review and evaluation of all BMPs to determine whether the BMPs are adequate, properly implemented and maintained, or whether additional BMPs are needed.
- iv.** A review of the wipe test procedures to ensure they are quantitatively detecting residual contaminants. If a review indicates that changes to the sampling procedures are necessary, then the Discharger, with the written approval of the Executive Officer, may make the changes.
- v.** An evaluation report that includes:
  - Identification of personnel performing the evaluation;
  - Date of evaluation;
  - Necessary Program revisions;
  - Incidents of non-compliance and corrective actions taken; and
  - Certification that the Discharger is in compliance with this Order.

If this certification cannot be provided, the evaluation report shall include an explanation as to why the Discharger is not in compliance with this Order. Each Discharger shall sign its report, certify it in accordance with the requirements of Attachment D, Section V.B, and retain each report for at least five years.

At least 30 days prior to conducting its Comprehensive Site Compliance Evaluation, each Discharger shall notify the Regional Water Board of its intent to conduct the evaluation so a representative of the Regional Water Board may accompany the Discharger during its facility inspection and its review of BMPs.

## **8 Best Management Practices for Responses to Trigger Exceedances**

### **a. Review of BMPs and Acceleration of Monitoring**

If the wipe test monitoring required in the MRP (Attachment E) shows exceedance of any triggers shown in Table 3, the Discharger shall review the BMPs in the BMPs Plan with its staff to remind the staff of the importance of properly following the BMPs and to refresh the staff's familiarity with the BMPs to ensure that they are more diligently implemented. The Discharger shall also accelerate monitoring as follows:

- i.** For exceedance of any trigger by less than two times the trigger, accelerate to monthly frequency (or, if the dry dock is not submerged or flooded for more than one month, until the next time the dry dock will be submerged or flooded); or
- ii.** For exceedance of any trigger by greater than or equal to two times the trigger, or for exceedance of the trigger at any magnitude for more than five pollutants in one monitoring event, the Discharger shall sample prior to each submergence or flooding of its dry docks after working on a vessel.

The Discharger shall continue the accelerated monitoring as required above until at least one monitoring event demonstrates that all triggers are met. At that time, the Discharger shall continue to diligently implement the BMPs in its BMPs Plan, and resume the routine sampling schedule described in MRP (Attachment E) Section III.2.c.

### **b. Enhancement of BMPs with Pressure Washing**

The Discharger shall enhance the BMPs for the next and subsequent dry dock uses if any of the following trigger exceedances occur:

- i.** Exceedance of any trigger for three consecutive months (or successive submersions) during accelerated monitoring, or
- ii.** Seven or more of ten monitoring events (including both routine and accelerated) show exceedance of any trigger, or
- iii.** Five or more of ten monitoring events (including both routine and accelerated) show exceedance of a trigger by three times the trigger for any pollutant (including a different pollutant in a different monitoring event).

The BMPs enhancement shall, at a minimum, add pressure washing of the dry dock deck surface prior to submersion. (In this context, "pressure washing" refers to a jet of water of at least 1,500 pounds per square inch [psi], compared to "power washing," which involves water from the water main at approximately 60 to 100 psi and is already a required BMP in the BMP Plan.) In this instance, the Discharger shall collect the wash water and dispose of it via the sanitary sewer or another means, and not discharge it to waters of the State. The Discharger shall update its BMPs Plan to incorporate the new measures within 30 days of receiving results meeting the conditions set forth above.



**c. Further Enhancement of BMPs**

If any of the trigger exceedance conditions in Provision VI.C.3.b continue to occur based on monitoring following the addition of pressure washing, the Discharger shall further evaluate its BMPs, its staff’s proper implementation of the BMPs, and the feasibility of resurfacing the dry dock with a material more amenable to cleaning. The Discharger shall update its BMPs Plan to include any remaining technically and economically-achievable control measures and provide a schedule for resurfacing the dry dock surface, if feasible, within 30 days of receiving results exceeding the triggers a third time during accelerated monitoring.

**d. Final Evaluation of Efforts**

If any trigger exceedances continue to occur based on monitoring following the addition of pressure washing to the BMPs Plan and implementation of any remaining control measures identified in Provision VI.C.7.c, including resurfacing the dry dock surface, if feasible, the Discharger may request that the Executive Officer evaluate its efforts. If warranted, the Executive Officer may authorize the Discharger to resume sampling as described in MRP (Attachment E) Section III.A.2., or to cease conducting wipe tests. Such authorization must be in writing. The Regional Water Board may consider the Discharger’s efforts and revise the triggers with the next permit reissuance so the triggers continue to provide feedback for thorough BMPs implementation.

**e. Wipe Test Triggers for Accelerated Monitoring and Other Actions**

Table 3 contains triggers for accelerated monitoring and other actions based on wipe test monitoring results.

**Table 3. Triggers for Dry Dock Wipe Samples**

Analyte	Trigger (µg/sample)
Chromium	31,000
Hexavalent Chromium	3,100
Copper	1,800
Lead	330
Nickel	8,300
Zinc	18,000
Tributyltin	2.1
Polychlorinated biphenyls (PCBs)	2.5

**9. Best Management Practices for Non-Contact Cooling Water Discharges**

Each Discharger that discharges non-contact cooling water shall establish and implement a BMPs Plan that describes the steps to ensure that discharge of non-contact cooling water will not adversely impact the receiving surface water. The Discharger shall submit a copy of the plan to the Regional Water Board with its Notice of Intent form (Attachment B) or at least 60 days prior to discharging non-contact cooling water. The Discharger shall keep a copy readily available onsite. The BMPs Plan must include a narrative description of the BMPs to be

implemented at the site to control the discharge of thermal waste in non-contact cooling water. BMPs shall be identified and described and include the anticipated effectiveness of each BMP. The Discharger shall consider measures to reduce the generation of non-contact cooling water and measures to dissipate thermal waste before discharge to surface waters. Such measures could include evaporative cooling (e.g., where the non-contact cooling water is sprayed over the receiving water surface). The BMPs Plan shall ensure that non-contact cooling water discharges, by the time the water reaches receiving waters, are no warmer than 86 degrees Fahrenheit and no warmer than 4 degrees Fahrenheit above the natural receiving water temperature.

The Discharger shall conduct one compliance evaluation each year to determine the effectiveness of the BMPs Plan for non-contact cooling water and submit a report with the annual report (see MRP [Attachment E] Section VIII). The Discharger shall revise its BMP Plan as appropriate, and summarize its evaluation and describe any revisions in the annual Self-Monitoring Report required by Attachment E of this Order.

## ATTACHMENT A – DEFINITIONS

**Arithmetic Mean ( $\mu$ )**, 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:

$$\text{Arithmetic mean} = \mu = \Sigma x / n$$

where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and  $n$  is the number of samples.

**Bioaccumulative** pollutants are 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.

**Carcinogenic** pollutants are substances that are known to cause cancer in living organisms.

**Detected, but Not Quantified (DNQ)** are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

**Estimated Chemical Concentration** is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Median** is 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)** 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 title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

**Minimum Level (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.

**Not Detected (ND)** are those sample results less than the laboratory's MDL.

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

**Reporting Level (RL)** is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from 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.

**Source of Drinking Water** is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

**Standard Deviation ( $\sigma$ )** 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;

$\mu$  is the arithmetic mean of the observed values; and

n is the number of samples.

**ATTACHMENT B – NOTICE OF INTENT (NOI)**

**NOTICE OF INTENT (NOI)** to comply with the terms of the region-wide General National Pollutant Discharge Elimination System (NPDES) Permit authorizing discharges from dry docks to surface waters.

**General Permit No. CAG032012  
 Order No. R2-2012-00xx**

**FOR REGIONAL WATER BOARD USE ONLY**

<b>WDID:</b> <b>CIWQS Place No.:</b>	<b>Date NOI Received:</b>	<b>Date NOI Processed:</b>
<b>Case Manager’s Name:</b>	<b>Fee Received*:</b> \$	<b>Check No.:</b>

\* The annual fee will be based on the adopted fee schedule, available at <http://www.waterboards.ca.gov/fees/docs/adoptedfeeschedule.pdf>.  
 The fee schedule is subject to change.

**DISCHARGER TO PROVIDE THE FOLLOWING INFORMATION**

**I. OWNER/OPERATOR INFORMATION** (Provide a separate form for each facility. If additional owners/operators are involved, provide the information in a supplemental letter.)

Facility/Agency Name		Owner/Operator Type (Check One) <input type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Other, specify the type:	
Street Address			
City	State	Zip Code	Phone No.
Contact Person’s Name and Title		<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner/Operator	
Contact Person’s Email		Contact Person’s Phone No.	

Additional owner information attached

**II. BILLING ADDRESS**

<input type="checkbox"/> <b>Owner/Operator</b> (Enter information at right <b>only</b> if it is different from above) <input type="checkbox"/> <b>Other</b> (Enter information at right)	Name		
	Mailing Address		
	City	State	Zip Code

**III. DISCHARGE INFORMATION**

Describe the proposed discharges. List potential pollutants in the discharge. Describe or attach details of operations (e.g., floating or graving dry docks, number of vessels per year, maximum size of vessels). Attach additional sheets if needed.

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Check types of discharges:

Integral Ballast Water.  
 Indicate maximum volume per dry dock submersion: \_\_\_\_\_

Non-Contact Cooling Water.  
 Indicate maximum flow: \_\_\_\_\_

Salt Water Fire Suppression Water.  
 Indicate maximum flow: \_\_\_\_\_

Stormwater from Dry Dock Surfaces *After* Cleaning.

Other, please specify:

**IV. DRY DOCK DIMENSIONS AND CAPACITIES**

Dry dock No.	Discharge Point Nos.	Average Submerged/Immersed Depth (ft)	Width at Top (ft)	Length to Outer Sill (ft) or Caisson	Capacity (million gallons)
$n^{(1)}$	00n				

<sup>(1)</sup> n is the number designation of the dry dock.

**V. PREVIOUS OR POTENTIAL DRY DOCK POLLUTANT DISCHARGES**

	Minimum	Maximum	No. of Samples
Chromium			
Hexavalent chromium			
Copper			
Lead			
Nickel			
Zinc			
Tributyltin			
Polychlorinated biphenyls (PCBs)			

\* Attach additional sheets as appropriate to fully describe the samples collected.

**VI. RECEIVING WATER INFORMATION AND DISCHARGE POINTS**

Receiving Water(s)*:...	
<i>Discharge points / coordinates</i>	
<u>Exposed deck or floor of dry dock <i>n</i>.</u>	
Discharge Point EFF-00 <i>n</i> :	Latitude: _____ Longitude: _____
<u>Sediment Sample near dry dock <i>n</i>.</u>	
Discharge Point SED-00 <i>n</i> A:	Latitude: _____ Longitude: _____
Discharge Point SED-00 <i>n</i> B:	Latitude: _____ Longitude: _____
Discharge Point SED-00 <i>n</i> C:	Latitude: _____ Longitude: _____
Discharge Point SED-00 <i>n</i> D:	Latitude: _____ Longitude: _____
<u>Background sediment sample.</u>	
Discharge Point SED-00( <i>N</i> +1):	Latitude: _____ Longitude: _____
<u>Receiving Water near Dry Dock Sample</u>	
Discharge Point RSW-00 <i>n</i> :	Latitude: _____ Longitude: _____
<u>Background Receiving Water</u>	
Discharge Point RSW-00( <i>N</i> +1):	Latitude: _____ Longitude: _____

\* See Order Attachment E, page E-2. Attach additional sheets for additional receiving waters and discharge points.  
*n* is the number designation of the dry dock.  
*N* is the total number of dry docks at the facility. For example if there were two dry docks, then the location names for the sample stations would be SED-003 and RSW-003. For each facility, regardless of the number of dry docks, only one background sediment and one background receiving water station is required.

**VII. LOCATION AND SITE MAPS**

Attach a topographic map or maps of the area. Maps should clearly show the following:

1. The legal boundaries of the facility;
2. The location and identification number of each of the dry docks and their sampling locations.

**VIII. BEST MANAGEMENT PRACTICES (BMPs) PLANS**

Attach BMPs plans on separate sheets. The BMPs plans shall address all specific means of controlling the discharge of pollutants, including non-contact cooling water thermal waste, from the dry dock facility. The BMPs plans shall also include a schedule and procedures for plan review, plan implementation, and annual training.

**IX. AUTHORIZATION OF REPRESENTATIVE**

This statement authorizes the named individual or any individual occupying the named position of the company/organization listed below to act as our representative to process the required NOI for coverage under the NPDES General Permit for discharges from the subject facility. The Company/Organization hereby agrees to comply with and be responsible for all the conditions specified in the General Permit.

Company/Organization Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State and Zip Code+4: \_\_\_\_\_

Authorized Contact Person and Title: \_\_\_\_\_

Phone No.: ( ) \_\_\_\_\_

Fax No.: ( ) \_\_\_\_\_

E-mail address: \_\_\_\_\_

A separate authorization statement is attached:

Yes \_\_\_\_\_ No \_\_\_\_\_

**X. CERTIFICATION**

I certify under penalty of law that this document and all attachments were prepared under my direct 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 directly responsible for gathering the information, the information submitted is, true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility and the development and implementation of Pollution Prevention Practices, if required, will be complied with.

Signature \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name and Title: \_\_\_\_\_

Company/Organization Name: \_\_\_\_\_

Phone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

E-mail address: \_\_\_\_\_

**XI. APPLICATION FEE AND MAILING INSTRUCTIONS**

Submit this NOI form with attachments and a check made out to the “San Francisco Bay Regional Water Quality Control Board” with the appropriate fee (see <http://www.waterboards.ca.gov/fees/docs/adoptedfeeschedule.pdf>) to the following address:

San Francisco Bay Regional Water Quality Control Board  
 Attn: NPDES Wastewater Division  
 1515 Clay Street, Suite 1400  
 Oakland, CA 94612



**ATTACHMENT C – RESERVED**

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**ATTACHMENT D –STANDARD PROVISIONS****I. STANDARD PROVISIONS – PERMIT COMPLIANCE****A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this 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. (40 CFR § 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 Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

**B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for the Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 CFR § 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 Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR § 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 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 the Discharger only when necessary to achieve compliance with the conditions of this Order (40 CFR § 122.41(e)).

**E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 122.41(g).)
2. The issuance of this 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 § 122.5(c).)

## F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (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 § 122.41(i); Wat. Code, § 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 Order (40 CFR § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR § 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 Order (40 CFR § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR § 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 § 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 § 122.41(m)(1)(ii).)
2. 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 § 122.41(m)(2).)
3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against the Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 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 § 122.41(m)(4)(i)(B)); and
- c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 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 § 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 § 122.41(m)(3)(ii).)

## H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations 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 § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations 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 § 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 § 122.41(n)(3)):
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));
  - b. The permitted facility was, at the time, being properly operated (40 CFR § 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 § 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 § 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 § 122.41(n)(4).)

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This 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 § 122.41(f).)

### **B. Duty to Reapply**

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

### **C. Transfers**

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of this Order 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 § 122.41(l)(3); § 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 § 122.41(j)(1).)
- B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR § 122.41(j)(4); § 122.44(i)(1)(iv).)

## **IV. STANDARD PROVISIONS – RECORDS**

- A. Except for records of monitoring information required by this 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 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 Order, and records of all data used to complete the application for this 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 Regional Water Board Executive Officer at any time. (40 CFR § 122.41(j)(2).)
- B. Records of monitoring information shall include:
  1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));
  2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));
  3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and
6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

**C. Claims of confidentiality for the following information will be denied (40 CFR § 122.7(b)):**

1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

## **V. STANDARD PROVISIONS – REPORTING**

### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, § 13267.)

### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional 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 § 122.41(k).)
2. 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 § 122.22(a)(3).)
3. All reports required by this Order and other information requested by the Regional 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 § 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 § 122.22(b)(2)); and

- c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR § 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 Regional 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 § 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 § 122.22(d).)

### **C. Monitoring Reports**

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 CFR § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(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 Order, shall be submitted no later than 14 days following each schedule date. (40 CFR § 122.41(l)(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 become 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 § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR § 122.41(l)(6)(ii)):
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)
  - b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)
3. The Regional 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 § 122.41(l)(6)(iii).)

**F. Planned Changes**

The Discharger shall give notice to the Regional 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 § 122.41(l)(1)):

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 § 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 Order. (40 CFR § 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 § 122.41(l)(1)(iii).)

**G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR § 122.41(l)(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 § 122.41(l)(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 Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(l)(8).)

## VI. STANDARD PROVISIONS – ENFORCEMENT

- A. The Regional Water Board is authorized to enforce the terms of this 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 Regional Water Board as soon as they know or have reason to believe (40 CFR § 122.42(a)):

1. 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 Order, if the discharge will exceed the highest of the following “notification levels” (40 CFR § 122.42(a)(1)):
  - a. 100 micrograms per liter ( $\mu\text{g/L}$ ) (40 CFR § 122.42(a)(1)(i));
  - b. 200  $\mu\text{g/L}$  for acrolein and acrylonitrile; 500  $\mu\text{g/L}$  for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter ( $\text{mg/L}$ ) for antimony (40 CFR § 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 § 122.42(a)(1)(iii)); or
  - d. The level established by the Regional Water Board in accordance with Section 122.44(f) (40 CFR § 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 Order, if that discharge will exceed the highest of the following “notification levels” (40 CFR § 122.42(a)(2)):
  - a. 500 micrograms per liter ( $\mu\text{g/L}$ ) (40 CFR § 122.42(a)(2)(i));
  - b. 1 milligram per liter ( $\text{mg/L}$ ) for antimony (40 CFR § 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 § 122.42(a)(2)(iii)); or
- d.** The level established by the Regional Water Board in accordance with section 122.44(f) (40 CFR § 122.42(a)(2)(iv)).

**ATTACHMENT E – MONITORING AND REPORTING PROGRAM**

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**ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)**

National Pollutant Discharge Elimination System (NPDES) regulations at 40 CFR 122.48 require that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements that implement the federal and State regulations.

**I. GENERAL MONITORING PROVISIONS**

- A. Dischargers shall comply with this MRP. The Executive Officer may amend this MRP pursuant to 40 CFR 122.62, 122.63, and 124.5.
- B. Dischargers shall conduct all monitoring in accordance with Attachment D, Section III, and as described in this MRP. Equivalent test methods must be more sensitive than those specified in 40 CFR 136 and must be specified in this permit.

**II. MONITORING LOCATIONS**

Each Discharger shall establish monitoring locations as set forth below to demonstrate compliance with this Order.

**Table E-1. Monitoring Locations**

Type of Sampling Location	Monitoring Location Name	Monitoring Location Description
Exposed Deck of Dry Dock <i>n</i>	EFF-00 <i>n</i> <sup>(1)</sup>	Randomly selected areas on dry dock <i>n</i> deck that have been exposed to wastes from operations (three areas at a minimum, each a minimum of one square foot for each class of analytes).
Dry Dock <i>n</i> Vicinity Sediment	SED-00 <i>n</i> A SED-00 <i>n</i> B SED-00 <i>n</i> C SED-00 <i>n</i> D	For each floating dry dock, four separate locations, two at each end, where representative sediment samples may be collected at the perimeter of dry dock <i>n</i> . For each graving dry dock, two separate locations, where representative sediment samples may be collected in the vicinity of the caisson.
Background Sediment	SED-00( <i>N</i> <sup>(2)</sup> +1)	Sediment location at sufficient distance from the dry dock to be representative of background sediment conditions.
Receiving Water at Dry Dock <i>n</i> Perimeter	RSW-00 <i>n</i>	San Francisco Bay near the perimeter or end of dry dock No. <i>n</i> , close to sampling point SED-00 <i>n</i> A, SED-00 <i>n</i> B, SED-00 <i>n</i> C, or SED-00 <i>n</i> D for floating dry docks, or SED-00 <i>n</i> A or SED-00 <i>n</i> B for graving dry docks.
Background Receiving Water	RSW( <i>N</i> <sup>(2)</sup> +1)	Water location at same location as background sediment location (at sufficient distance from the dry dock to be representative of background water conditions).

<sup>(1)</sup> *n* is the number designation of the dry dock.

<sup>(2)</sup> *N* is the total number of dry docks at the facility. For example if there were two dry docks, then the location names for the sample stations would be SED-003 and RSW-003. For each facility, regardless of the number of dry docks, only one background sediment and one background receiving water station is required.

### III. MONITORING REQUIREMENTS FOR DRY DOCK SURFACES

- A. Prior to submergence of each dry dock, each Discharger shall observe the cleanliness of the dry dock surfaces. Observations shall be recorded with the date and time of dry dock use and other observations relevant to the discharge of wastes. The Discharger shall note any conditions requiring correction, such as the presence of waste materials. The Discharger shall correct any such condition prior to flooding or submergence. Inspection reports shall identify the inspector's name, title, and any corrective actions taken.
- B. Each Discharger shall conduct monitoring at Monitoring Locations EFF-00*n* as described below.

#### 1. Wipe Sampling Locations

Sample locations shall be selected by a randomized grid procedure, and locations shall be recorded and reported in quarterly self-monitoring reports. To assess the amount of pollutant remaining on the dry dock after cleaning and before submergence, three areas shall be selected randomly from a grid on the dry dock deck. At each grid location, wipe samples shall be collected for analysis of the metals identified in Table 3 of the Order and, when required, polychlorinated biphenyls (PCBs) and tributyltin (TBT) from five adjoining areas. The adjoining wipe samples shall be considered as one set of wipe samples to meet the analytical requirements of this Order. Three sample sets are required for each sampling event for Monitoring Locations EFF-00*n*. The methodology shall follow USEPA recommended procedures including, but not limited to: EPA/600/R-07/004 January 2007, EPA/540/P-91/008 OSWER Directive 9360.4-07 January 1991, and 40 CFR 761.123.

#### 2. Wipe Sampling Procedure

Samples shall be collected using commercially available wipe test kits for the collection of metals, PCBs, and TBT. The results of the analyses shall be reported as  $\mu\text{g}/\text{sample}$  or  $\mu\text{g}/\text{ft}^2$ .

#### 3. Wipe Sampling Frequency

Sampling of each dry dock surface, after cleaning, is required twice per calendar year, not less than four months apart. Sampling shall be performed by collecting wipe samples from dry dock surfaces exposed to waste. Biannual sampling and analysis need not include PCBs or TBT if these pollutants are not detected in the wipe samples to be taken in the first year of operation and once every three years thereafter, as described below.

To assess the efficacy of the wipe sampling procedure, once every three years, starting with the first year of operation following the effective date of the Authorization to Discharge, each Discharger shall sample three sets of randomly selected and identified adjacent one  $\text{ft}^2$  areas on the surface of each dry dock, and analyze the samples for all the pollutants identified in Table 3 of the Order. This sampling shall occur prior to cleaning and biannual sampling of the cleaned deck and be reporting in the annual self monitoring report.

#### 4. Wipe Sample Reporting and Triggers

All the wipe sampling data collected shall be compared to the triggers in Table 3 of the Order, and reported in quarterly and annual reports.

Dischargers shall identify analytical methods in monitoring reports. Analytical methods shall be adequately sensitive to detect pollutants at concentrations below the triggers in Table 3 of the Order.

**5. Wipe Sampling Details**

The wipe sample for the metals listed in Table 3 (excluding hexavalent chromium) shall be collected using a lead dust sampling wipe, 5” by 7¾”, pre-moistened with water, polysorbate 20, methylparaben, and propylparaben, and placed in a sterile digestion tube.

The wipe sample for hexavalent chromium shall be collected using a sterile 4” by 4” gauze sponge moistened, but not saturated, with deionized water and placed in a sterile glass jar for analysis.

The wipe sample for PCBs shall be collected using a sterile 4” by 4” gauze sponge moistened with hexane, and placed in a separate sterile glass jar for analysis.

The wipe sample for TBT shall be collected using a sterile 4” by 4” gauze sponge moistened with deionized water, and placed in a separate sterile glass jar for analysis.

C. If, on the basis of operational experience, the sampling protocol specified in Section III.A.2, above, proves unworkable or unreliable, a Discharger may propose an alternate procedure. The Discharger may commence use of the alternate procedure with written Executive Officer approval.

**IV. RECEIVING WATER MONITORING REQUIREMENTS**

Each Discharger shall collect and analyze receiving water samples collected at Monitoring Locations RSW-00*n* and RSW-00(*N*+1) and record standard observations as described below.

**Table E-2. Receiving Water Monitoring**

Parameter	Units	Sample Type	Minimum Sampling Frequency
Total Suspended Solids	mg/L	Grab	Annually
Settleable Solids	ml/L	Grab	Annually
Oil and Grease	mg/L	Grab	Annually
Metals <sup>[1]</sup>	µg/L	Grab	Annually
PCBs	µg/L	Grab	Annually
Tribuyltin	µg/L	Grab	Annually
Standard observations <sup>[2]</sup>			During and immediately after the release of each vessel

<sup>[1]</sup> The following metals (of those identified at 40 CFR 131.38[b]) shall be monitored: chromium (III), chromium (VI), copper, lead, nickel, and zinc.

<sup>[2]</sup> Standard observations shall include the following:  
 (a) The presence or absence of any floating and suspended materials (e.g., oil, grease, algae, and other macroscopic particulate matter), and source and size of affected area.  
 (b) Any discoloration or turbidity, including a description of color, source, and size of affected area.  
 (c) The presence or absence of odor and characterization of source.  
 (d) The presence of water-associated waterfowl or wildlife, people fishing, or other recreational activities in the vicinity of the discharge.

- (e) Hydrographic conditions, including time and height of high and low tides (corrected to nearest National Oceanic and Atmospheric Administration location for the observation date and time).
- (f) Weather conditions, including air temperature and precipitation during the five days prior to observation.

**V. SEDIMENT MONITORING REQUIREMENTS**

For floating dry docks, each Discharger shall conduct sediment monitoring at Monitoring Locations SED-00nA, SED-00nB, SED-00nC, and SED-00nD for floating dry dock *n*. The samples shall be composites from surface grabs at Monitoring Locations SED-00nA, SED-00nB, SED-00nC, and SED-00nD.

For graving dry docks, each Discharger shall conduct sediment monitoring at Monitoring Locations SED-00nA and SED-00nB for graving dry dock *n*. The samples shall be composites from surface grabs at Monitoring Locations SED-00nA and SED-00nB.

Each Discharger shall also conduct sediment monitoring at Monitoring Location SED-00(N+1) at the same location as the remote receiving water Monitoring Location RSW-00(N+1). The sample shall be a grab of surface sediment.

Grab samples shall be from the top 2-3 centimeters of sediment. Sediment sampling shall occur outside the influence of any possible dredging, if possible.

**Table E-3. Sediment Monitoring of Composite Samples**

Parameter	Units	Minimum Sampling Frequency
Metals <sup>[1]</sup>	µg/kg	1/Year
PCBs	µg/kg	1/Year
Tributyltin	µg/kg	1/Year

<sup>[1]</sup> Sampling shall include the following metals: chromium (III), chromium (VI), copper, lead, nickel, and zinc.

**VI. REPORTING REQUIREMENTS**

**A. General Reporting Requirements**

Each Discharger shall comply with all Federal Standard Provisions (Attachment D). Each Discharger shall maintain records in a manner and at a location (e.g., dry dock offices) such that the records are accessible to Regional Water Board staff. The minimum period of retention specified in Federal Standard Provisions (Attachment D), Section IV, Records, shall be extended during the course of any unresolved litigation regarding the subject discharge, or when requested by the Executive Officer.

**B. Routine Reports**

Each Discharger shall submit both quarterly Self Monitoring Reports (SMRs) and annual reports.

1. **Report Format.** The Discharger shall electronically submit SMRs as an attached file using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). The CIWQS website will provide

additional directions for SMR submittal in the event of a service interruption for electronic submittal.

- 2. Report Dates and Contents.** The Discharger shall submit SMRs and annual reports by the due dates, and with the contents, specified below:
- a. Quarterly SMRs** — Quarterly SMRs shall be due 30 days after the end of each calendar quarter, covering that calendar quarter. Quarterly monitoring periods shall be January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31. The quarterly SMR shall contain the applicable items described in Attachment D, sections V.B and V.C, as well as the items below.
- i.** Quarterly SMRs shall include the results of all monitoring specified in Sections III through V of this MRP. Reports shall include analytical method detection limits, minimum levels, reporting levels, and related quantification parameters. If the analytical data for samples collected during a quarter are unavailable for incorporation into that quarter's report, then the data shall be included in the next quarter's SMR. If the Discharger monitors any pollutant more frequently than required by this Order, the Discharger shall include the results of such monitoring in the SMR.
- ii.** The Discharger shall report with each sample result the Reporting Level (RL) and Method Detection Limit (MDL).
- (a) Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- (b) Sample results less than the 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. 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 (+/- a percentage of the reported value), numerical ranges (low to high), or any other means the laboratory considers appropriate.
- (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 minimum level (ML) (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. The Discharger shall not use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- iii.** The Discharger shall report how many times each of its dry docks has been submerged or flooded after vessel servicing. The Discharger shall also describe cleaning activities completed before each time the dry dock is submerged or flooded. This will include a description of the vessels serviced and documentation vouching for surface clean-up, according to the BMPs Plan, prior to submerging or flooding. If



wipe samples are collected and analyzed in that quarter, then information on the specific nature of the vessel service immediately prior to sampling shall be identified.

- iv. The Discharger shall report the number of vessels that discharged non-contact cooling water to the receiving water, estimate the average cooling water discharge flow (gallons per day) and duration, and describe the nature of the BMPs used to lower the temperature of the cooling water prior to discharge.
- v. The Discharger shall attach a cover letter to each SMR that includes the following information:
  - (a) Clear identification of any violations of the Order or a clear statement that there were no violations.
  - (b) Description of any violations and proposed time schedule for any corrective actions.
  - (c) Identification of any wipe sample analysis result that exceeds a trigger in Table 3 of the Order, and any corrective actions taken or planned.
  - (d) Any claims for data invalidation. (Data should not be submitted in an SMR if it does not meet quality assurance/quality control standards. However, if the Discharger wishes to invalidate any measurement after it was submitted in an SMR, a letter shall identify the measurement suspected to be invalid and state the Discharger's intent to submit, within 60 days, a formal request to invalidate the measurement. This request shall include the original measurement in question, the reason for invalidating the measurement, all relevant documentation that supports invalidation [e.g., laboratory sheet, log entry, test results, etc.], and the corrective actions taken or planned [with a time schedule for completion] to prevent recurrence of the sampling or measurement problem.)
- b. Annual Reports** — Annual reports shall be due February 1 each year, covering the previous calendar year. Annual reports shall commence on the effective date of the Authorization to Discharge, and cover the period January 1 through December 31. The annual report shall contain the items described below.
  - i. Annual compliance summary.
  - ii. Comprehensive discussion of performance and compliance. (This summary shall include each parameter for which the Order specifies a trigger, the number of samples taken during the monitoring period, and the number of samples that exceeded triggers. It shall also include any corrective actions taken or planned, such as changes to equipment or operations that may be needed to achieve compliance, and any other actions taken or planned that are intended to improve the performance and reliability of the Discharger's practices.)
  - iii. Both tabular and graphical summaries of monitoring data. (The Discharger shall identify trends, if any, in pollutant concentrations found in wipe samples, receiving water, or sediments for the previous year or years.)

- iv. Results of facility report reviews. (See Provisions VI.C.6 [Contingency Plan], VI.C.7.d [Best Management Practices for Cleaning Dry Dock Surfaces] and VI.C.9 [Best Management Practices for Non-Contact Cooling Water Discharges] of the Order.)

**3. Report Submission**

Each Discharger shall submit SMRs and annual reports to the Regional Water Board, signed and certified as required by the Federal Standard Provisions (Attachment D), to the address listed below, unless the Discharger submits these reports electronically using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>).

Executive Officer  
 California Regional Water Quality Control Board  
 San Francisco Bay Region  
 1515 Clay Street, Suite 1400  
 Oakland, CA 94612  
 ATTN: NPDES Wastewater Division

**C. Discharge Monitoring Reports**

1. As described in Section VI.B.3 above, at any time during the term of this Order, the State or Regional Water Board may notify Dischargers to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, Dischargers shall submit DMRs in accordance with the requirements described below.
2. Once notified by the State or Regional Water Board, Dischargers shall submit paper copy DMRs. DMRs must be signed and certified as required by the Federal Standard Provisions (Attachment D). Dischargers shall submit original DMRs and one copy to one of the addresses listed below:

Standard Mail	FedEx/UPS/Other Private Carriers
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 <sup>th</sup> Floor Sacramento, CA 95814

3. All discharge monitoring results shall be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format as USEPA Form 3320-1.

**D. Violation and Spill Reports**

1. Within 24 hours of becoming aware of a violation of this Order (e.g., a spill of oil or other hazardous material not contained onsite and completely cleaned up), the Discharger shall report by telephone to the Regional Water Board at (510) 622-2369.
2. The Discharger shall report spills to the State Office of Emergency Services (telephone [800] 852-7550) only when the spills are in accordance with applicable reportable quantities for hazardous materials.
3. The Discharger shall submit a written report to the Regional Water Board within five working days following telephone notification unless directed otherwise by Regional Water Board staff. A report submitted electronically is acceptable. The written report shall include the following:
  - a. Date and time of violation or spill, and duration if known;
  - b. Location of violation or spill (street address or description of location);
  - c. Nature of violation or material spilled;
  - d. Quantity of any material involved;
  - e. Receiving water body affected, if any;
  - f. Cause of violation or spill;
  - g. Estimated size of affected area;
  - h. Observed impacts to receiving waters (e.g., oil sheen, fish kill, or water discoloration);
  - i. Corrective actions taken to correct violation or to contain, minimize, or clean up spill;
  - j. Future corrective actions planned to prevent recurrence and implementation schedule;  
and
  - k. Persons or agencies notified.

**ATTACHMENT F - FACT SHEET**

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## ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to any Discharger. Sections or subsections of this Order not specifically identified as “not applicable” fully apply to the Dischargers.

### I. PERMIT INFORMATION

- A. Site owners or operators who apply for an Authorization to Discharge under this Order and who are granted such authorization are hereinafter called “Dischargers.” For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to “Discharger” herein.
- B. This Order requires each Discharger to submit a Notice of Intent (NOI) and, if available, monitoring data according to the requirements contained in the Monitoring and Reporting Program (Attachment E).

### II. FACILITY DESCRIPTION

#### A. Facility and Discharge Descriptions

This Order is for dry dock operations located within the San Francisco Bay Region, which for purposes of this Order includes Central, Lower, and South San Francisco Bay; San Pablo Bay; Carquinez Strait; Mare Island Strait; Suisun Bay; and the Sacramento-San Joaquin Delta.

Dischargers that enroll under this Order use graving dry docks or floating dry docks to get ships and other vessels out of the water. With a floating dry dock, the vessel is moved into position over supports on the dry dock deck, which is partially submerged under the vessel. The water is then pumped out of ballast tanks into adjacent waters to raise the dry dock and vessel out of the water. After work is completed, the process is reversed (ballast tanks are filled) to submerge the dry dock and refloat the vessel.

When a graving dry dock is flooded, a vessel is brought into the dry dock and positioned onto support blocks. The dock end is closed with a caisson (dry dock “door”) and the dock is emptied of all water via a sump pump that discharges the water. The vessel is then left standing freely on the support blocks. Water is pumped back into the dry dock when work is completed to refloat the vessel. The caisson is opened, and the vessel may leave the dry dock.

This Order covers the following types of discharges:

- 1. **Discharges from Dry Dock Surfaces.** Discharges regulated by this Order consist of water that washes over the dry docks when they are submerged or flooded. Water flowing over dry dock surfaces can carry particulates and other residual material. Shipyard activities can involve many sources of pollutants, including blast abrasives, paint chips, cutting and welding slag, paper trash, discarded materials, sediment, marine growth, oil, solvents, and plastics. When work on a vessel is complete, the dry dock deck, or floor, is swept, and debris that ends up on the dry dock

floor is removed prior to the next cycling of the dry dock. Any residual particulate matter remaining on the floor of the dry dock after cleanup has the potential to come in contact with water when the dry dock is submerged or flooded.

2. **Integral Ballast Water.** Floating dry docks use integral ballast water to raise and lower vessels into and out of the water. Currently, the largest floating dry dock in the San Francisco Bay Region (operated by BAE Systems San Francisco Ship Repair) requires about 22 million gallons of integral ballast water each time the dry dock is lowered and raised.
3. **Non-Contact Cooling Water.** This Order covers non-contact cooling water associated with vessels undergoing maintenance and repair. Such vessels may have crew living on-board while in dry dock. In those situations, on-board equipment, such as heating, air conditioning, and power generation equipment, continues to operate. This equipment requires cooling water to remove waste heat. This cooling water is pumped from adjacent surface water, through heat exchangers, and then returned back to the same water body.
4. **Salt Water Fire Suppression Water.** This Order covers salt water fire suppression water. Dischargers may occasionally release over-pressure from salt water fire protection systems. The source of this water is the same as the receiving water. The systems circulate salt water for fire suppression when needed. The largest such fire suppression system in the San Francisco Bay Region (at BAE Systems San Francisco Ship Repair) discharges at a rate of about 290,000 gallons per day.
5. **Stormwater from Dry Dock Surfaces *after* Cleaning.** When no shipyard activity is occurring and the dry docks are clean, stormwater runoff from the dry dock surfaces may be discharged.

This Order does *not* cover process water used in ship dismantling operations, seepage water from graving dry dock walls, seepage water from graving dry dock caissons, ballast water from vessels in dry dock, and stormwater runoff from dry dock surfaces is collected in dry dock sumps. This water must be disposed of in compliance with applicable federal, State, and local laws and requirements. This Order also does *not* cover sanitary wastewater or stormwater from onshore facilities, including piers.

The State Water Board developed a statewide NPDES General Permit for stormwater discharges associated with industrial activities (NPDES General Permit CAS000001). Stormwater discharges that are not commingled with other wastewaters may be regulated under the State Water Board General Permit.

## B. Existing Requirements

This is a new general permit. It may be used for discharges from existing and new dry docks. Existing individual dry dock NPDES permits do not contain numeric effluent limitations. They contain discharge prohibitions, receiving water limitations, narrative effluent limitations, and provisions requiring the implementation of Best Management Practices (BMPs) to ensure that dry dock surfaces are clean and free of pollutants prior to submergence. As a component of the required BMPs, permits issued in 2011 required routine collection of wipe and rinse samples of dry dock surfaces prior to the submergence or flooding of the dry dock. These 2011 permits required samples to be analyzed for metals that potentially result from ship repair, rebuilding, and dismantling operations; PCBs; and tributyltin. These 2011 permits contained triggers,

exceedance of which required dischargers to reexamine and, if possible, improve their cleaning procedures to reduce residual contaminants on the dry dock surfaces.

**III. APPLICABLE PLANS, POLICIES, AND REGULATIONS**

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

**A. Legal Authorities**

This Order is issued pursuant to Clean Water Act (CWA) Section 402 and implementing regulations adopted by the USEPA and CWC Chapter 5.5, Division 7 (commencing with Section 13370). It serves as an NPDES permit for point source discharges to surface waters. This Order also serves as WDRs pursuant to CWC Article 4, Chapter 4, Division 7 (commencing with Section 13260).

**B. California Environmental Quality Act (CEQA)**

Under CWC Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA.

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

**1. Water Quality Control Plans.** *The Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) is the Regional Water Board’s master water quality control planning document. It designates beneficial uses and water quality objectives (WQOs) for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve WQOs. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board (State Water Board), USEPA, and the Office of Administrative Law, as required. Requirements of this Order implement the Basin Plan.

The Basin Plan identifies beneficial uses for all parts of San Francisco Bay. The table below lists beneficial uses for the receiving waters as identified in the Basin Plan. The Basin Plan implements State Water Board Resolution No. 88-63, which establishes State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Because of the marine influence in most parts of San Francisco Bay, total dissolved solids levels exceed 3,000 milligrams per liter (mg/L) and thereby meet an exception to State Water Board Resolution No. 88-63. The MUN designation therefore only applies to the Sacramento-San Joaquin Delta, where dissolved solid concentrations are lower.

**Table F-1. Basin Plan Beneficial Uses of San Francisco Bay**

Receiving Water Name	Beneficial Uses
Central, Lower, and South San Francisco Bay; San Pablo Bay; Carquinez Strait; Mare Island Strait; Suisun Bay; and Sacramento-San Joaquin Delta	Agriculture (AGR) Industrial Service Supply (IND) Municipal Supply (MUN) Groundwater Recharge (GWR) Ocean Commercial and Sport Fishing (COMM) Estuarine Habitat (EST) Fish Migration (MIGR) Preservation of Rare and Endangered Species (RARE) Fish Spawning (SPWN)



	Wildlife Habitat (WILD) Water Contact Recreation (REC1) Non-contact water Recreation (REC2) Navigation (NAV) Industrial Process Supply (PROC) Shell Fish Harvesting (SHELL)
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The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters. Requirements of this Order implement the Thermal Plan.

The State Water Board's *Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1, Sediment Quality* became effective on August 25, 2009. This 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.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About 40 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 apply in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority toxic pollutants.
3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria USEPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria USEPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
4. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards become effective for CWA purposes (40 CFR 131.21, 65 Fed. Reg. 24641 [April 27, 2000]). Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.
5. **Antidegradation Policy.** NPDES regulations at 40 CFR 131.12 requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where it applies under federal law and requires that existing water quality be maintained unless degradation is

justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

- 6. Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All limitations and requirements of this Order are consistent with anti-backsliding requirements of the CWA and NPDES Regulations.

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

In October 2011, USEPA approved a list of impaired water bodies prepared pursuant to CWA Section 303(d), which requires the identification of specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. This list (the 303[d] List) contains the San Francisco Bay, as described in this Order, as a waterbody impaired by chlordane, DDT, dieldrin, dioxin compounds, furan compounds, invasive species, mercury, selenium, and dioxin-like and non dioxin-like PCBs. In November 2010, USEPA partially approved an updated 303(d) list. Where the Regional Water Board has not done so already, it plans to adopt Total Maximum Daily Loads (TMDLs) for water bodies on the 303(d) list. TMDLs establish wasteload allocations for point sources and load allocations for non-point sources, and are established to achieve the water quality standards for the impaired water bodies.

The SIP requires final effluent limitations for all 303(d)-listed pollutants to be consistent with TMDLs and associated wasteload allocations. A TMDL for mercury became effective on February 12, 2008, and a TMDL for PCBs became effective on March 29, 2010. Neither TMDL contains wasteload allocations for dry docks. As explained in section IV.D.3 of this Fact Sheet, this Order does not find Reasonable Potential for mercury. It does find Reasonable Potential for PCBs. Nevertheless, the provisions of this Order require BMPs intended to ensure that no detectable PCBs will be discharged from dry docks subject to this Order. The PCBs trigger in Table 3 of the Order is based on a typical detection limit for the PCBs wipe test.

### **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 waters of the United States. Control of pollutants is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the NPDES regulations: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality objectives (WQOs) to protect receiving water beneficial uses. Several specific factors affecting the development of limitations and requirements in this Order are discussed below.

#### **A. Discharge Prohibitions**

- 1. Discharge Prohibition III.A (No discharge other than as described in this Notice of Intent):** This prohibition is based on 40 CFR 122.21(a), duty to apply, and CWC Section

13260, which requires filing an application and Report of Waste Discharge before discharge can occur. Discharges not described in a Notice of Intent are prohibited.

2. **Discharge Prohibition III.B (No discharge of sanitary wastewater):** This prohibition is necessary because the requirements of this Order do not address sanitary wastewater. Sanitary wastewater discharges must meet secondary treatment standards and standards for the protection of human health. This Order's requirements do not implement these standards so sanitary discharges are prohibited.
3. **Discharge Prohibition III.C (No discharge of solid materials and wastes, spent abrasive, paint residues, and marine fouling organisms):** This prohibition is based on Basin Plan Table 4-1, Discharge Prohibitions 6 and 7, which prohibit discharges of stable toxic and deleterious substances, and discharges of solid wastes. The rationale for this prohibition is to minimize the discharge of persistent toxic pollutants and solid wastes into State waters.
4. **Discharge Prohibition III.D (No discharge of floating materials):** This prohibition is based on Basin Plan Table 4-1, Discharge Prohibitions 8 and 13, which prohibit the discharge of oil or other petroleum product, or other floating materials, to protect birds and other wildlife from the possible toxic effects.
5. **Discharge Prohibition III.E (No discharge of ballast water from vessels in dry dock):** This prohibition is necessary because ballast water from vessels in dry dock may contain invasive species and the requirements of this Order do not reflect the discharge of such ballast water.
6. **Discharge Prohibition III.F (No discharge of power washing or pressure washing water or other process wastewater):** This prohibition is based on Basin Plan Prohibition 6, which limits the discharge of any persistent toxicants. Wash waters are to be collected for discharge to a sanitary sewer system or through other legal means not subject to this Order. This prohibition is necessary because the requirements of this Order do not reflect the discharge of power washing or pressure washing water, boiler drainage, or any process water, thus this Order must prohibit the discharge of such wastewater.
7. **Discharge Prohibition III.G (No discharge of seepage water or stormwater):** This prohibition is necessary because the requirements of the Order do not address seepage water or stormwater. Seepage or stormwater could contain pollutants not controlled by the BMPs specified in the Order. Thus, the Order may not sufficiently protect water quality if seepage water or stormwater were discharged.

## **B. Basin Plan Discharge Prohibition 1**

Basin Plan Discharge Prohibition 1 prohibits discharge of "any wastewater which has particular characteristics of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1...." This Prohibition is to provide an added degree of protection from the continuous effect of discharges and provide a buffer against the effects of abnormal discharges caused by temporary plant upsets or malfunctions. As explained in Basin Plan Section 4.2, the Regional Water Board reviews requests for exceptions to this prohibition based in part on the reliability of a discharger's system in preventing inadequately treated wastewater from being discharged to the receiving water.

Water having contact with the dry dock deck surfaces during and after submergence or flooding flows on to, or into, the dry dock to refloat a vessel and then returns to the source surface water. These discharges are not continuous and not subject to upset. The 10:1 dilution ratio was designed to accommodate treatment plant upsets. In any case, providing an initial dilution of at least 10:1 would be impracticable for this type of discharge, and thus would be an inordinate burden for the discharger. Furthermore, such an inordinate burden would not result in greater water quality protection than implementation of the BMP Plan required in Provision VI.C.7 of the Order.

Integral ballast water, non-contact cooling water from vessels in dry dock, and salt water fire suppression water are all drawn from the receiving water and then returned. No pollutants of concern are added, other than waste heat in cooling water. None of these discharges is continuous, and none is subject to upset. Providing an initial dilution of at least 10:1 would not result in greater water quality protection than implementation of the BMP Plan required in Provision VI.C.9 of the Order.

### **C. Technology-Based Effluent Limitations**

The CWA requires that technology-based effluent limitations be established on several levels of control:

1. Best practicable treatment control technology (BPT) represents the average of the best existing performance by well-operated facilities within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
2. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory. BAT standards apply to toxic and non-conventional pollutants.
3. Best conventional pollutant control technology (BCT) represents the control from existing industrial point source of conventional pollutants including BOD, TSS, total coliform, pH, and oil and grease. The BCT standard is established after considering the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and the cost effectiveness of additional industrial treatment beyond BPT.
4. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of the NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines, and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. However, CWA 402(a)(1) and 40 CFR 125.3 authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where effluent limit guidelines are not available for certain industrial categories. USEPA has not issued effluent limit guidelines for the ship building and repair industry; however, USEPA conducted an extensive study of the ship building and repair industry and issued the *Development Document for Proposed Best Management Practices for the Shipbuilding and Repair Industry: Dry Docks Point Source Category* (December 1979). USEPA concluded, "This industry is such that numerical effluent limitations are impractical and difficult

to apply in a manner which could be monitored...” and “...Best Management Practices (BMP) have been developed for general application, and should be considered as guidance in lieu of numerical limitations.” Therefore, this Order (Section VI.C.7) contains narrative (BMP-based) requirements that represent BPT controls based on BPJ. In setting these limits, the factors specified in 40 CFR 125.3(d), as shown below, were considered.

**Table F-2. Factors Considered Pursuant to 40 CFR 125.3(d)(1)**

Factors	Considerations
(i) Total cost of technology in relation to effluent reduction benefits to be achieved	Thorough cleaning of dry dock surfaces using brushes and vacuums is achievable in the context of dry dock operations. Readily available motorized equipment can be used to remove potential pollutants, providing a substantial benefit relative to the total cost incurred.
(ii) Age of equipment and facilities involved	Dry docks, some of which may be old, cannot be readily altered. However, new and effective equipment (brooms, power washers, etc.) can be used to collect and remove potential pollutants.
(iii) Process employed	Methodical cleaning operations can be specified in the BMP Plan and can be readily monitored for compliance. No unusual or technically challenging processes are required (proper planning and scheduling of activities is most important).
(iv) Engineering aspects of application of control techniques	The process of sweeping, scrubbing, and cleaning dry dock surfaces does not lend itself to more sophisticated engineering controls.
(v) Process changes	Existing dry dock operators have been cleaning the surfaces of their dry docks after ship maintenance operations and prior to submergence for years. No specific process changes are required.
(vi) Non-water quality environmental impact (including energy requirements)	Waste solids would continue to be removed from dry docks and recycled or properly disposed of as appropriate.

**D. Water Quality-Based Effluent Limitations (WQBELs)**

WQBELs are derived to implement WQOs that protect beneficial uses. Beneficial uses and WQOs have been approved pursuant to federal law. Most beneficial uses and Basin Plan WQOs were approved under State law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the [Clean Water] Act” pursuant to 40 CFR 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than those required by CWA water quality standards.

**1. Scope and Authority**

NPDES regulations at 40 CFR 122.44(d)(1)(i) require permits to include WQBELs for pollutants, including toxicity, that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. As specified in 40 CFR 122.44(d)(1)(i), permits are required to include WQBELs for all pollutants “which the Director determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.” The process for determining “Reasonable Potential” and calculating WQBELs when necessary is intended (1) to protect the receiving water beneficial uses as specified in

the Basin Plan, and (2) to achieve applicable WQOs contained in the CTR, NTR, and Basin Plan.

## 2. Applicable Beneficial Uses and WQOs

The WQOs that apply to the receiving waters for this discharge are from the Basin Plan; the CTR, established by USEPA at 40 CFR 131.38; and the NTR, established by USEPA at 40 CFR 131.36. Some pollutants have WQOs established by more than one of these sources. The State Thermal Plan regulates thermal waste discharges. The discharge of non-contact cooling water to surface water would be considered a thermal waste discharge.

- a. **Basin Plan.** The Basin Plan specifies numeric WQOs for 10 priority toxic pollutants, these are arsenic, cadmium, chromium (VI), copper in marine and freshwater, lead, mercury, nickel, silver, zinc, and cyanide. Effluent limitations and provisions contained in this Order are based on available information designed to implement these WQOs.
- b. **CTR.** The CTR specifies numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants. These criteria apply to all inland surface waters and enclosed bays and estuaries of the San Francisco Bay Region, although Basin Plan Tables 3-3 and 3-4 include numeric WQOs for certain of these priority toxic pollutants that supersede the CTR criteria (except in the South Bay south of the Dumbarton Bridge). Human health criteria are further identified as for consumption of “water and organisms” and “organisms only.” The CTR criteria for “organisms only” apply for this discharge because the receiving water is not a source of drinking water.
- c. **NTR.** The NTR establishes numeric aquatic life criteria for selenium, numeric aquatic life and human health criteria for cyanide, and numeric human health criteria for 33 other toxic organic pollutants for waters of San Francisco Bay that include the receiving waters for these discharges.
- d. **State Thermal Plan.** The Thermal Plan states that, for existing and new facilities thermal waste discharges to enclosed bays and estuaries must comply with limitations necessary to ensure protection of beneficial uses.
- e. **Sediment Quality Objectives.** The Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1, Sediment Quality contains a narrative WQO, “Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities in bays and estuaries of California.” This WQO is to be implemented by integrating three lines of evidence: sediment toxicity, benthic community condition, and sediment chemistry. The Policy requires that if the Regional Water Board determines that a discharge has reasonable potential to cause or contribute to an exceedance of this WQO, it is to impose the WQO as a receiving water limit.

## 3. Determining the Need for WQBELs

Assessing whether a pollutant has Reasonable Potential is the fundamental step in determining whether or not a WQBEL is required. Using the methods prescribed in the SIP Section 1.3, available effluent and receiving water data were analyzed to determine if facility discharges show Reasonable Potential. Data representative of effluent quality are unavailable

due to the nature of the discharges; therefore, this Reasonable Potential Analysis is based on the nature of dry dock operations and the shipyard industry in general.

**a. Discharges from Dry Dock Surfaces.** Based on industry practices and operations, there is Reasonable Potential for residual material to be washed into the receiving water when a dry dock is submerged or flooded. Such particulate material may contain metals common to the shipyard industry (e.g. chromium, copper, lead, nickel, and zinc), PCBs, and tributyltin at concentrations that could cause or contribute to exceedances of WQOs. This determination is based on the following Oregon Department of Environmental Quality and USEPA Office of Enforcement and Compliance Assurance documents, which provide descriptions of the pollutants generated during vessel maintenance and overhaul work.

- *Best Management Practices for Oregon Shipyards*, Oregon Department of Environmental Quality, 2000  
 (<http://www.deq.state.or.us/wq/pubs/bmps/shipyards.pdf>)
- *USEPA Office of Compliance Sector Notebook Project: Profile of the Shipbuilding and Repair Industry*, U.S. EPA Office of Enforcement and Compliance Assurance, 1997  
 (<http://www.epa.gov/compliance/resources/publications/assistance/sectors/notebooks/shipblsn.pdf>)
- *A Guide for Ship Scrappers*, U.S. Office of Enforcement and Compliance Assurance, 2000, EPA 315-B-00-001  
 (<http://www.epa.gov/compliance/resources/publications/civil/federal/shipscrapguide.pdf>).

Moreover, chromium, copper, lead, nickel, and zinc were detected in dry dock surface wipe samples collected in 2011 at two San Francisco Bay dry docks, Bay Ship & Yacht Co. and BAE Systems San Francisco Ship Repair. Other metals (i.e., antimony, cadmium, mercury, selenium, silver, and thallium) were not detected in those samples. A summary of the sampling data is show below.

**Table F-3. Wipe Sample Test Results**

Analyte	Bay Ship & Yacht Range (µg/ft <sup>2</sup> ) <sup>(1)(2)</sup>	BAE Systems Ship Repair Range (µg/ft <sup>2</sup> ) <sup>(1)(2)</sup>
Antimony	ND (3.0)	ND (4.0)
Arsenic	0.32-2.3	2.0 – 8.4
Cadmium	ND (0.25)	ND (2.0)
Chromium III		4.8 – 5,000
Chromium VI	ND (0.001)	0.001 – 0.10
Copper	65 - 1300	780 -79,000 <sup>(3)</sup>
Lead	0.47 – 6.3	3.6 – 23
Mercury	ND (0.010)	ND (0.05)
Nickel	1.2 - 16	4.5 - 17
Selenium	ND (0.5)	ND (2.0)
Silver	ND (0.25)	2.0 – 4.2
Thallium	ND (0.50)	ND (2.0)

Analyte	Bay Ship & Yacht Range ( $\mu\text{g}/\text{ft}^2$ ) <sup>(1)(2)</sup>	BAE Systems Ship Repair Range ( $\mu\text{g}/\text{ft}^2$ ) <sup>(1)(2)</sup>
Zinc	64	270 – 17, 300
Tributyltin	ND (0.02)	0.02 – 1.6
Polychlorinated Biphenyls (PCBs)	ND (2.5)	ND (1.0)

(1) Bay Ship & Yacht collected six samples (nine for copper); BAE Systems collected ten.

(2) Laboratory reporting levels are cited in parentheses when an analyte was reported as non-detect (ND).

(3) For this range, the median was 4,500 and the average was 14,000

- b. Integral Ballast Water.** Integral ballast water is water drawn from the receiving water, stored in the ballasts of a floating dry dock, and returned to the receiving water. There is no Reasonable Potential for any pollutant because there is no opportunity to introduce any pollutant to a floating dry dock's integral ballasts.
- c. Non-Contact Cooling Water.** Vessels in dry dock may continue to operate on-board heating and cooling systems that use non-contact cooling water taken from the adjacent surface water and return it to the same water body. In such cases, the returned cooling water contains waste heat that is then dissipated into the receiving water body. There is thus Reasonable Potential for this waste heat to exceed Thermal Plan objectives.
- d. Salt Water Fire Suppression Water.** Fire suppression water is drawn from the receiving water and immediately returned to the receiving water. There is no Reasonable Potential for any pollutant because there is no opportunity to introduce any pollutant before the water is discharged.
- e. Stormwater from Dry Dock Surfaces after Cleaning.** There is no Reasonable Potential for stormwater collected from dry dock surfaces after cleaning takes place if the BMPs required by Provisions VI.C.7 and CI.C.8 of the Order are implemented because these BMPs would remove any pollutants from the dry dock surfaces.

#### 4. Water Quality-Based Effluent Limitations (WQBELs)

Dry dock discharges exhibit Reasonable Potential for chromium, copper, lead, nickel, zinc, PCBs, tributyltin, and thermal waste. However, the establishment and enforcement of numeric effluent limitations for both chemical pollutants and thermal waste discharges are infeasible due to the difficulties of obtaining representative effluent samples and of applying numeric limitations. The Dischargers' potential releases of chemical pollutants and thermal wastes are most appropriately controlled through Best Management Practices (BMPs) (see Provisions VI.C.7, VI.C.8, and VI.C.9). CWA Section 304(e) authorizes the inclusion of BMPs as requirements in discharge permits, and in accordance with 40 CFR 122.44(k), BMPs can be used to control or abate the discharge of pollutants when numeric effluent limitations are infeasible, or when the BMPs are necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. This Order, therefore, contains narrative discharge specifications that require implementation of BMPs Programs that cover both chemical pollutants and thermal wastes.



### **E. Anti-backsliding and Antidegradation**

This Order is a new general permit; thus all effluent limitations in this Order are new. Nevertheless, these narrative limitations are comparable to those contained in the existing individual dry dock permits; therefore, they comply with anti-backsliding requirements.

This Order requires Dischargers to adopt BMPs to remove potential chemical pollutants from dry dock surfaces prior to those surfaces contacting the receiving water. These measures will maintain the water quality necessary to preserve and protect existing beneficial uses. Similarly, BMPs provide for the minimization of thermal waste impacts. These measures ensure that thermal waste discharges will meet effluent limitations more stringent than necessary to ensure the projection and propagation of a balanced indigenous population of shellfish, fish, and wildlife. The BMPs reflect the best technology available for minimizing potential adverse environmental impacts associated with the discharges.

### **V. RATIONALE FOR RECEIVING WATER LIMITATIONS**

Receiving water limitations are based on Basin Plan WQOs and are a required part of this Order. Receiving water limitations V.A and V.B are based on the narrative and numeric WQOs in Basin Plan Chapter 3. Receiving water limitation V.C requires compliance with federal and State water quality standards.

### **VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. CWC Sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) (Attachment E) establishes monitoring and reporting requirements to implement federal and State requirements.

The principal purposes of a monitoring program are to:

- document compliance with waste discharge requirements and prohibitions established by the Regional Water Board;
- facilitate self-policing by dischargers in the prevention and abatement of pollution arising from waste discharge;
- develop or assist in the development of limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards; and
- prepare water and wastewater quality inventories.

The MRP is a standard requirement in almost all NPDES permits issued by the Regional Water Board, including this Order. It defines terms, specifies general sampling and analytical protocols, and sets out requirements for reporting spills, violations, and routine monitoring data in accordance with NPDES regulations, the CWC, and Regional Water Board policies. The MRP also defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP.

### **A. Dry Dock Surface Monitoring**

The MRP establishes requirements for assessing the impact of pollutants on water flooding the surface of the dry dock. This Order requires the collection of wipe samples from randomly selected locations on the dry dock that could be affected by ship building, repair, and maintenance operations. Wipe tests will indicate the effectiveness of the BMPs in removing potential pollutants from the dry dock before it is submerged or flooded. Wipe samples are to be collected using both organic and aqueous solvents as described in MRP Section III. Analysis of wipe samples yields pollutant values in terms of  $\mu\text{g}/\text{ft}^2$  wipe surface for comparison with triggers set forth in Provision VI.C.8 (Table 3) of the Order and described in Section VII.C.2 below.

The MRP does not require direct sampling of water flushing over dry dock surfaces because collecting such samples may be unsafe and because it is impractical to control the amount of water relative to the affected surface area during these very dynamic operations, particularly for floating dry docks.

### **B. Receiving Water Monitoring**

The MRP requires receiving water monitoring to establish background water quality conditions and evaluate the potential impact of discharges on receiving waters. The MRP defines receiving water monitoring locations close to the discharge. It also calls for background receiving water samples to be taken at a sufficient distance from the dry docks to be representative of the background water quality conditions. Because receiving water quality will likely remain relatively stable in San Francisco Bay, the frequency of background monitoring is limited to once per year.

### **C. Sediment Monitoring**

The MRP requires the collection of sediment samples near the ends of a floating dry dock or outside the caisson of a graving dry dock. It also requires sediment monitoring farther from the dry docks for background conditions. Sediment samples are needed to determine sediment chemistry and to generate data for future comparison with the sediment quality objectives.

### **D. Other Monitoring Requirements**

This Order requires Dischargers to evaluate their sampling data on a temporal basis to identify trends, if any. In addition, if wipe samples analysis results indicate that any triggers listed in Table 3 of the Order are exceeded, the Discharger must comply with additional requirements specified in Provision VI.C.8 of the Order.

## **VII. RATIONALE FOR PROVISIONS**

### **A. Standard Provisions**

Standard Provisions, which, in accordance with 40 CFR 122.41 and 122.42 apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachments D. The Discharger must comply with all standard provisions and with those additional conditions that apply under 40 CFR 122.42.

NPDES regulations at 40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with Section 123.25 this Order omits federal conditions that address enforcement authority specified in Sections 122.41(j)(5) and (k)(2) because the enforcement authority under CWC is more stringent. In lieu of these conditions, this Order incorporates by reference CWC Section 13387(e).

## **B. MRP Requirements**

Dischargers are required to monitor their discharges in order to evaluate compliance with the requirements of the Order. Monitoring requirements are contained in the MRP (Attachment E) and Standard Provisions (Attachment D). This provision requires compliance with these documents and is authorized by 40 CFR 122.41(h) and (j) and CWC Sections 13267 and 13383.

## **C. Special Provisions**

### **1. Reopener Provisions**

Provision VI.C.1 is based on 40 CFR 122.62 and allows modification of this Order and its effluent limitations as necessary in response to updated WQOs, regulations, or other new relevant information that may be established in the future and other circumstances allowed by law.

### **2. Notice of Intent**

Provision VI.C.2 is based on 40 CFR 122.28(b).

### **3. Discharge Termination**

Provision VI.C.3 is based on 40 CFR 122.28(b).

### **4. Non-Compliance**

Provision VI.C.4 is based on 40 CFR 122.41(a).

### **5. Individual NPDES Permit May Be Required**

Provision VI.C.5 is based on 40 CFR 122.28(b)(3).

### **6. Contingency Plan**

Provision VI.C.6 is based on Regional Water Board Resolution 74-10.

### **7. Best Management Practices for Cleaning Dry Dock Surfaces**

Provision VI.C.7 is based on CWA Section 304(e) and 40 CFR 122.44(k), which allows the use of BMPs to control or abate the discharge of pollutants when numeric effluent limitations are infeasible. The narrative discharge requirements in the Order call for removing particulates and residuals from dry docks through scraping, sweeping, and pressure washing, and taking other appropriate actions, prior to submergence or flooding of any portion of a dry

dock. These measures are based on the guidance provided in *USEPA Development Document for Proposed Best Management Practices for the Ship Building and Repair Industry: Dry docks Point Source Category* (1979).

## 8. Best Management Practices for Responses to Trigger Exceedances

Provision VI.C.8 requires Dischargers to compare the results of test wipe samples from their dry dock decks or floors after cleaning to triggers set forth in the Order. The purposes of these triggers are (1) to provide feedback regarding how thoroughly the BMPs are being implemented, and (2) to indicate whether additional BMPs may be appropriate. The triggers are not effluent limitations and are not intended to evaluate whether discharges could cause or contribute to exceedances of WQOs in the receiving water. This Order requires receiving water monitoring to assess the water quality effects of the discharge.

To relate the residual pollutant shown by a wipe sample to concentrations in the water, it is assumed that water in the water column above the wipe sample area mixes completely with the pollutants remaining on the dry dock deck or floor after cleaning. The submerged, or flooded, depth varies between dry docks. For a floating dry dock, the fully submerged dry dock deck surface lies below 20 to 40 feet of water. For a graving dry dock, there is likely to be at most 40 feet of water above the floor of the dry dock. To allow for a margin of safety, the triggers in Table F-4, with the exception of the PCBs trigger, are based on one half of the depth at full submersion of the dry dock at Bay Ship & Yacht in Alameda, which at the time of this Order is the smallest dry dock in the Region. This is 10 ft or 300 cm of water. In other words, the pollutants (measured in  $\mu\text{g}$ ) on 1  $\text{ft}^2$  of area (930  $\text{cm}^2$ ) would be mixed into 930  $\text{cm}^2 \times 300$  cm of water.

Except for the PCBs trigger, the triggers are based on chronic toxicity criteria using the more stringent of freshwater or saltwater criteria from the Basin Plan, the CTR (Federal Register Vol. 67, No. 97), and for tributyltin, USEPA's *Ambient Aquatic Life Water Quality Criteria for Tributyltin (TBT) – Final* (822-R-03-031), December 2003. For metals, the dissolved values were converted to total recoverable values using a hardness value of 48 mg  $\text{CaCO}_3$ . This hardness value was the lowest value recorded for two Regional Monitoring Program sampling stations (Napa River and Davis Point) that are relatively close to the Allied Defense Recycling dry docks at Mare Island. Water at this location tends to be fresher and have lower hardness than water near the other existing dry docks in the Region. Using this hardness value, conversion factors for chromium III, chromium VI, lead, and zinc, were calculated to be 0.860, 0.962, 0.899, and 0.986 respectively. The copper conversion factor was the site-specific translator from Basin Plan Table 7.2.1-2. The nickel conversion factor was the site-specific translator from the Clean Estuary Partnership's *North of Dumbarton Bridge Copper and Nickel Development and Selection of Final Translators*, March 2005. To calculate the triggers, these total recoverable values were multiplied by 279  $\text{ft}^2/\text{L}$ . For PCBs, the trigger was set at a typical detection level to ensure that detectable PCBs concentrations would not be discharged (the San Francisco Bay PCBs TMDL does not provide a wasteload allocation for dry docks). This trigger is lower than it would be if it were based on the CTR criterion.

**Table F-4. Water Quality Objectives (WQO) and Wipe Sample Triggers**

Analyte	WQO (µg/L)	Trigger (µg/sample)
Chromium III	110	31,000
Chromium VI	11	3,100
Copper	6.6	1,800
Lead	1.2	330
Nickel	30	8,300
Zinc	64	18,000
Tributyltin	0.0074	2.1
Polychlorinated Biphenyls (PCBs)	--	2.5

The Order contains accelerated monitoring requirements and BMPs enhancements to ensure, if necessary, that pollutants on the dry dock deck surface are removed to the extent technologically and economically feasible. The levels specified for accelerated monitoring (e.g., two times trigger level) or BMPs enhancements (e.g., seven of ten events) are based on what will reasonably capture substantive exceedances that would warrant the response actions required, versus less substantive exceedances that may be due to sampling and analytical variability.

When no further improvements can be implemented, this Order allows the Executive Officer to authorize a Discharger to return to the routine monitoring frequency in the MRP or cease conducting wipe tests altogether. Under such circumstances, the Regional Water Board may consider the Discharger's efforts and revise the triggers with the next permit reissuance so the triggers continue to provide feedback regarding how thoroughly the BMPs and pollution prevention plan are being implemented.

## 9. Best Management Practices for Non-Contact Cooling Water Discharges

Occasional low-volume non-contact cooling water discharges are most appropriately controlled through BMPs, as authorized by CWA Section 304(e) and 40 CFR 122.44(k). Implementation of BMPs is the simplest way to ensure that Thermal Plan WQOs are met. Thermal Plan WQOs differ somewhat for enclosed bays versus estuaries, and existing discharges versus new discharges. Nevertheless, they essentially require the following:

- Discharge temperatures must protect beneficial uses;
- Discharge temperatures may be no more than 4°F above the natural temperatures of the receiving waters; and
- Discharge temperatures may not be higher than 86°F.

The Order calls for BMPs that achieve these WQOs.

## VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as an NPDES permit for dry dock facilities in the San Francisco Bay Region. As a step in the WDRs adoption process, the Regional Water Board has developed tentative WDRs. The Regional Water Board encourages public participation in the WDRs adoption process.

### A. Notification of Interested Parties

The Regional Water Board notified the Dischargers and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and provided them with an opportunity to submit written comments and recommendations. Notification was provided through *The Recorder*.

### B. Written Comments

Staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at 1515 Clay Street, Suite 1400, Oakland, California 94612, Attention: **Derek Whitworth**.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by **5:00 p.m., May 3, 2012**.

### C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: **June 13, 2012**  
Time: **9:00 a.m.**  
Location: Elihu Harris State Office Building  
1515 Clay Street, 1<sup>st</sup> Floor Auditorium  
Oakland, CA 94612

Contact: Derek Whitworth 510 622 2349 email [dwhitworth@waterboards.ca.gov](mailto:dwhitworth@waterboards.ca.gov)

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Dates and venues may change. The Regional Water Board's Web address is <http://www.waterboards.ca.gov/sanfranciscobay> where one can access the current agenda for changes in dates and locations.

### D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

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

**E. Information and Copying**

Related documents, including comments received and other information, are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., except from noon to 1:00 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling 510-622-2300.

**F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference dry dock General Permit, and provide a name, address, and phone number.

**G. Additional Information**

Requests for additional information or questions regarding this Order may be directed to Derek Whitworth at 510-622-2349 or [DWhitworth@waterboards.ca.gov](mailto:DWhitworth@waterboards.ca.gov).