CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
1515 Clay Street, Suite 1400, Oakland, California 94612
www.waterboards.ca.gov/sanfranciscobay

ORDER R2-2023-00XX
NPDES PERMIT CAG032012

GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM DRY DOCK OPERATIONS

This Order was adopted on:	**June X, 2023**
This Order shall become effective on:	**September 30, 2023**
This Order shall expire on:	**October 1, 2028**
CIWQS regulatory measure number:	**XXXXXX**

To obtain coverage under this Order, prospective dischargers must submit the Notice of Intent (NOI) form shown in Attachment B and a filing fee equivalent to the first year's annual fee. Applicable prospective dischargers must also submit the NOI form shown in Attachment C to obtain coverage for landside stormwater discharge. Discharge is not authorized until the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board), Executive Officer issues an Authorization to Discharge. Authorized Dischargers that intend to continue discharging after this Order's expiration date shall file a new NOI form no later than **January 5, 2028**.

The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Water Board have classified discharges under this general National Pollutant Discharge Elimination System (NPDES) permit (General Permit) as "**minor**."

I do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the Regional Water Board on the date indicated above.

Eileen White, Executive Officer

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ATTACHMENTS

1. GENERAL PERMIT SCOPE

These waste discharge requirements (WDRs) shall serve as an NDPES General Permit for discharges to San Francisco Bay associated with the operation of floating and graving dry docks used for repairing, constructing, and dismantling marine vessels. Fact Sheet (Attachment F) sections 1 and 2 provide additional information describing covered facilities and discharges.

1.1. Discharges Covered by this General Permit

1.1.1. Water that washes over dry dock decks after cleaning when dry docks are submerged or flooded;

1.1.2. Non-contact cooling water from ships awaiting maintenance in dry docks;

1.1.3. Integral ballast water discharged from floating dry docks;

1.1.4. Saltwater fire suppression water;

1.1.5. Stormwater falling on dry dock surfaces after cleaning, and;

1.1.6. Stormwater from landside facilities associated with dry docks.

1.2. Discharges Not Covered by this General Permit

1.2.1. Process wastewaters used in ship dismantling operations;

1.2.2. Seepage water from graving dry dock walls;

1.2.3. Seepage water from graving dry dock caissons;

1.2.4. Ballast water from vessels in dry dock;

1.2.5. Stormwater runoff from dry dock surfaces prior to cleaning; and

1.2.6. Sanitary wastewaters (sewage).

2. FINDINGS

The Regional Water Board finds the following:

2.1. Legal Authorities. This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA and Water Code chapter 5.5, division 7 (commencing with § 13370).

2.2. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part

of the application process, information obtained through monitoring and reporting programs, and other available information. The Fact Sheet contains background information and rationale for the requirements in this Order and is hereby incorporated into and constitutes findings for this Order. Attachments A through E and G are also incorporated into this Order.

2.3 Notification of Interested Parties. The Regional Water Board notified prospective enrollees and interested agencies and persons of its intent to prescribe these WDRs, and has provided an opportunity to submit written comments and recommendations. Fact Sheet section 8.1 provides details regarding the notification.

2.5. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Fact Sheet section 8.3 provides details regarding the public hearing.

THEREFORE, IT IS HEREBY ORDERED that Order R2-2017-0027 (previous order) is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in Water Code division 7 (commencing with § 13000) and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous order.

3. DISCHARGE PROHIBITIONS

3.1. Discharge of waste at a location or in a manner different than described in an NOI and Authorization to Discharge is prohibited.

3.2. Discharge of sanitary wastewater (sewage) is prohibited.

3.3. Discharge of solid materials, solid wastes, spent abrasives, or paint residues to waters of the State is prohibited.

3.4. Discharge of oil or other petroleum products, or other floating materials, from any activity that may cause sheen, deleterious bottom deposits, turbidity, or discoloration in surface waters is prohibited.

3.5. Discharge of oil or any residuary product of petroleum to waters of the State is prohibited, except as allowed by Water Code division 7.

3.6. Discharge of ship ballast water from vessels in dry dock is prohibited.

3.7. Discharge of power washing or pressure washing water, boiler drainage, or process water used or accumulated in dry dock areas is prohibited.

3.8. Discharge of graving dock seepage water from dry dock walls or caissons, or stormwater runoff from dry dock surfaces when vessels are being processed, is prohibited.

3.9. Discharge of fire suppression water (for purposes of system testing or pressure relief) into a receiving water from which it did not originate, or that contains chemical additives, is prohibited.

4. EFFLUENT LIMITATIONS

4.1. Each Discharger shall prevent or minimize the discharge of pollutants from any surface of its floating dry docks during submergence or, for graving dry docks, when opening its caisson by implementing a Best Management Practices Program as described in Provisions 6.3.4 and 6.3.5.

4.2. Each Discharger that discharges non-contact cooling water shall implement a Best Management Practices Program as described in Provision 6.3.6.

4.3. On an ongoing basis, each 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 or pressure washing.

Prior to submergence or flooding, any remaining area of the dry dock deck that was previously inaccessible shall be cleaned by scraping, broom cleaning, and power or 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.

4.4. 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.

5. RECEIVING WATER LIMITATIONS

5.1. Discharges shall not cause the following conditions in receiving waters:

5.1.1. Floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses;

5.1.2. Alteration of suspended sediment in such a manner as to cause nuisance or adversely affect beneficial uses or detrimental increase in the concentrations of toxic pollutants in sediments or aquatic life;

5.1.3. The presence of pollutants in sediments in quantities that, alone or in combination, are toxic to benthic communities in bays and estuaries of California;

5.1.4. The presence of pollutants in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health in bays and estuaries of California;

5.1.5. The presence of pollutants in sediment at levels that alone or in combination are toxic or harmful to wildlife or fish by direct exposure or by bioaccumulation within aquatic life;

5.1.6. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses;

5.1.7. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;

5.1.8. Alteration of temperature beyond present natural background levels, unless it is demonstrated that such alteration in temperature does not adversely affect beneficial uses;

5.1.9. Changes in turbidity that cause nuisance or adversely affect beneficial uses, or increases from normal background light penetration or turbidity greater than 10 percent in areas where natural turbidity is greater than 50 nephelometric turbidity units (NTU), or above 55 NTU in areas where natural turbidity is less than or equal to 50 NTU;

5.1.10. Coloration that causes nuisance or adversely affects beneficial uses;

5.1.11. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses; or

5.1.12. Concentrations or quantities of toxic or other deleterious substances that cause deleterious effects on wildlife, waterfowl, or other aquatic life, or render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

5.2. Discharges shall not cause the following limits to be exceeded at any place in receiving waters within one foot of the water surface:

5.2.1. Dissolved Oxygen — Downstream of Carquinez Bridge: 5.0 mg/L, minimum
Upstream of Carquinez Bridge: 7.0 mg/L, minimum

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 that specified above, the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

5.2.2.	Dissolved Sulfide	Natural background levels
5.2.3.	pH	The pH shall not be depressed below 6.5 nor raised above 8.5. The discharge shall not cause changes greater than 0.5 pH units in normal ambient pH levels.
5.2.4.	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.

5.3. Discharges shall not cause a violation of any water quality standard for receiving waters adopted by the Regional Water Board, State Water Resources Control Board (State Water Board), or U.S. EPA as required by the CWA and regulations adopted thereunder. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board may revise or modify this Order in accordance with the more stringent standards.

6. PROVISIONS

6.1. Standard Provisions

6.1.1. Each Discharger shall comply with all “Standard Provisions” in Attachment D.

6.1.2. If there is any conflict, duplication, or overlap between provisions in this Order, the more stringent provision shall apply.

6.2. Monitoring and Reporting Provisions

Each Discharger shall comply with the Monitoring and Reporting Program (Attachment E) and future revisions thereto, and applicable monitoring and reporting requirements in Attachments D and G.

6.3. Special Provisions

6.3.1. **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 or as otherwise authorized by law. A Discharger may request a permit modification based on any of these circumstances. With any such request, the Discharger shall include antidegradation and anti-backsliding analyses as necessary.

6.3.1.1. If present or future investigations demonstrate that the discharges governed by this Order have or will have a reasonable potential to cause or contribute to adverse impacts on water quality or beneficial uses of the receiving waters;

6.3.1.2. If new or revised water quality objectives or total maximum daily loads (TMDLs) come into effect for San Francisco Bay or contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order may be modified as necessary to reflect the updated water quality objectives or wasteload allocations. Adoption of the effluent limitations in this Order is not intended to restrict in any way future modifications based on legally adopted water quality objectives or TMDLs or as otherwise permitted under federal regulations governing NPDES permit modifications;

6.3.1.3. If metal translator, dilution, or other water quality studies provide a basis for determining that a permit condition should be modified;

6.3.1.4. If a State Water Board precedential decision, new policy, new law, or new regulation is adopted; or

6.3.1.5. If an administrative or judicial decision on a separate NPDES permit or WDRs addresses requirements similar to this discharge.

6.3.2. **Application for General Permit Coverage and Authorization to Discharge**

6.3.2.1. **Notice of Intent.** A prospective Discharger seeking Authorization to Discharge pursuant to this Order shall complete and submit the NOI form in Attachment B. For landside industrial stormwater coverage, the prospective Discharger shall also complete and submit the NOI form in Attachment C. The Executive Officer may modify the NOI forms in Attachments B and C or require additional information prior to authorizing any discharge. Dischargers authorized to discharge under the previous order that submitted an NOI at the end of the previous order term need not submit a new NOI form to renew their Authorization to Discharge.

6.3.2.2. **Authorization to Discharge.** If the Executive Officer concludes that a proposed or previously authorized discharge is eligible for coverage under this Order, the Executive Officer will issue an Authorization to Discharge (or a modified Authorization to Discharge, if appropriate). Upon the effective date of the Authorization of Discharge, the Discharger shall comply with the requirements of this Order and its attachments. Any non-compliance with this Order's requirements shall constitute a violation of the CWA and Water Code 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.

6.3.2.3. **Facility Modifications.** At least 90 days prior to any significant facility modification, the Discharger proposing the modification shall submit a modified NOI form (e.g., a mark-up of the original NOI form showing all changes and including a new signature and date). The Discharger shall include a letter describing the changes, their purpose, when they are to go

into effect, and any new or additional measures taken or planned to prevent potential non-compliance with this Order's requirements.

6.3.2.4. **Discharge Termination.** A Discharger may terminate coverage under this Order by submitting a letter requesting termination and stating the reason. The Executive Officer may also terminate or revoke coverage under this Order for any of the causes specified for an individual permit as set forth in 40 C.F.R. section 122.28(b)(3). After providing notice and an opportunity for a hearing, coverage under this Order may be terminated or modified for cause, including, but not limited to, the following:

6.3.2.4.1. Violation of any term or condition of this Order;

6.3.2.4.2. Misrepresentation or failure to disclose all relevant facts in obtaining coverage under this Order; or

6.3.2.4.3. Change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

6.3.2.5. **Need for Individual NPDES Permit.** The Executive Officer may require any Discharger authorized to discharge pursuant to this Order to subsequently apply for and obtain an individual NPDES permit in the following circumstances:

6.3.2.5.1. The Discharger is not in compliance with the requirements of this Order;

6.3.2.5.2. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants from the facility;

6.3.2.5.3. Effluent limitation guidelines are promulgated for the discharges covered by this Order;

6.3.2.5.4. A new or revised water quality control plan containing requirements applicable to the discharge is approved;

6.3.2.5.5. The requirements of 40 C.F.R. section 122.28(a) (the circumstances under which the Regional Water Board is authorized to issue a general permit) are not met; or

6.3.2.5.6. Any other condition specified in 40 C.F.R. section 122.28(b)(3) is met.

6.3.3. **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 another type of emergency, such as an employee strike, a strike by suppliers or maintenance services, a power outage, vandalism, an earthquake, or a fire. Each 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.

The Contingency Plan shall, at a minimum, contain the provisions below:

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

6.3.3.2. Maintenance of adequate supplies necessary for cleaning and testing dry dock surfaces;

6.3.3.3. Provision of emergency standby power;

6.3.3.4. Protection against vandalism;

6.3.3.5. Expeditious action to repair failures of, or damage to, equipment; and

6.3.3.6. Reporting of spills and discharges of waste, including measures taken to clean up the effects of such discharges

6.3.4. **Best Management Practices for Cleaning Dry Dock Surfaces.** Prior to commencing dry dock operations pursuant to this Order, 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 implement its BMPs Plan to identify and evaluate sources of wastes and pollutants associated with facility activities 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 U.S. EPA'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:

6.3.4.1. **Discharge Characterization.** The BMPs Plan shall assess all individual activities conducted at the site, potential pollutant sources associated with each activity, and the nature of the pollutants that could be discharged.

6.3.4.2. **BMP Identification.** The BMPs Plan shall describe the BMPs to be implemented at the site to control pollutant discharges. BMPs shall be identified and described for each potential pollutant source, including the anticipated effectiveness of each BMP. Dischargers shall consider, and include as appropriate, the following:

6.3.4.2.1. **Preventative BMPs** – measures to reduce or eliminate the generation of pollutants and waste, including measures to prevent leaks and spills;

6.3.4.2.2. **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 contain dust and particulate material;

6.3.4.2.3. **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 any adverse effects of such discharge;

6.3.4.2.4. **Dry Dock Surface Monitoring BMPs** – measures to monitor dry dock surfaces, as described in the MRP; and

6.3.4.2.5. **Response to Trigger Exceedance BMPs** – measures to be taken in response to dry dock surface monitoring results that exceed the trigger specified in Provision 6.3.5.

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

- Control of large solid materials;
- Abrasive blasting;
- Oil, grease, and fuel transfer;
- 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 or wax;
- Cathodic protection and anode handling and storage;
- Hull cleaning; and
- Other activities with potential to result in the discharge of wastes or pollutants to the receiving water.

6.3.4.3. **Site Map.** The BMPs Plan shall include a site map that includes:

- Address, city, and county;
- Site boundaries and structures;
- Runoff collection and conveyance system locations, and points of discharge;
- Areas of industrial activity where discharges originate; and
- Material handling and processing areas; waste treatment, storage, and disposal areas; dust and particulate generating areas; cleaning and rinsing areas; and other areas of industrial activity that are potential pollutant sources.

6.3.4.4. **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 Plan and submit an evaluation report, and a description of BMPs Plan revisions based on the evaluation, with each annual report submitted pursuant to MRP section 7.2.2.2. The Discharger shall implement revisions within 30 days of evaluation.

Evaluations shall be conducted not less than 8 months nor more than 16 months apart. At least 30 days prior to conducting each evaluation, the Discharger shall notify the Regional Water Board of its intent to conduct the evaluation, so a Regional Water Board representative is presented with an opportunity to accompany the Discharger during its facility inspection and its BMP review.

Each Discharger shall summarize the evaluation in an evaluation report that includes the above elements. Each Discharger shall sign and certify the report in accordance with Attachment D section 5.2 and retain each report for at least five years.

Evaluations shall include the following:

6.3.4.4.1. Date of evaluation and identification of personnel performing evaluation;

6.3.4.4.2. Review of all visual observation records, inspection records, and sampling and analysis records;

6.3.4.4.3. Visual inspection of all pollutant sources and potential sources for pollutant discharges;

6.3.4.4.4. Review and evaluation of all BMPs to determine whether they are adequate, whether they are properly implemented and maintained, and whether additional BMPs are needed;

6.3.4.4.5. Review of wipe test procedures to ensure they quantitatively detect residual contaminates. If a review indicates that changes to the sampling procedures are necessary, the Discharger shall implement the changes following written concurrence of the Executive Officer; and

6.3.4.4.6. Identification of incidents of non-compliance, corrective actions taken, and necessary program revisions.

6.3.5. **Best Management Practices for Responses to Trigger Exceedances**

6.3.5.1. **Best Management Practices Review.** If the wipe test monitoring required by MRP section 3.2 shows an exceedance of a copper trigger of 1,400 micrograms per square foot (µg/sq.ft.), within seven days of discovering the trigger exceedance the Discharger shall review the BMPs in the BMPs Plan with its staff to (1) remind the staff of the importance of properly following the BMPs and (2) refresh the staff's familiarity with the BMPs to ensure that they are diligently implemented. This review shall be documented in the subsequent quarterly self-monitoring report, which shall include the following information:

6.3.5.1.1. Date wipe test was performed, date monitoring results were received, and date BMPs were reviewed;

6.3.5.1.2. BMPs reviewed and how those BMPs relate to the trigger exceedance; and

6.3.5.1.3. Brief description of the staff addressed through the review.

6.3.5.2. **Best Management Practices Enhancement with Pressure Washing.** If the copper trigger is exceeded during accelerated monitoring pursuant to MRP section 3.2.5, the Discharger shall enhance its BMPs before the next subsequent dry dock use. The BMPs enhancement shall, at a minimum, add pressure washing of all areas where industrial activity occurs on the dry dock deck surfaces prior to submersion. "Pressure washing" means using a water jet of at least 1,500 pounds per square inch (psi) (compared to "power washing," which means using a water jet of approximately 60 to 100 psi). The Discharger shall collect pressure washing wash water and dispose of it via the sanitary sewer or another authorized means (i.e., not discharge it directly to waters of the U.S.). The Discharger shall update its BMPs Plan to incorporate the enhanced BMPs within 30 days of learning that the copper trigger is exceeded during accelerated monitoring.

6.3.5.3. **Further Best Management Practices Enhancement.** If the copper trigger is exceeded following the implementation of pressure washing, the Discharger shall further evaluate its BMPs, its staff's 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

adhere to a schedule for resurfacing the dry dock surface, if feasible, within 30 days of receiving results exceeding the trigger following the implementation of pressure washing.

6.3.5.4. **No Further Action.** When no further technically and economically achievable control measures can be implemented, the Executive Officer may authorize a Discharger to return to the routine monitoring frequency indicated in MRP section 3.2.3 or cease conducting wipe tests altogether.

6.3.6. **Best Management Practices for Non-Contact Cooling Water.** Prior to discharging any non-contact cooling water, each Discharger that discharges non-contact cooling water shall establish and implement a BMPs Plan that describes steps to ensure that non-contact cooling water discharges will not adversely affect the receiving water.

The BMPs Plan shall narratively describe the BMPs to be implemented to control the discharge of thermal waste in non-contact cooling water. The BMPs Plan shall evaluate the anticipated effectiveness of each BMP. The Discharger shall consider (1) measures to reduce the generation of non-contact cooling water and (2) measures to dissipate thermal waste before discharge to surface waters. Such measures shall include use of shore-side power when available and feasible. Additional measures could include evaporative cooling (e.g., spraying the non-contact cooling water over the receiving water surface). The BMPs Plan shall ensure that non-contact cooling water discharges are no warmer than 86 degrees Fahrenheit and no more than 4 degrees Fahrenheit above the natural receiving water temperature by the time the water reaches the receiving waters.

Each applicable Discharger shall conduct at least one compliance evaluation per calendar year to determine the effectiveness of the BMPs Plan for non-contact cooling water and submit an evaluation report, and a description of BMPs Plan revisions based on the evaluation, with each annual report submitted pursuant to MRP section 7.2.2.2. The Discharger shall implement revisions within 30 days of evaluation.

6.3.7. **Best Management Practices for Landside Stormwater.** Each Discharger that has enrolled for coverage of its landside (non-dry dock) industrial stormwater discharges shall comply with the following requirements:

6.3.7.1. **Stormwater Pollution Prevention Plan (SWPPP).** The Discharger shall prepare a SWPPP that is designed in accordance with good engineering practices and retained onsite, revised whenever necessary, and made available upon request of any Regional Water Board representative. The SWPPP includes the following elements:

- Facility name and contact information;
- SWPPP performance standards;

- Planning and organization;
- Site map;
- List of industrial materials;
- Description of potential pollution sources;
- Assessment of potential pollutant sources;
- Identification and evaluation of all pollutant sources that may affect stormwater discharge quality;
- Identification, assignment, and implementation of control measures and management practices to reduce pollutants in stormwater discharges;
- Minimum BMPs;
- Advanced BMPs, if applicable;
- Monitoring implementation plan;
- Annual comprehensive facility evaluation; and
- Date SWPPP was initially prepared and dates of each SWPPP amendment.

6.3.7.2. **Best Management Practices.** The Discharger shall select, design, install, and maintain BMPs that reduce or prevent discharges of pollutants in stormwater in a manner that reflects best industry practice considering technological availability and economic practicability and achievability. The SWPPP shall identify these BMPs, including, at a minimum, the following:

6.3.7.2.1. **Good Housekeeping.** The Discharger shall do the following:

6.3.7.2.1.1. Observe all outdoor areas associated with industrial activity; including stormwater discharge locations, drainage areas, conveyance systems, waste handling/disposal areas, and perimeter areas affected by off-facility materials or stormwater run-on to determine housekeeping needs. Any identified debris, waste, spills, tracked materials, or leaked materials shall be cleaned and disposed of properly;

6.3.7.2.1.2. Minimize or prevent material tracking;

6.3.7.2.1.3 Minimize dust generated from industrial materials or activities;

6.3.7.2.1.4 Ensure that all facility areas impacted by rinse and wash waters are cleaned as soon as possible;

6.3.7.2.1.5 Cover all stored industrial materials that can be readily mobilized by contact with stormwater;

6.3.7.2.1.6 Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper) that can be transported or dispersed by the wind or contact with stormwater;

6.3.7.2.1.7 Prevent disposal of any rinse and wash waters or industrial materials into the stormwater conveyance system;

6.3.7.2.1.8 Minimize stormwater discharges from non-industrial areas (e.g., stormwater flows from employee parking area) that contact industrial areas of the facility; and

6.3.7.2.1.9 Minimize authorized non-stormwater discharges from non-industrial areas (e.g., potable water, fire hydrant testing) that contact industrial areas of the facility.

6.3.7.2.2. **Preventive Maintenance.** The Discharger shall identify all equipment and systems used outdoors that may spill or leak pollutants, observe the identified equipment and systems to detect leaks or identify conditions that may result in the development of leaks, establish an appropriate schedule for maintenance of identified equipment and systems, and establish procedures for prompt maintenance and repair of equipment and maintenance of systems when conditions exist that may result in the development of spills or leaks.

6.3.7.2.3. **Spill and Leak Prevention and Response.** The Discharger shall establish procedures and controls to minimize spills and leaks; develop and implement spill and leak response procedures to prevent industrial materials from discharging through the stormwater conveyance system (spilled or leaked industrial materials shall be cleaned promptly and disposed of properly); identify and describe all necessary and appropriate spill and leak response equipment, locations of spill and leak response equipment, and spill or leak response equipment maintenance procedures; and identify and train appropriate spill and leak response personnel.

6.3.7.2.4. **Material Handling and Waste Management.** The Discharger shall do the following:

6.3.7.2.4.1. Prevent or minimize handling of industrial materials or wastes that can be readily mobilized by contact with stormwater during a storm;

6.3.7.2.4.2. Contain all stored non-solid industrial materials or wastes (e.g., particulates, powders, shredded paper) that can be transported or dispersed by the wind or contact with stormwater;

6.3.7.2.4.3. Cover industrial waste disposal containers and industrial material storage containers that contain industrial materials when not in use;

6.3.7.2.4.4. Divert run-on and stormwater generated from within the facility away from all stockpiled materials;

6.3.7.2.4.5. Clean all spills of industrial materials or wastes that occur during handling in accordance with spill response procedures; and

6.3.7.2.4.6. Observe and clean, as appropriate, any outdoor material or waste handling equipment or containers that can be contaminated by contact with industrial materials or wastes.

6.3.7.2.5. **Erosion and Sediment Control.** The Discharger shall implement effective wind erosion controls; provide effective stabilization for inactive areas, finished slopes, and other erodible areas prior to forecasted storms; maintain effective perimeter controls and stabilize site entrances and exits to sufficiently control discharges of erodible materials; and divert run-on and stormwater generated from within the facility away from erodible materials.

6.3.7.2.6. **Employee Training.** The Discharger shall ensure that all personnel implementing the SWPPP are properly trained with respect to BMP implementation, BMP effectiveness evaluations, visual observations, and monitoring activities. The Discharger shall identify which personnel need to be trained, their responsibilities, and the types of training they are to receive, and maintain documentation of completed training and the personnel that received the training with the SWPPP.

6.3.7.2.7. **Quality Assurance and Record Keeping.** The Discharger shall develop and implement management procedures to ensure that appropriate personnel implement all SWPPP elements; develop methods of tracking and recording BMP implementation; and maintain BMP implementation records, training records, and records related to any spills and clean-up related response activities for a minimum of three years.

6.3.7.3. **Stormwater Action Levels.** The Discharger is subject to the following action levels and requirements:

Table 1. Stormwater Action Levels

Parameter	Unit	Action Level
pH	standard units	6.0-9.0 [1]
Total Suspended Solids	mg/L	100
Oil and Grease	mg/L	15
Aluminum, Total Recoverable	µg/L	750
Copper, Total Recoverable	µg/L	33
Lead, Total Recoverable	µg/L	260
Zinc, Total Recoverable	µg/L	260

Footnote:

[1] Values below or above this range require action.

6.3.7.3.1. Upon measurement of a pollutant (see MRP section 6) in excess of an action level above, the Discharger shall review the SWPPP to identify appropriate modifications to existing BMPs or additional BMPs as necessary to reduce pollutant discharge concentrations to levels below the action level. The Discharger shall revise the SWPPP accordingly before

the next storm, if possible, or as soon as practical, and in no event later than three months following the exceedance.

6.3.7.3.2. If, upon subsequent monitoring, the pollutant continues to exceed an action level above, the Discharger shall further evaluate its BMPs and update its SWPPP accordingly to include enhanced BMPs. Enhanced BMPs may include exposure minimization BMPs (e.g., shelters that prevent stormwater contact with industrial materials or activities), stormwater containment or discharge reduction BMPs (e.g., BMPs that divert, infiltrate, reuse, contain, retain, or reduce stormwater runoff volumes), or treatment control BMPs (e.g., mechanical, chemical, biological, or other treatment technologies). BMP enhancement shall continue until either the pollutant measured is maintained below the action level above or the Discharger has implemented all technically-and-economically-achievable control measures. In any case, the Discharger shall document its actions in its Annual Stormwater Report (see MRP section 7.4).

ATTACHMENT A – DEFINITIONS AND ABBREVIATIONS

DEFINITIONS

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

Arithmetic mean = $\mu = \Sigma x / n$

where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples

Average Monthly Effluent Limitation (AMEL)
Highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)
Highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

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

Carcinogenic
Known to cause cancer in living organisms.

Coefficient of Variation (CV)
Measure of data variability calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

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

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

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

Detected, but Not Quantified (DNQ)
Sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

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

Effluent Concentration Allowance (ECA)
Value derived from the water quality criterion or objective, dilution credit, and ambient background concentration that is used, in conjunction with the CV for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as wasteload allocation (WLA) as used in U.S. EPA guidance (*Technical Support Document for Water Quality-based Toxics Control*, March 1991, second printing, EPA/505/2-90-001).

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

Estimated Chemical Concentration
Concentration that results from the confirmed detection of a substance below the ML by the analytical method.

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

Inland Surface Waters
All surface waters of the state that are not the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
Highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation
Lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

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

Median
Middle measurement in a data set. The median of a data set 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 n/2 and n/2+1).

Method Detection Limit (MDL)
Minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 C.F.R. part 136, Appendix B.

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

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

Not Detected (ND)
Sample results less than the laboratory's MDL.

Persistent Pollutants
Substances for which degradation or decomposition in the environment is nonexistent or very slow.

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

Reporting Level (RL)
ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. For priority pollutants, 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 State Implementation Plan (SIP) Appendix 4 in accordance with SIP section 2.4.2 or established in accordance with SIP section 2.4.3. 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
Any water designated as municipal or domestic supply (MUN) beneficial use.

Standard Deviation (σ)
Measure of variability calculated as follows:

$$\text{Standard deviation} = \sigma = (\Sigma[(x - \mu)^2]/(n - 1))^{0.5}$$

where: x is the observed value
μ is the arithmetic mean of the observed values
n is the number of samples

Toxicity Reduction Evaluation (TRE)
Study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. A TIE is a set of procedures to identify the specific chemicals responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

ABBREVIATIONS

%	Percent
µg/L	Micrograms per liter
µg/kg	Micrograms per kilogram
µg/sq. ft.	Micrograms per square feet
1/Blending Event	Once per blending event
1/Day	Once per day
1/Month	Once per month
1/Quarter	Once per quarter
1/Week	Once per week
1/Year	Once per year
2/Month	Two times per month
2/Week	Twice per week
2/Year	Twice per year
3/Week	Three times per week
4/Week	Four times per week
5/Week	Five times per week
AMEL	Average monthly effluent limitation
AWEL	Average weekly effluent limitation
B	Background concentration
C	Water quality criterion or objective
C-24	24-hour composite
CFU/100 mL	Colony forming units per 100 milliliters
Continuous	Measured continuously
Continuous/D	Measured continuously, and recorded and reported daily
Continuous/H	Measured continuously, and recorded and reported hourly
CV	Coefficient of Variation
DNQ	Detected, but not quantified
DL	Detection level
ECA	Effluent Concentration Allowance
Grab	Grab sample
GPM	Gallons per minute

MDEL	Maximum Daily Effluent Limitation
MDL	Method detection limit
MEC	Maximum effluent concentration
MG	Million gallons
mg/L	Milligrams per liter
mg/L as N	Milligrams per liter as nitrogen
MGD	Million gallons per day
ML	Minimum level
MPN/100 mL	Most probable number per 100 milliliters
ND	Not detected
NTU	Nephelometric turbidity units
RL	Reporting level
RPA	Reasonable potential analysis
s.u.	Standard pH units
TIE	Toxicity identification evaluation
TRE	Toxicity reduction evaluation
TUa	Acute toxicity units
TUc	Chronic toxicity units

ATTACHMENT B – NOTICE OF INTENT FORM

This **NOTICE OF INTENT** form shall be completed and submitted to apply for authorization or reauthorization to discharge from dry dock facilities under NPDES Permit CAG032012 (Dry Dock General Permit) to waters of the United States.

1. OWNER INFORMATION AND CERTIFICATION

The following certification shall be signed in accordance with Attachment D section 5.2. The Discharger hereby agrees to comply with and be responsible for all conditions specified in the Dry Dock General Permit.

<table>
<tr><td colspan="3">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 C.F.R. § 122.22(d).)</td></tr>
<tr><td colspan="2">Signature</td><td>Date</td></tr>
<tr><td colspan="2">Printed Name</td><td>Title</td></tr>
<tr><td colspan="2">Owner Type (check one)

☐ Public
☐ Private
☐ Other, specify type:</td><td>New or Previously Authorized Facility (check one)

☐ New Facility
☐ Previously Authorized Facility</td></tr>
<tr><td colspan="3">Company / Owner Name</td></tr>
<tr><td colspan="2">Mailing Address</td><td>Phone Number</td></tr>
<tr><td>City</td><td>County</td><td>Zip Code</td></tr>
<tr><td colspan="3">Contact Person Name and Title</td></tr>
<tr><td colspan="2">Contact Person Email</td><td>Contact Person Phone Number</td></tr>
</table>

☐ Check here if additional owners information is attached to this form.

2. FACILITY OPERATION INFORMATION

Facility Operator Name (if there is more than one operator, each operator must submit a separate Notice of Intent)		Facility Operator Type (check one) ☐ Public ☐ Private ☐ Other, specify type:	
Facility Name	Facility Address		
City	State	Zip Code	Phone Number
Contact Person's Name and Title			
Contact Person's Email		Contact Person's Phone Number	
Duly Authorized Representative: The following individual (or any individual occupying the position listed below) may act as the facility's duly authorized representative and may sign and certify submittals in accordance with Attachment D section 5.2.3. This individual shall be responsible for the overall operation of the facility or for facility environmental matters. Name			
Title			
Company/Organization			
Street Address			
City	State	Zip Code	Phone Number
Email			

3. BILLING INFORMATION

Facility Operator Name		Check as applicable: ☐ Owner ☐ Operator	
Mailing Street Address			
City	State	Zip Code	Phone Number
Contact Person Name			
Contact Person Email		Contact Person Phone Number	

4. DESCRIPTION OF OPERATIONS

Description of Operations

Complete table to describe operations, filling in rows as needed. Include the types of discharge and attach additional sheets as needed.

Dry Dock No.	Type (floating or graving)	Maximum Number of Vessels Per Year	Maximum Size of Vessels Per Year
1			
2			
3			
4			
5			

Types of Discharge (select all discharge types that apply)

Identify type of discharge by checking appropriate boxes and providing details.

☐ **Integral Ballast Water**
Frequency of discharge: _____
Maximum volume per dry dock submersion: _____
Number of dry dock submersions per year: _____
Average daily discharge flow (gallons/day) when discharging: _____

☐ **Non-Contact Cooling Water**
Frequency of Discharge: _____
Maximum flow: _____ (gallons/day) Million gallons per year: _____
Average daily discharge flow (gallons/day) when discharging: _____

☐ **Salt Water Fire Suppression Water**
Frequency of discharge: _____
Maximum flow: _____ (gallons/day) Million gallons per year: _____
Average daily discharge flow (gallons/day) when discharging: _____

☐ Stormwater from dry dock surfaces *after* cleaning

☐ Other discharges (provide daily and annual total flows):

5. DRY DOCK DIMENSIONS AND CAPACITIES

Dry Dock No.	Average Submerged or Immersed Depth (feet)	Width at Top (feet)	Length to Outer Sill or Caisson (feet)	Capacity (million gallons)
1				
2				
3				
4				
5				

☐ Check here if information for additional dry docks is attached to this form.

6. RECEIVING WATERS, DISCHARGE POINTS, AND MONITORING LOCATIONS

Provide the name of the receiving water and the latitude and longitude for each point described in the table below. Attach additional sheets for additional receiving waters, discharge points, and sampling points. See MRP section 2 and Table E-1 for information related to monitoring locations.

RECEIVING WATER NAME:

MONITORING LOCATIONS		
Receiving Water Monitoring Location (near each dry dock)(1)	**Latitude** (degrees, to five decimal places)	**Longitude** (degrees, to five decimal places**)**
RSW-00*n*		
Reference Water Monitoring Location(1)	**Latitude** (degrees, to five decimal places)	**Longitude** (degrees, to five decimal places)
RSW-00(N+1)		
Sediment Monitoring Locations (for each dry dock)(1)	**Latitude** (degrees, to five decimal places)	**Longitude** (degrees, to five decimal places)
SED-00*n*		
Reference Sediment Monitoring Location(1)	**Latitude** (degrees, to five decimal places)	**Longitude** (degrees, to five decimal places)
SED-00(N+1)		

(1) Receiving water must be monitored at one location per dry dock, and sediment must be monitored at one location per dry dock. "*n*" is the number designation of the dry dock. "N" is the total number of dry docks at the facility. For example, if there are two dry docks, the location names must be as follows:

- Receiving water monitoring locations: RSW-001 and RSW-002
- Reference water monitoring location: RSW-003
- Sediment monitoring locations: SED-001 and SED-002
- Reference sediment monitoring location: SED-003

Regardless of the number of dry docks, only one reference water and one reference sediment location are required.

7. MONITORING DATA

Summarize monitoring data collected during the past five years, including receiving water samples collected near each dry dock, reference water samples, and wipe samples. For new facilities, report analytical results for receiving water near each dry dock. Provide a separate data summary table for each sample location.

Receiving Water Data at Dry Dock *n*
Location ID No. (e.g., RSW-00*n*): _____

Parameter	Highest Value	Range	Units	Test Method	Method Detection Limit	Number of Samples
Total Suspended Solids						
Settleable Solids						
Oil and Grease						
Chromium III						
Chromium VI						
Copper						
Lead						
Nickel						
Zinc						
PCBs						
Tributyltin						

Reference Water Data
Location ID No. (e.g., RSW-00[N+1]): _____

Parameter	Highest Value	Range	Units	Test Method	Method Detection Limit	Number of Samples
Total Suspended Solids						
Settleable Solids						
Oil and Grease						
Chromium III						
Chromium VI						
Copper						
Lead						
Nickel						
Zinc						
PCBs						
Tributyltin						

Wipe Sample Data

Parameter	Highest Value	Range	Units	Test Method	Method Detection Limit	Number of Samples
Copper						

8. VICINITY MAP AND SITE LAYOUT MAP

Include vicinity map and site layout map. The vicinity map must show facility location and surrounding landmarks. Site layout map must be topographic with the following information:

- Legal facility boundaries;
- Location and identification number of each dry dock;
- Discharge points for integral ballast water used for submersion;
- Discharge points of non-contact cooling water;
- Receiving water sample locations for each dry dock;
- Reference water sample location;
- Sediment sample location for each dry dock; and
- Reference sediment sample location.

9. APPLICATION FEE AND MAILING INSTRUCTIONS

Submit application fee by check payable to “State Water Resources Control Board” to this address:

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

Discharges authorized under the Dry Dock General Permit are “Category 3” discharges. For the current fee, see Water Code § 2200(b)(10) (https://www.waterboards.ca.gov/resources/fees/water_quality/).

Submit this form (with signature and attachments) via email to R2NPDES.GeneralPermits@waterboards.ca.gov or as otherwise indicated at www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/general_permits.shtml.

ATTACHMENT C– NOTICE OF INTENT FORM FOR LANDSIDE STORMWATER

This **NOTICE OF INTENT** form shall be completed and submitted to apply for authorization or reauthorization to discharge stormwater associated with landside industrial activities at dry dock facilities under NPDES Permit CAG032012 (Dry Dock General Permit) to waters of the United States.

1. OWNER INFORMATION AND CERTIFICATION

The following certification shall be signed in accordance with Attachment D section 5.2. The Discharger hereby agrees to comply with and be responsible for all conditions specified in the Dry Dock General Permit.

<table>
<tr><td colspan="3">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 C.F.R. § 122.22(d).)</td></tr>
<tr><td colspan="2">Signature</td><td>Date</td></tr>
<tr><td colspan="2">Printed Name</td><td>Title</td></tr>
<tr><td colspan="2">Owner Type (check one)

☐ Public
☐ Private
☐ Other, specify type:</td><td>New or Previously Authorized Facility (check one)

☐ New Facility
☐ Previously Authorized Facility</td></tr>
<tr><td colspan="3">Company / Owner Name</td></tr>
<tr><td colspan="2">Mailing Address</td><td>Phone Number</td></tr>
<tr><td>City</td><td>County</td><td>Zip Code</td></tr>
<tr><td colspan="3">Contact Person Name and Title</td></tr>
<tr><td colspan="2">Contact Person Email</td><td>Contact Person Phone Number</td></tr>
</table>

☐ Check here if additional owners information is attached to this form.

2. FACILITY OPERATOR INFORMATION

Facility Operator Name (if there is more than one operator, each operator must submit a separate Notice of Intent)			Facility Operator Type (check one) ☐ Public ☐ Private ☐ Other, specify type:
Facility Name		Facility Address	
City		State	Zip Code	Phone Number
Site Size (acres):	Industrial Area Exposed to Stormwater (acres):	Percent of Site Impervious (including rooftops):	
Contact Person's Name and Title			
Contact Person's Email			Contact Person's Phone Number
Duly Authorized Representative: The following individual (or any individual occupying the position listed below) may act as the facility's duly authorized representative and may sign and certify submittals in accordance with Attachment D section 5.2.3. This individual shall be responsible for the overall operation of the facility or for facility environmental matters.			
Name			
Title			
Company/Organization			
Street Address			
City	State	Zip Code	Phone Number
Email			

☐ Check here if information for additional operators is attached to this form.

3. DISCHARGE INFORMATION, RECEIVING WATERS, AND MONITORING LOCATIONS

DISCHARGE INFORMATION	
Discharge to Receiving Water: ☐ Direct ☐ Via storm drain system	**Storm drain system owner:**
RECEIVING WATER NAME:	

MONITORING LOCATIONS		
Stormwater Monitoring Location Name (STW-00n)[(1)]	**Latitude** (degrees, to five decimal places)	**Longitude** (degrees, to five decimal places)
STW-001		

(1) Stormwater must be monitored at each stormwater discharge point. "*n*" is the number designation of the stormwater discharge point.

☐ Check here if information for additional monitoring locations is attached to this form.

4. SITE LAYOUT MAP

Include a site layout map. The site layout map must show the facility location and surrounding landmarks, including storm drain system, stormwater discharge points. The site layout map must be topographic with the following information:

- Legal facility boundaries;
- Location and identification number of each dry dock;
- Landside stormwater discharge point(s);
- Landside stormwater monitoring location(s) (i.e., STW-00n);
- Landside general stormwater flow direction;
- Landside stormwater drainage area(s); and
- Receiving water

5. APPLICATION MAILING INSTRUCTIONS

Submit this form (with signature and attachments) via email to R2NPDES.GeneralPermits@waterboards.ca.gov or as otherwise indicated at www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/general_permits.shtml

ATTACHMENT D – STANDARD PROVISIONS

CONTENTS

ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

1.1.1. The Discharger must comply with all of the terms, requirements, and 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; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)

1.1.2. The Discharger shall comply with effluent standards or prohibitions established under CWA section 307(a) for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

1.2. Need to Halt or Reduce Activity Not a Defense

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

1.3. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

1.4. 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) that 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 a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

1.5. Property Rights

1.5.1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

1.5.2. 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 C.F.R. § 122.5(c).)

1.6. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, U.S. EPA, 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 (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 13383):

1.6.1. 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 (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);

1.6.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);

1.6.3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and

1.6.4. Sample or monitor, at reasonable times, for the purposes of ensuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

1.7. Bypass

1.7.1. Definitions

1.7.1.1. “Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)

1.7.1.2. “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 C.F.R. § 122.41(m)(1)(ii).)

1.7.2. **Bypass not exceeding limitations.** The Discharger may allow any bypass to occur that does not cause exceedances of effluent limitations, but only if it is for essential maintenance to ensure efficient operation. These bypasses are not

subject to the provisions listed in Standard Provisions – Permit Compliance sections 1.7.3, 1.7.4, and 1.7.5 below. (40 C.F.R. § 122.41(m)(2).)

1.7.3. **Prohibition of bypass.** Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):

1.7.3.1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));

1.7.3.2. 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 C.F.R. § 122.41(m)(4)(i)(B)); and

1.7.3.3. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance section 1.7.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)

1.7.4. **Approval.** 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 section 1.7.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)

1.7.5. **Notice**

1.7.5.1. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)

1.7.5.2. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions – Reporting section 5.5 below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(ii).)

1.8. 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 C.F.R. § 122.41(n)(1).)

1.8.1. **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 section 1.8.2 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 C.F.R. § 122.41(n)(2).)

1.8.2. **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 C.F.R. § 122.41(n)(3)):

1.8.2.1. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));

1.8.2.2. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));

1.8.2.3. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting section 5.5.2.2 below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and

1.8.2.4. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance section 1.3 above. (40 C.F.R. § 122.41(n)(3)(iv).)

1.8.3. **Burden of proof.** In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

2. STANDARD PROVISIONS – PERMIT ACTION

2.1. 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 C.F.R. § 122.41(f).)

2.2. 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 C.F.R. § 122.41(b).)

2.3. 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 the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and Water Code. (40 C.F.R. §§ 122.41(l)(3), 122.61.)

3. STANDARD PROVISIONS – MONITORING

3.1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)

3.2. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:

3.2.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or

3.2.2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N, for the measured pollutant or pollutant parameter.

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

4. STANDARD PROVISIONS – RECORDS

4.1. 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 C.F.R. § 122.41(j)(2).)

4.2. Records of monitoring information shall include:

4.2.1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));

4.2.2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));

4.2.3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));

4.2.4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));

4.2.5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and

4.2.6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

4.3. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

4.3.1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and

4.3.2. Permit applications and attachments, permits, and effluent data. (40 C.F.R. § 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information that the Regional Water Board, State Water Board, or U.S. EPA 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 U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

5.2. Signatory and Certification Requirements

5.2.1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting sections 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 C.F.R. § 122.41(k).)

5.2.2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

For a partnership or sole proprietorship, all permit applications shall be signed by a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(2).)

For a municipal, state, federal, or other public agency, 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 (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 C.F.R. § 122.22(a)(3).).

5.2.3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting section 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5.2.3.1. The authorization is made in writing by a person described in Standard Provisions – Reporting section 5.2.2 above (40 C.F.R. § 122.22(b)(1));

5.2.3.2. 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 C.F.R. § 122.22(b)(2)); and

5.2.3.3. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)

5.2.4. If an authorization under Standard Provisions – Reporting section 5.2.3 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 section 5.2.3 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 C.F.R. § 122.22(c).)

5.2.5. Any person signing a document under Standard Provisions – Reporting section 5.2.2 or 5.2.3 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 C.F.R. § 122.22(d).)

5.2.6. Any person providing the electronic signature for documents described in Standard Provisions – Reporting sections 5.2.1, 5.2.2, or 5.2.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting section 5.2, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R § 122.22(e).)

5.3. Monitoring Reports

5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)

5.3.2. 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. All reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 and comply

with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)

5.3.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

5.3.4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

5.4. 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 C.F.R. § 122.41(l)(5).)

5.5. Twenty-Four Hour Reporting

5.5.1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report 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.

For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The

Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

5.5.2. The following shall be included as information that must be reported within 24 hours:

5.5.2.1. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

5.5.2.2. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

5.5.3. The Regional Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

5.6. 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 C.F.R. § 122.41(l)(1)):

5.6.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

5.6.2. 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 unless the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a). (40 C.F.R. § 122.41(l)(1)(ii).) If the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a), this notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 C.F.R. section 122.42(a)(1) (see Additional Provisions – Notification Levels section 7.1.1). (40 C.F.R. § 122.41(l)(1)(ii).)

5.7. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

5.8. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting sections 5.3, 5.4, and 5.5 above at the time

monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting section 5.5 above. For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting section 5.5 and the applicable required data in appendix A to 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(7).)

5.9. 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 U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

5.10. Initial Recipient for Electronic Reporting Data

The owner, operator, or duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. section 127.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. section 127.2(c)]. U.S. EPA will update and maintain this list. (40 C.F.R. § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, Water Code sections 13268, 13385, 13386, and 13387.

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.1. 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 C.F.R. § 122.42(a)):

7.1.1. 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 that discharge will exceed the highest of the following “notification levels” (40 C.F.R. § 122.42(a)(1)):

7.1.1.1. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

7.1.1.2. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4 dinitrophenol and 2-methyl 4,6 dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

7.1.1.3. Five (5) times the maximum concentration reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

7.1.1.4. The level established by the Regional Water Board in accordance with 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

7.1.2. 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 C.F.R. § 122.42(a)(2)):

7.1.2.1. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

7.1.2.2. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

7.1.2.3. Ten (10) times the maximum concentration reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

7.1.2.4. The level established by the Regional Water Board in accordance with 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

7.2. Publicly Owned Treatment Works (POTWs)

7.2.1. All POTWs shall provide adequate notice to the Regional Water Board of any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)).

7.2.2. All POTWs shall provide adequate notice to the Regional Water Board of any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of this Order. (40 C.F.R. § 122.42(b)(2).)

7.2.3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

CONTENTS

TABLES

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Clean Water Act (CWA) section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and State laws and regulations.

1. GENERAL MONITORING PROVISIONS

1.1. Each Discharger shall comply with this MRP. The Executive Officer may amend this MRP pursuant to 40 C.F.R. section 122.63.

1.2. Each Discharger shall conduct all monitoring in accordance with Attachment D section 3. Equivalent test methods must be more sensitive than those specified in 40 C.F.R. section 136 and must be specified in this permit or the Discharger's Authorization to Discharge.

1.3. For the analysis of monitoring samples, each Discharger shall use laboratories certified by the State Water Resources Control Board (State Water Board) in accordance with Water Code section 13176 and shall obtain quality assurance/quality control data with laboratory reports. For any onsite field tests (e.g., pH) analyzed by a noncertified laboratory, the Discharger shall implement a Quality Assurance-Quality Control Program. Each Discharger shall keep a manual onsite containing the steps followed in this program and shall demonstrate sufficient capability to adequately perform these field tests (e.g., qualified and trained employees, properly calibrated and maintained field instruments). The program shall conform to U.S. EPA guidelines or other approved procedures.

1.4. If required by U.S. EPA, each Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:

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

2. MONITORING LOCATIONS

Each Discharger shall establish the following monitoring locations to demonstrate compliance with this Order:

Table E-1. Monitoring Locations

Monitoring Location Type	Monitoring Location [1]	Monitoring Location Description
Exposed Deck of Dry Dock	EFF-00n	Randomly selected areas on dry dock n deck that have been exposed to wastes from operations (three areas at a minimum, each a minimum of one square foot).
Receiving Water at Dry Dock	RSW-00n	For each dry dock, location near the perimeter or end of dry dock n, close to Monitoring Location SED-00n.
Reference Water	RSW-00(N+1)	Water location at sufficient distance from dry dock and other potential discharges to represent reference conditions (close to Monitoring Location SED-00[N+1]).
Sediment at Dry Dock	SED-00n	For each dry dock, location where representative sediment samples may be collected at the perimeter of dry dock n, close to Monitoring Location RSW-00n.
Reference Sediment	SED-00(N+1)	Sediment location at sufficient distance from dry dock and other potential discharges to represent reference conditions (close to Monitoring Location RSW-00[N+1]). [2]
Stormwater	STW-00n	Locations representing each stormwater discharge point prior to contact with receiving water, where a representative stormwater sample can be obtained.

Footnotes:

[1] Receiving water shall be monitored at one location per dry dock, and sediment shall be monitored at one location per dry dock. For Monitoring Locations EFF-00n, RSW-00n, and SED-00n, "n" is the number designation of the dry dock. For Monitoring Locations RSW-00(N+1) and SED-00(N+1), "N" is the total number dry docks at the facility. For example, if there are two floating dry docks, the location names shall be as follows:

- Receiving water monitoring locations: RSW-001 and RSW-002.
- Reference water monitoring location: RSW-003
- Sediment monitoring locations: SED-001 and SED-002
- Reference sediment monitoring location: SED-003

Regardless of the number of dry docks, only one reference water and one reference sediment location are required.

For Monitoring Locations STW-00n, "n" is the number designation of the stormwater discharge point.

[2] Reference sediment monitoring locations shall be located in areas expected to be uninfluenced by the discharge of pollutants of concern and shall be representative of habitat characteristics of the assessment area (e.g., salinity, grain size).

3. DRY DOCK SURFACE MONITORING REQUIREMENTS

3.1 Prior to each incident of flooding or submergence of each dry dock, each Discharger shall observe the cleanliness of the dry dock surfaces. Each Discharger shall record observations with the date and time of dry dock use and other observations relevant to the discharge of wastes. Each Discharger shall note any conditions requiring correction, such as the presence of waste materials. Each Discharger shall correct any such condition prior to dry dock flooding or submergence. Inspection reports shall identify the inspector's name, title, and any corrective actions taken.

3.2 The Discharger shall conduct monitoring at Monitoring Locations EFF-00n as described below:

3.2.1 **Wipe Sampling Locations.** Three samples are required for each sampling event for Monitoring Locations EFF-00n. Prior to each sampling event, sample locations shall be selected by a randomized grid procedure. Sample 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 area, wipe samples shall be collected for analysis of copper.

3.2.2. **Wipe Sampling Procedures.** Samples shall be collected using commercially available wipe test kits for the collection of metals. The wipe sample shall be collected using a lead dust sampling wipe, 5 inches by 7.75 inches, pre-moistened with water, polysorbate 20, methylparaben, and propylparaben and placed in a sterile digestion tube. The results of the analyses shall be reported as micrograms per square foot (µg/sq.ft.). The Discharger shall follow U.S. EPA-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 C.F.R. section 761.123.

3.2.3. **Wipe Sampling Frequency.** Dry dock surfaces shall be sampled quarterly for copper at each dry dock whenever vessel cleaning was conducted during the quarter. This monitoring shall occur after the cleaning and no more than four days prior to flooding or submergence of the dry dock.

3.2.4. **Wipe Sample Trigger.** Copper wipe data shall be compared to the copper trigger of 1,400 µg/sq.ft.

3.2.5. **Accelerated Monitoring.** If the wipe test monitoring result shows an exceedance of the copper trigger of 1,400 µg/sq.ft., the Discharger shall conduct accelerated monitoring as follows until three consecutive monitoring events provide results below the trigger:

3.2.5.1. For results that exceed the trigger by less than two times the trigger (i.e., results from 1,400 µg/sq.ft. through 2,800 µg/sq.ft.), the accelerated monitoring frequency shall be monthly (or, if the dry dock is not flooded or submerged for more than one month, until the next flooding or submergence event); or

3.2.5.2. For results that exceed the trigger by more than two times the trigger (i.e., results above 2,800 µg/sq.ft.), the accelerated monitoring frequency shall be once before each flooding or submergence event after working on any vessel in the dry dock.

3.3. If the sampling protocol specified in MRP section 3.2 proves unworkable or unreliable, a Discharger may propose an alternate procedure. The Discharger may commence use of the alternate procedure with written Executive Officer concurrence. The dry dock wipe tests should be coordinated with receiving water sampling to maximize the usefulness of the data set in determining whether dry

dock operations are resulting in water quality objective exceedances within the receiving water.

4. RECEIVING WATER MONITORING

Each Discharger shall monitor receiving waters at Monitoring Locations RSW-00n and RSW-00(N+1) as specified below:

Table E-2. Receiving Water Monitoring

Parameter	Unit	Sample Type	RSW-001 [1]
Total Suspended Solids [2]	mg/L	Grab	1/Year
Settleable Solids	mg/L	Grab	1/Year
Oil and Grease	mg/L	Grab	1/Year
Metals, Total Recoverable	µg/L	Grab	1/Year
PCBs	µg/L	Grab	1/Year
Tributyltin	µg/L	Grab	1/Year
Standard Observations [3]	-	-	1/Event

Footnotes:

[1] Receiving water monitoring shall be performed as soon as feasible following a flooding/submergence event, and no more than 6 hours following the flooding/submergence event. Receiving water monitoring shall be performed at least once each year for a flooding/submergence event for which dry dock deck wipe samples have been collected, as described in MRP section 3.

[2] Metals shall include chromium III, chromium VI, copper, lead, nickel, and zinc.

[3] See MRP section 7.2.2.1.3.1.

5. SEDIMENT MONITORING

Each Discharger shall perform sediment monitoring once during this Order term, consistent with the *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions* (State Water Board, 2018), to evaluate sediment toxicity, benthic community condition, and sediment chemistry. Sediment sampling shall occur outside the influence of any dredging, if possible. Dredging activity in the vicinity of the monitoring locations during sampling shall be described in annual reports.

5.1. Monitoring Locations. The Discharger shall conduct sediment monitoring at Monitoring Locations SED-00n and SED-00(N+1).

5.2. Field Procedures. For sediment toxicity and chemistry analyses, grab samples shall be collected from the upper 5 centimeters (cm) of the sediment surface. For benthic community conditions analyses, grab samples shall be collected with a minimum penetration depth of 5 cm and the entire sample contents shall be collected. In all cases, sediment samples shall be screened through a 0.5 millimeter-mesh screen.

5.3. Test Methods. All samples shall be tested and evaluated as described in the *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions,* sections IV.A.1.e (Laboratory Testing), IV.A.1.f

(Sediment Toxicity), IV.A.1.g (Benthic Community Condition), and IV.A.1.h (Sediment Chemistry). Sediment chemistry samples shall be tested for the analytes below:

Table E-3. Sediment Chemistry Monitoring

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Total Organic Carbon	mg/kg	Grab	Once
Percent Fines	%	Grab	Once
Metals, Total Recoverable [1]	µg/kg	Grab	Once
PCBs [2]	µg/kg	Grab	Once
Pesticides [2]	µg/kg	Grab	Once
PAHs [2]	µg/kg	Grab	Once
Tributyltin	µg/kg	Grab	Once

Footnotes:

[1] Metals include cadmium, chromium III, chromium VI, copper, lead, mercury, nickel, and zinc.

[2] PCBs, pesticides, and PAHs include those listed in *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions*, Appendix A-3.

5.4. Integrated Sediment Assessment. The Discharger shall conduct an integrated sediment assessment in accordance with *Water Quality Control Plan for Enclosed Bays and Estuaries of California*, *Sediment Quality Provisions*, sections IV.4.i and IV.A.4.j to determine the aquatic life sediment quality attained at the sediment monitoring location. Determination of the presence of a line of evidence effect (i.e., biologically significant chemical exposure, toxicity, or benthic community disturbance) shall be based on a comparison to a numeric response value or a statistical comparison to a result for a reference station. Comparison to reference station results shall be accomplished by compiling data for appropriate regional reference sites and determining the reference envelope using statistical methods (e.g., tolerance interval).

5.5. Sediment Stressor Identification Study. If the Discharger determines sediments at any dry dock sediment monitoring location (i.e., a non-reference sediment monitoring location) are “Likely Impacted” or “Clearly Impacted” through sediment monitoring assessments, it shall proceed with conducting a sediment stressor identification study in accordance with *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions,* section IV.A.4.f. The stressor identification study shall seek confirmation and characterization of pollutant related impacts, pollutant identification, and source identification to determine whether sediment impacts are linked to dry dock operations. The Discharger shall prioritize stressor identification to the monitoring locations designated as “Clearly Impacted,” followed by “Likely Impacted.” At least 30 days before initiating the study, the Discharger shall develop and submit a workplan to the Regional Water Board.

For monitoring locations designated as “Possibly Impacted,” the Discharger shall conduct confirmation monitoring in accordance with MRP section 5. The

Discharger shall initiate a stressor identification study if the monitoring location is confirmed as “Likely Impacted” or “Clearly Impacted.”

5.6. Regional Coordination. The Discharger may choose to coordinate sediment monitoring with the Regional Monitoring Program to collect and analyze sediment samples. (The Regional Monitoring Program may decline to coordinate its activities with the Discharger.) If coordinating with the Regional Monitoring Program, the Discharger may monitor at the frequency chosen by the Regional Monitoring Program for its regional monitoring purposes (i.e., discharger sediment samples may be collected and analyzed with Regional Monitoring Program sediment samples), but in no case shall the monitoring frequency be less than once during this Order term. If the Discharger chooses to coordinate with the Regional Monitoring Program, it shall indicate so and describe the coordination in its annual report submitted pursuant to MRP section 7.2.2.2.4.

6. LANDSIDE STORMWATER MONITORING

Each Discharger that has enrolled for coverage of its landside (non-dry dock) industrial stormwater discharges shall conduct stormwater monitoring at Monitoring Location STW-00n as described below:

Table E-4. Landside Stormwater Monitoring

Parameter	Unit	Sample Type	Minimum Sampling Frequency
pH	standard units	Grab	4 Storms/Year [3]
Total Suspended Solids	mg/L	Grab	4 Storms/Year [3]
Oil and Grease	mg/L	Grab	4 Storms/Year [3]
Aluminum, Total Recoverable	µg/L	Grab	4 Storms/Year [3]
Copper, Total Recoverable	µg/L	Grab	4 Storms/Year [3]
Lead, Total Recoverable	µg/L	Grab	4 Storms/Year [3]
Zinc, Total Recoverable	µg/L	Grab	4 Storms/Year [3]
Sampling Event Visual Observations [1]	-	-	4 Storms/Year [3]
BMP Visual Observations [2]	-	-	4 Storms/Year [3]

Footnotes:

[1] See MRP section 6.2.

[2] See MRP section 6.3.

[3] The Discharger shall collect and analyze samples from two storms between July 1 and December 31 and two storms between January 1 and June 30.

6.1. Sample Collection and Frequency. The Discharger shall conduct stormwater monitoring at all locations identified in its Notice of Intent form (i.e., Monitoring Location STW-00n). Grab samples shall be collected when the precipitation event produces a discharge from at least one drainage area and the precipitation event is preceded by 48 hours with no discharge from any drainage area. Samples shall be taken during the first 30 minutes of the discharge. If collection during the first 30 minutes is impracticable, grab samples may be taken during the first hour of the discharge, and the Discharger shall explain in the Annual Stormwater Report why

the grab samples could not be taken within the first 30 minutes. Samples shall represent the quality and quantity of stormwater discharged from the facility.

6.2. Sampling Event Visual Observations. The Discharger shall make the following observations when collecting stormwater samples:

6.2.1. Floating and suspended materials: presence or absence of floating material, such as oil, grease, algae, and other macroscopic particulate matter.

6.2.2. Discoloration and turbidity: description of color, source, and size of affected area.

6.2.3. Odor: presence or absence, characterization, source, distance of travel, and wind direction.

6.2.4. Weather conditions: air temperature and total precipitation during the five days prior to observation.

6.3. BMP Visual Observations. The Discharger shall visually observe equipment, storage areas, and BMPs within each drainage area for the presence or indication of prior, current, or potential unauthorized non-stormwater discharges and their sources; and correct BMP implementation if necessary.

The monthly visual observations shall be conducted during daylight hours of scheduled facility operating hours and on days without precipitation. The Discharger shall explain any uncompleted monthly visual observations in the Annual Stormwater Report.

7. REPORTING REQUIREMENTS

7.1. General Reporting Requirements

Each Discharger shall comply with all Standard Provisions (Attachments D) related to monitoring, reporting, and recordkeeping.

7.2. Self-Monitoring Reports (SMRs)

7.2.1. **Format.** Each Discharger shall submit self-monitoring reports (SMRs) and cover letters via email to R2NPDES.GeneralPermits@waterboards.ca.gov and as further instructed in its Authorization to Discharge. At any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) website (http://www.waterboards.ca.gov/ciwqs/index.html). The CIWQS website will provide additional information for SMR submittal in the event of a planned service interruption.

7.2.2. **Due Dates and Contents.** Each Discharger shall submit quarterly SMRs and annual reports by the due dates and with the contents specified below:

7.2.2.1. **Quarterly SMRs** — Quarterly SMRs shall be due the first day of the second month following each calendar quarter (January 1 – March 31, April 1 – June 30, July 1 – September 30, and October 1 – December 31), covering that calendar quarter. Each SMR shall contain the items listed below:

7.2.2.1.1. Cover letter that includes the following information:

7.2.2.1.1.1. Clear identification of any violations or a clear statement that there were no violations.

7.2.2.1.1.2. Compliance evaluation summary that identifies the following:

- Types of samples obtained during the monitoring period;
- Number and concentrations of samples that exceed the trigger;
- Violations of any prohibition, effluent limitation, discharge specification, or receiving water limitation; and
- Any failure to follow the BMPs Plans.

7.2.2.1.1.3. Detailed description of any violations, their causes, and proposed time schedule for corrective actions taken or planned to resolve the violations and prevent recurrence. If previous reports address the corrective actions, then reference the earlier reports.

7.2.2.1.1.4. Signature and certification in accordance with Attachment D sections 5.2 and 5.3.

7.2.2.1.2. All new monitoring results obtained since submitting the last 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 calculations and reporting for the SMR. If the analytical data for samples collected during a quarter are unavailable for incorporation into that quarterly SMR, then the status of laboratory reports shall be reported and the data shall be included in the next quarterly SMR.

7.2.2.1.3. Tabulated results of all monitoring specified in the MRP, including wipe tests, receiving water monitoring, standard observations, and sediment monitoring, as follows:

7.2.2.1.3.1. **Standard Observations.** Each Discharger shall tabulate standard observations to show the location, date of observation, and compliance or lack thereof for each of the following observations:

7.2.2.1.3.1.1. Floating and suspended materials (e.g., oil, grease, algae, and other macroscopic particulate matter): presence or absence, source, and size of affected area.

7.2.2.1.3.1.2. Discoloration and turbidity: color, source, and size of affected area.

7.2.2.1.3.1.3. Odor: presence or absence, characterization, source, and distance of travel.

7.2.2.1.3.1.4. Beneficial water use: estimated number of water-associated waterfowl or wildlife, fisherpeople, and other recreational activities.

7.2.2.1.3.1.5. Hydrographic condition: time and height of high and low tides (corrected to nearest National Oceanic and Atmospheric Administration location for the sampling date and time).

7.2.2.1.3.1.6. Weather conditions: wind direction, air temperature, and total precipitation during five days prior to observation.

7.2.2.1.3.2. **Analytical Results.** Each Discharger shall arrange all analytical and field test results in a tabular format to clearly illustrate compliance or lack thereof with the effluent limits and receiving water limits, and any exceedances of the trigger in Provision 6.3.4 of the Order. Tabulated monitoring data shall include the monitoring location name (e.g., EFF-00n, SED-00nA, RSW-00n), sample date, sample type, parameter, test results, units, corresponding analytical method detection limits, minimum levels, reporting levels, and related quantification parameters as signed by the laboratory director or other responsible laboratory official. Laboratory reports shall be included in an appendix.

7.2.2.1.4. Discussion of BMPs for responses to trigger exceedances (see Provision 6.3.4), including wipe sampling dates and dates when the Discharger received results; and BMPs reviewed and how they relate to the trigger exceedance.

7.2.2.1.5. Explanation of the circumstances of any dredging activity in the vicinity of the sediment sampling locations (see MRP section 5).

7.2.2.1.6. Monitoring results for any pollutant sampled more frequently than required by this Order.

7.2.2.1.7. Clear statement regarding whether the dry dock cleaning procedures in the BMPs Plan were followed.

7.2.2.1.8. Dry dock flooding or submergence data in a tabulated format. Tabulated data shall also include the dry dock identification number/name, vessel names and types, docking dates, and undocking dates. Each dry dock shall be listed in the table; if a dry dock was not flooded or submerged during the quarter, this information shall also be documented in the table.

7.2.2.1.9. Identification, in a tabular format, of each vessel that discharged non-contact cooling water to the receiving water. Tabulated data shall include

an estimate of the daily flow in gallons per day, the duration of discharge, and whether and how the BMPs in the BMPs Plan were used to lower the temperature prior to discharge.

7.2.2.2. **Annual SMR** — Annual SMRs shall be due February 15 each year, covering the previous calendar year. Annual SMRs shall cover the period of January 1 through December 31 and contain the items described below:

7.2.2.2.1. Annual compliance summary.

7.2.2.2.2. Comprehensive discussion of performance and compliance. This summary shall 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.

7.2.2.2.3. Both tabular (one year) and graphical (five years) summaries of monitoring data (the Discharger shall identify trends, if any, in pollutant concentrations found in wipe or receiving water samples for previous years).

7.2.2.2.4. Description of regional coordination with the Regional Monitoring Program, as applicable.

7.2.2.2.5. Annual Comprehensive Site Compliance Evaluation Report as required by Provision 6.3.3.1.4 of the Order.

7.2.2.2.6. Annual Non-Contact Cooling Water Compliance Evaluation Report as required by Provision 6.3.5 of the Order.

7.2.3. **Monitoring Periods.** Monitoring periods for all required monitoring shall be as set forth in the table below:

Table E-5. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On	Monitoring Period
1/Event for wipe sampling	Effective date of Authorization to Discharge	After dry dock deck cleaning and no more than four days prior to dry dock flooding or submergence
1/Year	Closest January 1 before or after effective date of Authorization to Discharge [1]	January 1 through December 31
Once	Effective date of Authorization to Discharge	Once during the term of the Order within 12 months prior to applying for permit reissuance

Footnote:

[1] Monitoring performed before the effective date of an Authorization to Discharge may be used to satisfy the monitoring required by this Order.

7.2.4. **RL and MDL Reporting for Receiving Water and Sediment Sampling.** The Discharger shall report with each receiving water sample result the Reporting

Level (RL) and Method Detection Limit (MDL) as determined by the procedure in 40 C.F.R. part 136. The Discharger may select any analytical methods described in 40 C.F.R. part 136; however, the RLs shall be below applicable water quality objectives. Otherwise, RLs shall be as low as possible. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

7.2.4.1. 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).

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

7.2.4.3. Sample results less than the laboratory's MDL shall be reported as "Not Detected" or "ND."

7.2.4.4. The Discharger shall instruct laboratories to establish calibration standards so that the lowest calibration standard is at or below the minimum level specified below (or its equivalent if there is differential treatment of samples relative to calibration standards). At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. The table below lists minimum levels for priority pollutants:

Table E-6. Minimum Levels

CTR No.	Parameter	Suggested Analytical Method [1]	Minimum Level (ug/L) [2]
	Aluminum, Total Recoverable	200.5	4.9
5a	Chromium (III)	SM 3500	-
5b	Chromium (VI)	SM 3500	10
	Chromium (total) [3]	SM 3500	10
6	Copper, Total Recoverable	200.9	5.0
7	Lead, Total Recoverable	200.9	5.0
9	Nickel, Total Recoverable	249.2	5.0
	Tributyltin	SM 6710B	-
13	Zinc, Total Recoverable	200 or 289	20

CTR No.	Parameter	Suggested Analytical Method [1]	Minimum Level (ug/L) [2]
	Aluminum, Total Recoverable	200.5	4.9
119-125	PCBs: Aroclors 1016, 1221, 1232, 1242, 1248, 1254, 1260	608	0.50

Footnotes:

[1] The suggested method is the U.S. EPA Method unless otherwise specified (SM = Standard Methods). The Discharger may use another U.S. EPA approved or recognized method if that method has a level of quantification below the applicable water quality objective. Where no method is suggested, the Discharger may use any standard method.

[2] Minimum levels are from the State Implementation Policy or, for aluminum, U.S. EPA Method 200.5.

[3] Analysis for total chromium may be substituted for analysis of chromium (III) and chromium (VI) if the concentration measured is below the lowest hexavalent chromium water quality criterion (11 µg/L).

7.3. Sediment Stressor Identification Report

When applicable, the Discharger shall submit a Sediment Stressor Identification Report no later than October 1, 2027, that covers the work performed as required by MRP section 5.4. The Discharger shall plan accordingly so that workplans, studies, and reports are completed within a reasonable period after detecting potential sediment quality impacts at sediment monitoring locations.

7.4. Annual Stormwater Report. When applicable, the Discharger shall submit an Annual Stormwater Report by July 15 each year providing data for the previous year (July 1 through June 30). The Annual Stormwater Report shall, at a minimum, include the following:

7.3.1. Identification of any non-compliance within the reporting year, with discussion of response actions;

7.3.2 Tabulated summary of all monitoring results (see MRP Table E-4) and visual observations taken during inspections;

7.3.3. Comprehensive discussion of source identification and control programs for oil and grease, pH, TSS, aluminum, copper, lead, zinc, and any other chemical constituents that should not be present in stormwater; and

7.3.4. Comprehensive discussion of corrective actions taken or planned, including but not limited to a summary of BMP changes implemented during the previous year and changes planned for the following year.

7.5. Discharge Monitoring Reports (DMRs)

The Discharger shall submit Discharge Monitoring Reports (DMRs) in accordance with Attachment D section 5.3.2 if instructed to do so by the Regional Water Board or State Water Board.

7.6. Violations and Unauthorized Discharges

7.6.1. Within 24 hours of becoming aware of a violation of this Order, the Discharger shall report by telephone or email to the Regional Water Board staff overseeing this Order (see Authorization to Discharge).

7.6.2. The Discharger shall report spills to the California Office of Emergency Services (telephone 800-852-7550) when spills meet or exceed applicable reportable quantities for hazardous materials.

7.6.3. The Discharger shall submit a written report to the Regional Water Board within five business days following the telephone or email notifications described in sections 7.6.1 and 7.6.2 above unless directed otherwise by Regional Water Board staff in writing. Electronic submittal is acceptable. The written report shall include the following:

7.6.3.1. Date, time and duration of violation or spill;

7.6.3.2. Location of violation or spill (street address or description of location);

7.6.3.3. Nature of violation or material spilled;

7.6.3.4. Volume and quantity of any material involved;

7.6.3.5. Receiving water affected, if any;

7.6.3.6. Cause of violation or spill;

7.6.3.7. Estimated size of affected area;

7.6.3.8. Observed receiving water impacts (e.g., oil sheen, fish kill, or water discoloration);

7.6.3.9. Actions taken to correct violation or to contain, minimize, or clean up spill;

7.6.3.10. Future corrective actions planned to prevent recurrence and implementation schedule; and

7.6.3.11. Persons or agencies notified.

ATTACHMENT F – FACT SHEET

CONTENTS

TABLES

ATTACHMENT F – FACT SHEET

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order. As described in section 2.2 of the Order, the Regional Water Board incorporates this Fact Sheet as findings supporting the issuance of the Order.

1. PERMIT INFORMATION

1.1. This Order regulates discharges from dry dock operations. It reissues NPDES General Permit CAG032012, which the Regional Water Board adopted through Order R2-2017-0027 (previous order) on July 12, 2017. The previous order became effective September 1, 2017.

1.2. Site owners and operators that complete an NOI and apply for an Authorization to Discharge under this Order, and that are granted such authorization, are hereinafter called "Dischargers." For purposes of this Order, references to "discharger" or "permittee" in applicable federal and State laws, regulations, plans, and policies are held to be equivalent to references to Discharger herein.

2. FACILITY AND DISCHARGE DESCRIPTIONS

2.1. Facility Descriptions. This Order is for dry dock operations located within the San Francisco Bay Region. Dischargers that enroll under this Order use floating dry docks or graving dry docks to get ships and other vessels into and out of the water.

2.1.1. **Floating Dry Docks.** 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.

2.1.2. **Graving Dry Docks.** 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 on the support blocks. When work is completed, water is pumped back into the dry dock to refloat the vessel. The caisson is opened, and the vessel may leave the dry dock.

2.2. Discharge Description. Discharges covered by this Order are described in Fact Sheet sections 2.2.1 through 2.2.6 below.

2.2.1. **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 submerging or flooding the dry dock. Any residual particulate matter remaining on the floor of the dry dock after cleanup has the potential to contact water when the dry dock is submerged or flooded.

2.2.2. **Discharges of 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 to the same water body.

2.2.3. **Discharges of Integral Ballast Water.** Floating dry docks use integral ballast water to raise and lower vessels into and out of the water.

2.2.4. **Discharges of Fire Suppression Water.** This Order covers fire suppression water when the source of the water is the same as the receiving water (i.e., salt water, not potable water). Dischargers may occasionally release over-pressure from the fire protection systems that circulate water for fire suppression when needed.

2.2.5. **Discharges of Stormwater from Dry Dock Surfaces after Cleaning.** When no shipyard activity is occurring and the dry docks are clean, stormwater runoff from dry dock surfaces may be discharged.

2.2.6. **Discharges of Stormwater from Landside Facilities Associated with Dry Docks.** This Order covers stormwater discharges from onshore structures and surfaces, including piers, associated with dry dock facilities. Runoff from these industrial areas may carry particulate and residual material, including blast abrasives, paint chips, cutting and welding slag, paper trash, discarded materials, sediment, marine growth, oil, solvents, and plastics. Dischargers may enroll landside stormwater discharges under this Order or maintain coverage under the statewide General Permit for Storm Water Discharges Associated with Industrial Activities (Industrial General Permit), NPDES Permit CAS000001. Dischargers may terminate coverage under the Industrial General Permit for any landside stormwater discharges covered under this Order as of the effective date of an Authorization to Discharge.

2.2.7. Discharges NOT covered by this Order. 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 collected in dry dock sumps. This Order also does not cover sanitary wastewater. Such wastewaters must be disposed of in accordance with applicable federal, State, and local laws and other requirements. The State Water Board developed the Industrial General Permit for stormwater discharges associated with industrial activities. Stormwater discharges not commingled with other wastewaters may be covered under the Industrial General Permit.

2.3. Discharge Points and Receiving Waters. Dischargers may discharge to any receiving waters in the San Francisco Bay Region, which, for purposes of this Order, include Central, Lower, and South San Francisco Bay; San Pablo Bay; Carquinez Strait; Mare Island Strait; Suisun Bay; and the Sacramento-San Joaquin Delta. The NOI form in Attachment B requires Dischargers to specify their discharge locations and show them on a topographic map.

2.4. Previous Order Requirements. The previous order imposed 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 or flooding. As a component of the required BMPs, the previous order required routine collection of wipe samples of dry dock surfaces prior to submergence or flooding. It required Dischargers to analyze the samples for copper, which potentially results from ship repair, rebuilding, and dismantling operations. It contained a trigger (1,800 micrograms per square foot [µg/sq.ft.]) that, when exceeded, required Dischargers to reexamine and, if possible, improve their cleaning procedures to reduce residual contaminants on dry dock surfaces. Wipe sample test results from the previous order term are summarized below:

Table F-1. Wipe Sample Test Results

Parameter	Unit	Mare Island Dry Dock LLC	Lind Marine LLC	Bay Ship & Yacht Co.
Copper	µg/sq. ft.	13 – 22,000	62 – 2,300	1.2 – 3,900

2.5. Compliance Summary

Three dischargers were enrolled under the previous order during previous order term. Their compliance with the previous order is described below:

2.5.1. **Mare Island Dry Dock LLC.** On April 24, 2018, Regional Water Board staff inspected Mare Island Dry Dock LLC and observed BMP deficiencies for landside industrial stormwater management and response to trigger exceedances. The deficiencies primarily related to spill containment and leak prevention measures, container labeling practices, accelerated monitoring for copper, and facility staff training following a trigger exceedance. The Discharger addressed the deficiencies when it submitted a corrective action report.

2.5.2. **Lind Marine LLC.** On May 2, 2018, Regional Water Board staff inspected Lind Marine LLC and observed BMP deficiencies for landside industrial stormwater

management and dry dock cleaning. The deficiencies primarily related to maintenance of stormwater inlets; outdoor storage practices of equipment, scrap metal, and materials; and spill containment measures for fuel containers. The Discharger addressed and corrected the deficiencies when it submitted a corrective action report.

2.5.3. **Bay Ship & Yacht Co.** On May 8, 2018, Regional Water Board staff inspected Bay Ship & Yacht Co. and observed BMP deficiencies for landside industrial stormwater management and dry dock cleaning. The deficiencies primarily related to spill containment and leak prevention measures for waste and fuel containers, and container labeling practices. The Discharger addressed the deficiencies when it submitted a corrective action report.

On July 3, 2019, Regional Water Board staff issued a notice of violation to Bay Ship & Yacht Co. for violations identified in 2018 and 2019 quarterly and annual reports. This included failure to collect wipe samples and conduct accelerated monitoring following copper trigger exceedances, to report standard observations, and to notify the Regional Water Board of its intent to perform comprehensive site compliance evaluations. The Discharger addressed these violations when it submitted a corrective action report.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

3.1. Legal Authorities

This Order serves as WDRs pursuant to California Water Code article 4, section 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the U.S. EPA, and Water Code section 5.5, division 7 (commencing with § 13370). It serves as an NPDES permit for point source discharges to surface waters from enrolled facilities.

3.2. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resources Code division 13, section 3 (commencing with § 21100).

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

3.3.1. **Water Quality Control Plan.** The Regional Water Board adopted the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin

Plan. In addition, this Order implements State Water Board Resolution 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Receiving water beneficial uses include some or all of the following:

- Agricultural Supply
- Commercial and Sport Fishing
- Estuarine Habitat
- Fish Migration
- Fish Spawning
- Groundwater Recharge
- Industrial Process Supply
- Industrial Service Supply
- Municipal and Domestic Supply
- Navigation
- Preservation of Rare or Endangered Species
- Shellfish Harvesting
- Water Contact Recreation
- Non-Contact Water Recreation
- Wildlife Habitat

3.3.2. **Thermal Plan.** The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California* (Thermal Plan) on January 7, 1971, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. It defines "thermal waste" as cooling water and industrial process water used for the purpose of transporting waste heat; therefore, some discharges covered by this Order are thermal wastes subject to the Thermal Plan. This Order implements the Thermal Plan.

3.3.3. **Sediment Quality.** The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* on September 16, 2008, and amended this plan on June 5, 2018. This plan supersedes other narrative sediment quality objectives and establishes sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries. This Order implements the sediment quality objectives of this plan.

3.3.4. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** The NTR and CTR contain federal water quality criteria for priority pollutants. U.S. EPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About 40 NTR criteria apply in California. U.S. EPA adopted the CTR on May 18, 2000. The CTR promulgated new toxics criteria for California and incorporated the NTR criteria that applied in the State. U.S. EPA amended the CTR on February 13, 2001.

3.3.5. **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 establishes implementation provisions for priority pollutant criteria and objectives, and provisions for chronic toxicity control. The SIP became effective on April 28, 2000, with respect to the priority pollutant

criteria U.S. EPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established through the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria U.S. EPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. Requirements of this Order implement the SIP.

3.3.6. **Antidegradation Policy.** Federal regulations at 40 C.F.R. section 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 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Permitted discharges must be consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.

3.3.7. **Anti-Backsliding Requirements.** CWA sections 402(o) and 303(d)(4) and 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

3.3.8. **Endangered Species Act Requirements.** 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 §§ 2050 to 2097) or Federal Endangered Species Act (16 U.S.C.A. §§ 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, including protecting rare, threatened, or endangered species. Dischargers are responsible for meeting all applicable Endangered Species Act requirements.

3.4. Impaired Water Bodies on CWA section 303(d) List

On April 6, 2018, U.S. EPA approved a revised list of impaired waters pursuant to CWA section 303(d), which requires 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 includes San Francisco Bay as a waterbody impaired by mercury, PCBs, selenium, chlordane, DDT, dieldrin, dioxin and furan compounds, and invasive species. Where it has not done so already, the Regional Water Board plans to adopt total maximum daily loads (TMDLs) for pollutants on the 303(d) list. TMDLs establish wasteload

allocations for point sources and load allocations for nonpoint sources and are established to achieve water quality standards.

The SIP requires effluent limitations for all 303(d)-listed pollutants to be consistent with TMDLs and associated wasteload allocations. A TMDL for mercury became effective February 12, 2008, and a TMDL for PCBs became effective March 29, 2010. Neither TMDL contains wasteload allocations for dry docks because dry docks are not known to be significant sources of mercury. Dry docks could be a source of PCBs, but receiving water and sediment monitoring completed during the previous order term did not detect any PCBs associated with dry dock discharges. A TMDL for selenium in North San Francisco Bay became effective on August 23, 2016. This TMDL does not contain wasteload allocations for dry dock facilities because these facilities are not known to be sources of selenium. Dry docks are also not known to be significant sources of chlordane, DDT, dieldrin, dioxin and furan compounds, or invasive species.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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

4.1. Discharge Prohibitions

4.1.1. Prohibitions in this Order

4.1.1.1. **Discharge Prohibition 3.1. (No discharge other than as described):** This prohibition is based on 40 C.F.R. section 122.21(a) and Water Code section 13260, which require filing an application and Report of Waste Discharge before a discharge can occur. Discharges not described in the application and Report of Waste Discharge, and subsequently in this Order, are prohibited.

4.1.1.2. **Discharge Prohibition 3.2. (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 other requirements. This Order's requirements do not implement these standards so sanitary discharges are prohibited.

4.1.1.3. **Discharge Prohibition 3.3. (No discharge of solid materials and wastes, spent abrasive and paint residues):** 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.

4.1.1.4. **Discharge Prohibition 3.4. (No discharge of oil and floating materials):** This prohibition is based on Basin Plan Table 4-1, Discharge Prohibitions 8 and 13, which prohibit the discharge of oil and other petroleum products, and other floating materials, to protect birds and other wildlife from possible toxic effects.

4.1.1.5. **Discharge Prohibition 3.5. (No discharge of oil or any residuary product of petroleum):** This prohibition is based on Basin Plan Table 4-1, Discharge Prohibition 13, which prohibits the discharge of oil and residuary product of petroleum to protect birds and other wildlife, except as allowed by Water Code division 7.

4.1.1.6. **Discharge Prohibition 3.6. (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.

4.1.1.7. **Discharge Prohibition 3.7. (No discharge of power washing or pressure washing water, boiler drainage, or other process wastewater):** 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 prohibits these discharges. Wash waters are to be collected for discharge to a sanitary sewer system or through other legal means not subject to this Order.

4.1.1.8. **Discharge Prohibition 3.8. (No discharge of seepage water or stormwater):** This prohibition is necessary because the requirements of the Order do not address seepage water from dry dock walls or caissons or stormwater runoff from dry dock surfaces when vessels are being processed. Seepage or stormwater could contain pollutants not controlled by the BMPs specified in this Order; thus, this Order may not sufficiently protect water quality if seepage water or stormwater were discharged.

4.1.1.9. **Discharge Prohibition 3.9. (No discharge of fire suppression water containing chemical additives):** This prohibition is necessary because the requirements of this Order do not reflect the discharge of fire suppression water, for purposes of system testing or pressure relief, into a receiving water from which it does not originate, or that contains chemical additives. Fire suppression water could contain pollutants not controlled by the BMPs specified in this Order, thus, this Order may not sufficiently protect water quality if fire suppression water is discharged.

4.1.2. Basin Plan Discharge Prohibition 1

Basin Plan Table 4-1, Discharge Prohibition 1, prohibits the discharge of any wastewater that 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, or into any nontidal water. This prohibition is intended 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 upsets or malfunctions. Basin Plan section 4.2 allows exceptions to Discharge Prohibition 1 in the following circumstances:

- An inordinate burden would be placed on the discharger relative to the beneficial uses protected, and an equivalent level of environmental protection can be achieved by alternate means; or
- A discharge is approved as part of reclamation project; or
- A net environmental benefit will be derived as a result of the discharge; or
- A discharge is approved as part of a groundwater cleanup project.

The Basin Plan further states:

> In reviewing requests for exceptions, the Water Board will consider the reliability of the discharger's system in preventing inadequately treated wastewater from being discharged to the receiving water and the environmental consequences of such discharges.

The 10:1 dilution requirement was intended to accommodate treatment plant upsets. Discharges from the dry dock facilities covered by this Order are neither continuous nor subject to upset. In any case, providing an initial dilution of at least 10:1 would be impracticable for dry dock discharges; dischargers would likely need to construct a deepwater outfall costing millions of dollars, capture all water that washes over their dry docks and related facilities, and route that water through the deepwater outfall, constituting an inordinate burden for Dischargers. Moreover, Provisions 6.3.3 through 6.3.7 of the Order requiring development and implementation of BMPs to control potential pollutants provides an equivalent level of water quality protection.

4.2. Technology-Based Effluent Limitations

CWA section 301(b) and 40 C.F.R. section 122.44 require that permits include conditions meeting technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet water quality standards. The CWA requires that technology-based effluent limitations (TBELs) be established based on several levels of control:

- **Best practicable treatment control technology (BPT)**. 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.

- **Best available technology economically achievable (BAT).** BAT represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

- **Best conventional pollutant control technology (BCT).** BCT represents the control from existing industrial point sources of conventional pollutants, including biochemical oxygen demand, total suspended solids, fecal coliform, pH, and oil and grease. BCT standards are 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.

- **New source performance standards (NSPS).** NSPS represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires U.S. EPA to develop effluent limitations, guidelines, and standards representing the application of BPT, BAT, BCT, and NSPS. CWA section 402(a)(1) and 40 C.F.R. section 125.3 authorize the use of best professional judgment to derive technology-based effluent limitations on a case-by-case basis whenever U.S. EPA has not promulgated effluent limitations, guidelines, and standards. When best professional judgment is used, the Regional Water Board must consider specific factors outlined in 40 C.F.R. section 125.3.

U.S. EPA has not promulgated effluent limitations, guidelines, or standards for the ship building and repair industry; however, U.S. EPA 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). U.S. EPA 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 (Provisions 6.3.3 through 6.3.7) contains narrative BMP-based requirements that represent BPT controls based on best professional judgement. In setting these limits, the factors specified in 40 C.F.R. sections 125.3(d)(1) and (3) were considered:

Table F-2. Factors Considered Pursuant to 40 C.F.R. Section 125.3(d)

Factors	Considerations
Cost of application of technology relative to effluent reduction benefits	The cost of imposing these limits is reasonable given that existing Dischargers can comply through their existing processes. 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.
Age of equipment and facilities	The limitations can be met with existing equipment and facilities. 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.
Process employed	The limitations can be met with existing processes. Methodical cleaning operations can be specified in the Best Management Practices Plan and can be readily monitored for compliance. No unusual or technically challenging processes are required.
Engineering aspects of various controls	The existing controls are practicable and capable of meeting these limits. The process of sweeping, scrubbing, and cleaning dry dock surfaces does not lend itself to more sophisticated engineering controls.
Process changes	No process changes are necessary to meet these limits. Existing dry dock operators have been cleaning the surfaces of their dry docks after ship maintenance operations and prior to submergence or flooding for years. No specific process changes are required.
Non-water quality environmental impacts	Because no process changes are necessary, no non-water-quality impacts are foreseeable. Waste materials would continue to be removed from dry docks and recycled or properly disposed of as appropriate.

4.3. Water Quality-Based Effluent Limitations

4.3.1. Scope and Authority

CWA section 301(b) and 40 C.F.R. section 122.44(d) require permits to include limitations more stringent than federal technology-based requirements where necessary to achieve water quality standards. According to 40 C.F.R. section 122.44(d)(1)(i), permits must include effluent limitations for all pollutants that are or may be discharged at levels that have a reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective, water quality-based effluent limitations (WQBELs) must be established using (1) U.S. EPA 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 a narrative

criterion, supplemented with relevant information. The process for determining reasonable potential and calculating WQBELs when necessary is intended to achieve applicable water quality objectives and criteria, and thereby protect designated beneficial uses of receiving waters. This Order imposes WQBELs for pollutants with reasonable potential to cause or contribute to exceedances of water quality standards. 40 C.F.R. section 122.44(k) allows use of BMPs in place of numeric effluent limitations when numeric effluent limitations are infeasible, as is the case with discharges from dry dock surfaces from submergence or flooding, stormwater runoff after cleaning, and landside industrial stormwater runoff.

4.3.2. Beneficial Uses and Water Quality Criteria and Objectives

Fact Sheet section 3.3.1 identifies the potential beneficial uses of the receiving waters for discharges subject to this Order. Water quality criteria and objectives to protect these beneficial uses are described below:

4.3.2.1. **Basin Plan Objectives.** The Basin Plan specifies numeric water quality objectives for many pollutants to protect aquatic life (see Basin Plan section 3.3.21). It also specifies narrative water quality objectives, such as the narrative toxicity objective: “All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms.”

4.3.2.2. **CTR Criteria.** The CTR specifies numeric aquatic life and human health criteria for numerous priority pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries. Some human health criteria are for consumption of “water and organisms” and others are for consumption of “organisms only.” Waters with municipal or domestic supply beneficial use designation are subject to the “water and organisms” criteria.

4.3.2.3. **NTR Criteria.** The NTR establishes numeric aquatic life and human health criteria for a number of toxic pollutants for San Francisco Bay waters upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta.

4.3.2.4. **Thermal Plan**. The Thermal Plan defines specific water quality objectives for specific circumstances. Although the objectives differ somewhat for enclosed bays versus estuaries, and existing discharges versus new discharges, they essentially require the following:

- Discharge temperatures must protect beneficial uses;
- Discharge temperatures may be no more than four degrees Fahrenheit (ºF) above the natural temperature of the receiving waters; and
- Discharge temperatures may not be higher than 86ºF.

4.3.2.5. **Sediment Quality Objectives.** The *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions,* contains the following narrative water quality objectives:

4.3.2.5.1. "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 objective 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 objective, it is to impose the objective as a receiving water limit.

4.3.2.5.2. "Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health in bays and estuaries of California." This objective is to be implemented by a three-tiered procedure based on pollutant concentrations in sediment and fish tissue.

4.3.2.5.3. "Pollutants shall not be present in sediment at levels that alone or in combination are toxic to wildlife and resident finfish by direct exposure or bioaccumulate in aquatic life at levels that are harmful to wildlife or resident finfish by indirect exposure in bays and estuaries of California." This objective is to be implemented on a case-by-case basis, based upon an ecological risk assessment.

4.3.3. **Reasonable Potential Analysis**

Assessing whether a pollutant has reasonable potential to exceed a water quality objective is the fundamental step in determining whether a WQBEL is required. 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. This Order finds that there is reasonable potential if TBELs implemented as BMPs are not adequately implemented and therefore not protective of water quality objectives.

4.3.3.1. **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 material may contain metals common to the shipyard industry (e.g., chromium, copper, lead, nickel, and zinc) and tributyltin at concentrations that could cause or contribute to exceedances of water quality objectives. This determination is based on the Oregon Department of Environmental Quality and U.S. EPA Office of Enforcement and Compliance Assurance documents, which provide descriptions of the pollutants generated during vessel maintenance and overhaul work. These documents also suggest that

PCBs could be discharged from dry docks, but receiving water and sediment monitoring completed during the previous order term did not detect PCBs associated to dry dock discharges. The documents are as follows:

- *Best Management Practices for Oregon Shipyards*, Oregon Department of Environmental Quality, 2000;
- *USEPA Office of Compliance Sector Notebook Project: Profile of the Shipbuilding and Repair Industry*, U.S. EPA Office of Enforcement and Compliance Assurance, 1997; and
- *A Guide for Ship Scrappers*, U.S. Office of Enforcement and Compliance Assurance, 2000, EPA 315-B-00-001.

4.3.3.2. **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.

4.3.3.3. **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. There is thus reasonable potential for this waste heat to exceed Thermal Plan water quality objectives.

4.3.3.4. **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.

4.3.3.5. **Stormwater from Dry Dock Surfaces after Cleaning.** There is reasonable potential for stormwater collected from dry dock surfaces after cleaning takes place if the BMPs required by Provisions 6.3.4 and 6.3.5 of the Order are not adequately implemented. Proper implementation of these BMPs would remove any pollutants from the dry dock surfaces.

4.3.3.6. **Landside Stormwater Discharges.** There is reasonable potential for stormwater collected from landside surfaces to cause or contribute to exceedances of water quality objectives because runoff may carry pollutants (e.g., particulate material, metals, oil and grease) washed off from onshore equipment, structures, and surfaces associated with dry dock facilities.

4.3.3.7. **Sediment.** Pollutants in some receiving water sediments may be present in quantities that alone or in combination are toxic to benthic communities. To determine potential sediment quality impacts from dry dock operations, the

previous order required sediment monitoring to evaluate three lines of evidence (LOEs): sediment toxicity, benthic community condition, and sediment chemistry.

4.3.3.7.1. **Sediment Toxicity.** Sediment toxicity measures the response of invertebrates exposed to surficial sediments under controlled laboratory conditions. The sediment toxicity LOE is used to assess both pollutant-related and biological effects and exposure. Sediment toxicity tests are of short durations and may not duplicate exposure conditions in natural systems. This LOE provides a measure of exposure to all pollutants present, including non-traditional or unmeasured chemicals. Sediment toxicity results are classified into one of the following four categories:

- Nontoxic: response is not substantially different from that expected in sediments that are uncontaminated and have optimum characteristics for the test species (e.g., control sediments);
- Low toxicity: response is of relatively low magnitude; response may not be greater than test variability;
- Moderate toxicity: response is of moderate magnitude and there is a high confidence that a statistically significant toxic effect is present; or
- High toxicity: response is of high magnitude and there is a high confidence that a statistically significant toxic effect is present.

4.3.3.7.2. **Benthic Community Condition.** Benthic community condition measures species composition, abundance, and diversity of the sediment-dwelling invertebrates inhabiting surficial sediments. The benthic community LOE is used to assess impacts to the primary receptors targeted for protections in bays and estuaries of California. Benthic community composition is a measure of the biological effects of both natural and anthropogenic stressors. Benthic community condition is classified into one of the following four categories:

- Reference: community composition equivalent to least affected or unaffected site;
- Low disturbance: community exhibits some indication of stress but could be within measurement error of unaffected condition;
- Moderate disturbance: community exhibits clear evidence of physical, chemical, natural, or anthropogenic stress; or
- High disturbance: community exhibits high magnitude of stress.

4.3.3.7.3. **Sediment Chemistry.** Sediment chemistry measures the concentration of chemicals of concern in surficial sediment. This sediment LOE is used to assess the potential risk to benthic organisms from toxic pollutants in surficial sediments. The sediment chemistry LOE is intended only to evaluate overall exposure risk from chemical pollutants in surficial sediment. It does not determine causality between exposure risk and specific chemicals. Sediment chemistry results are classified into one of the following four exposure categories:

- Minimal exposure: sediment-associated contamination may be present, but exposure is unlikely to result in effects;
- Low exposure: small increase in pollutant exposure that may be associated with increased effects, but magnitude or frequency of occurrence of biological impacts is low;
- Moderate exposure: clear evidence of sediment pollutant exposure that is likely to result in biological effects; or
- High exposure: pollutant exposure highly likely to result in possibly severe biological effects; generally present in small percentage of samples.

4.3.3.7.4. **Integrated Sediment Assessment.** Assessment as to whether the aquatic life sediment quality objective has been attained at a sediment monitoring location is accomplished by interpreting and integrating multiple lines of evidence (MLOE). None of the individual LOEs are sufficiently reliable when used alone to assess sediment quality impacts. However, each LOE produces information that, when integrated with the other LOEs, provides a more confident assessment of sediment quality relative to the sediment quality objectives.

Assessment categories are assigned to the three LOEs and evaluated to determine the final assessment for each sediment monitoring location. The assessment category represented by each of the possible MLOE combinations reflects the presence and severity of two characteristics of the sample: severity of biological effects and potential for chemical-mediated effects:

- Severity of biological effects: severity of biological effects present at a site is determined by integrating the toxicity LOE and benthic condition LOE using the decision matrix in Table F-3.
- Potential for chemical-mediated effects: potential for effects to be chemical-mediated is determined by integrating the toxicity LOE and chemistry LOE using the decision matrix presented in Table F-4.

Table F-3. Severity of Biological Effects Matrix

		Sediment Toxicity LOE Category			
		Nontoxic	**Low Toxicity**	**Moderate Toxicity**	**High Toxicity**
Benthic Community Condition LOE Category	**Reference**	Unaffected	Unaffected	Unaffected	Low Effect
	Low Disturbance	Unaffected	Low Effect	Low Effect	Low Effect
	Moderate Disturbance	Moderate Effect	Moderate Effect	Moderate Effect	Moderate Effect
	High Disturbance	Moderate Effect	High Effect	High Effect	High Effect

Table F-4. Potential for Chemical-Mediated Effects Matrix

		Sediment Toxicity LOE Category			
		Nontoxic	**Low Toxicity**	**Moderate Toxicity**	**High Toxicity**
Sediment Chemistry LOE Category	**Minimal Exposure**	Minimal Potential	Minimal Potential	Low Potential	Moderate Potential
	Low Exposure	Minimal Potential	Low Potential	Moderate Potential	Moderate Potential
	Moderate Exposure	Low Potential	Moderate Potential	Moderate Potential	Moderate Potential
	High Disturbance	High Exposure	Moderate Potential	High Potential	High Potential

The MLOE combines the intermediate classifications for severity of biological effect and potential for chemical-mediated effect result into one of the following six categories:

- Unimpacted: confident that sediment contamination is not causing significant adverse impacts to aquatic life living in the sediment at the site;

- Likely unimpacted: sediment contamination at the site is not expected to cause adverse impacts to aquatic life, but some disagreement among the LOE reduces the certainty in classifying the site as unimpacted;

- Possibly impacted: sediment contamination at the site may be causing adverse impacts to aquatic life, but these impacts are either small or uncertain because of disagreement among the LOE;

- Likely impacted: evidence for a contaminant-related impact to aquatic life at the site is persuasive, even if there is some disagreement among the LOE;

- Clearly Impacted: sediment contamination at the site is causing clear and severe adverse impacts to aquatic life; or

- Inconclusive: disagreement among the LOE suggests that either the data are suspect or that additional information is needed before a classification can be made.

Table F-5. Assessment Matrix

		Severity of Effect			
		Unaffected	**Low Effect**	**Moderate Effect**	**High Effect**
Potential for Chemical-Mediated Effects	**Minimal Potential**	Unimpacted	Likely Unimpacted	Likely Unimpacted	Inconclusive [1]
	Low Potential	Unimpacted	Likely Unimpacted	Possibly Impacted	Possibly Impacted
	Moderate Potential	Likely Unimpacted	Possibly Impacted or Inconclusive [1]	Likely Impacted	Likely Impacted
	High Potential	Inconclusive [1]	Likely Impacted	Clearly Impacted	Clearly Impacted

Determination of the presence of an LOE effect (i.e., biologically significant chemical exposure, toxicity, or benthic community disturbance) is based on a comparison to a numeric response value or a statistical comparison to reference monitoring locations. The numeric values or statistical comparisons (e.g., confidence interval) used to classify a LOE as “Effected” are specified in sections IV.A.1.f through IV.A.1.h of the *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions* to indicate “High Chemical Exposure,” “High Toxicity,” or “High Disturbance.” Reference monitoring locations are to be located in an area expected to be uninfluenced by the discharge or pollutants of concern in the assessment area and representative of other habitat characteristics of the assessment area (e.g., salinity, grain size). Comparison to reference monitoring locations is accomplished by compiling data for appropriate regional reference sites and determining the reference envelope using statistical methods (e.g., tolerance intervals).

4.3.3.7.5. **Discharger Sediment Assessments.** In 2019 and 2022, Dischargers performed sediment monitoring consistent with the *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions.* MLOE-based sediment assessments for dry dock monitoring locations and reference monitoring locations (unimpacted by dry dock operations) are summarized below:

Table F-6. MLOE-based Sediment Assessments

Discharger	Monitoring Location	Chemical Exposure	Benthic Disturbance	Toxicity	Final Assessment
Mare Island Dry Dock LLC	SED-001	Low	Moderate	Nontoxic	Likely Unimpacted
	SED-002	Low	Moderate	Low	Possibly Impacted
	SED-003	Moderate	Moderate	Low	Likely Impacted
	Reference (SED-005)	Low	Moderate	Nontoxic	Likely Unimpacted
Lind Marine LLC	SED-004	Low	Moderate	Nontoxic	Likely Unimpacted
	Reference (SED-005)	Low	Moderate	Nontoxic	Likely Unimpacted
Bay Ship & Yacht Co.	SED-001	Moderate	Moderate	Nontoxic	Possibly Impacted
	SED-002	Moderate	Moderate	Low	Likely Impacted
	Reference (SED-003)	High	Moderate	Low	Likely Impacted

Based on these assessments, it is unclear whether dry dock discharges cause or contribute to pollutants in sediments in quantities that, alone or in combination, are toxic to benthic communities. Moderate benthic community disturbance has been observed at all monitoring locations, including reference monitoring locations that are outside the influence of dry dock operations. Chemical exposure data also show the presence of pollutants unrelated to dry dock discharges, such as polycyclic aromatic hydrocarbons, in comparable concentrations between dry dock and reference monitoring locations. Additional studies are needed before concluding that dry dock discharges are linked to sediment quality impacts.

While the impact of dry dock discharges on sediment quality is unclear, this Order conservatively finds reasonable potential that discharges authorized under this Order could cause or contribute to an exceedance of the sediment objectives; therefore, consistent with the *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions,* this Order imposes the sediment objectives as receiving water limits (see Provisions 5.1.3 through 5.1.5 of the Order). Furthermore, the Monitoring and Reporting Program (MRP) section 5.5 requires confirmation monitoring and stressor identification studies for

sediments categorized as “Possibly Impacted,” “Likely Impacted,” and “Clearly Impacted” to clarify the potential impacts dry dock discharges could have on sediment quality and to inform future reasonable potential analyses. This requirement is consistent with section IV.A.4.f of the plan.

4.3.4. Water Quality-Based Effluent Limitations

Dry dock discharges of thermal wastes, metals common to the shipyard industry (e.g., chromium, copper, lead, nickel, and zinc), and tributyltin exhibit reasonable potential to cause or contribute to exceedances of water quality objectives. Similarly, landside stormwater discharges containing metals (e.g., aluminum, copper, lead, and zinc), oil and grease, and particulate material can cause or contribute to exceedances of water quality objectives. However, the establishment, evaluation, and enforcement of numeric effluent limitations for these pollutants are infeasible because representative effluent samples cannot readily be obtained from these types of discharges. These discharges are most appropriately controlled through BMPs, as set forth in Provisions 6.3.3 through 6.3.6 of the Order. CWA section 304(e) authorizes the use of BMPs as narrative effluent limitations. In accordance with 40 C.F.R. section 122.44(k), BMPs can be used to control or abate the discharge of pollutants when numeric effluent limitations are infeasible, or when BMPs are reasonably 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 that cover the pollutants with reasonable potential.

4.4. Discharge Requirement Considerations

4.4.1. **Anti-Backsliding.** This Order complies with the anti-backsliding provisions of CWA sections 402(o) and 303(d)(4), and 40 C.F.R. section 122.44(l), which generally require effluent limitations in a reissued permit to be as stringent as those in the previous order. The requirements of this Order are at least as stringent as those in the previous order.

4.4.2. **Antidegradation.** This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16. It does not authorize lowering water quality as compared to the level of discharge authorized in the previous order, which is the baseline by which to measure whether degradation will occur. This Order does not allow for an increased flow, a reduced level of treatment, or increased effluent limitations relative to the previous order. Therefore, further analysis and findings authorizing degradation are unnecessary.

4.4.3. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based requirements implement minimum, applicable federal technology-based requirements. In addition, this Order contains more

stringent effluent limitations as necessary to meet water quality standards. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement CWA requirements.

This Order's WQBELs have been derived to implement water quality objectives that protect beneficial uses. The beneficial uses and water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The procedures for calculating these WQBELs are based on the CTR, as implemented in accordance with the SIP, which U.S. EPA approved on May 18, 2000. U.S. EPA approved most Basin Plan beneficial uses and water quality objectives prior to May 30, 2000. Beneficial uses and water quality objectives submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 131.21(c)(1). U.S. EPA approved the remaining beneficial uses and water quality objectives, so they are also applicable water quality standards pursuant to 40 C.F.R. section 131.21(c)(2).

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in sections 5.1 and 5.2 of the Order are based on Basin Plan narrative and numeric water quality objectives. The receiving water limitation in section 5.3 of the Order requires compliance with federal and State water quality standards in accordance with the CWA and regulations adopted thereunder.

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

Attachment D contains standard provisions that apply to all NPDES permits in accordance with 40 C.F.R. section 122.41 and additional conditions applicable to specific categories of permits in accordance with 40 C.F.R. section 122.42. The Discharger must comply with these provisions. The conditions set forth in 40 C.F.R. sections 122.41(a)(1) and (b) through (n) apply to all state-issued NPDES permits and must be incorporated into permits either expressly or by reference.

In accordance with 40 C.F.R. section 123.25(a)(12), states may omit or modify conditions to impose more stringent requirements. This Order also omits the federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the State's enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates Water Code section 13387(e) by reference.

6.2. Monitoring and Reporting Provisions

CWA section 308 and 40 C.F.R. sections 122.41(h), 122.41(j)-(l), 122.44(i), and 122.48 require that NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and State requirements. For more information, see Fact Sheet section 7.

6.3. Special Provisions

6.3.1. Reopener Provisions

These provisions are based on 40 C.F.R. sections 122.62 and 122.63 and allow modification of this Order and its effluent limitations as necessary in response to updated water quality objectives, regulations, or other new and relevant information that may become available in the future, and other circumstances as allowed by law.

6.3.2. Application for General Permit Coverage and Authorization to Discharge

These provisions require submittal of an NOI form and compliance with this Order upon receipt of an Authorization to Discharge, and are based on 40 C.F.R. section 122.28(b). They allow the Executive Officer to terminate an Authorization to Discharge based on 40 C.F.R. section 122.28(b). The provision allowing the Executive Officer to require an individual permit is based on 40 C.F.R. section 122.28(b)(3).

6.3.3. Contingency Plan

The requirement to develop a Contingency Plan to ensure proper facility operation in the event of an emergency is based on Regional Water Board Resolution 74-10. Discharge in violation of this Order where the Discharger has failed to develop and implement a Contingency Plan as the Order requires could be the basis for considering the discharge a willful and negligent violation of the Order pursuant to Water Code section 13387.

6.3.4. Best Management Practices for Cleaning Dry Dock Surfaces

Provision 6.3.4 is based on CWA section 304(e) and 40 CFR 122.44(k), which allow use of BMPs to control or abate pollutant discharges when numeric effluent limitations are infeasible. The narrative discharge specifications in this 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 guidance provided in U.S. EPA's *Development Document for*

Proposed Best Management Practices for the Ship Building and Repair Industry: Dry docks Point Source Category (1979).

6.3.5. Best Management Practices for Responses to Trigger Exceedances

Provision 6.3.5 requires Dischargers to compare the results of wipe sample tests from dry dock decks and floors after cleaning to a copper trigger set forth in the Order (1,400 µg/sq.ft.). The purposes of the trigger are (1) to provide feedback regarding how thoroughly the BMPs are being implemented and (2) to indicate whether additional BMPs may be appropriate. Accelerated monitoring requirements and BMP enhancements, if necessary, ensure that pollutants on dry dock deck surfaces are removed to the extent technologically and economically feasible. When no further BMP enhancements can be implemented, this Order allows the Executive Officer to authorize a Discharger to return to the routine monitoring frequency indicated in MRP section 3.2.3 or cease conducting wipe tests. Under such circumstances, the Regional Water Board may consider the Discharger's efforts and revise the trigger with the next permit reissuance so the trigger continues to provide feedback regarding how thoroughly the BMPs are implemented.

The trigger is not an effluent limitation and is not intended to evaluate whether discharges could cause or contribute to exceedances of water quality objectives in the receiving water. This Order requires receiving water monitoring to assess the effects of the discharge on receiving water quality.

Data collected between 2013 and July 2016 indicate that copper is a reliable indicator of BMP implementation. Only copper and zinc were detected in wipe tests at levels greater than the triggers in previous orders. Copper was detected far more frequently than zinc and, when found, exceeded its trigger by significantly greater magnitudes than zinc. Because BMPs that control copper also control zinc and other pollutants related to dry dock operations, testing for copper alone is sufficient to evaluate BMP implementation.

The trigger is calculated to relate the residual copper found on a wipe sample to a concentration potentially discharged to receiving waters after flooding or submergence. The water volume in a column of water directly above the wipe sample area is assumed to mix completely with any copper remaining on the dry dock deck or floor after cleaning. The flooded or submerged depth varies among dry docks. For a floating dry dock, the fully submerged dry dock deck lies below 20 to 40 feet of water. For a graving dry dock, the dry dock floor lies below at most 40 feet of water. To allow for a margin of safety, the copper trigger is based on one half of the depth at full submersion of the Bay Ship & Yacht dry dock in Alameda, currently the smallest dry dock in the Region. This is 10 feet or about 300 centimeters (cm) of water. The copper (measured in micrograms) on 1.0 square foot (930 square centimeters, cm^2) of dry dock area would be mixed into about 280,000 cubic centimeters of water (930 cm^2 x 300 cm of water).

Because some receiving waters may be estuarine, the copper trigger is based on the freshwater chronic toxicity criterion (5.0 micrograms per liter) in Basin Plan Table 3-4 and the CTR assuming a hardness value of 48 milligrams of calcium carbonate (mg $CaCO_3$). This is the lowest hardness recorded at two Regional Monitoring Program sampling stations (Napa River and Davis Point) relatively close to the dry docks at Mare Island. Water at this location tends to be fresher and have lower hardness than water near the other dry docks in the Region. The freshwater criterion is roughly the same as the saltwater criterion. The use of the dissolved freshwater criterion without using a translator or conversion factor to estimate total recoverable copper is conservative.

The trigger is calculated by multiplying the water quality criterion (5.0 µg/L) by the water column volume above one square foot (280 liters) to obtain 1,400 µg/sq.ft.

6.3.6. Best Management Practices for Non-Contact Cooling Water

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). BMPs are an effective way to ensure that the Thermal Plan water quality objectives are met.

6.3.7. Best Management Practices for Landside Stormwater

6.3.7.1. **Stormwater Pollution Prevention Plan.** This provision is based on Basin Plan section 4.8 and is consistent with the requirements of the Industrial General Permit.

6.3.7.2. **Best Management Practices.** This provision is based on U.S. EPA regulations in 40 C.F.R. section 122.44 (k), which refer to U.S. EPA's *Guidance Manual for Developing Best Management Practices* (October 1993, EPA 833-B-93-004). Dischargers are required to incorporate a Best Management Practices Manual by reference into their SWPPPs.

6.3.7.3. **Stormwater Monitoring and Action Levels.** This provision establishes pollutant concentrations in landside stormwater discharges to be used to evaluate BMP effectiveness. These requirements are consistent with, and at least as stringent as, the requirements of the Industrial General Permit.

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 C.F.R. sections 122.41(h), 122.41(j)-(l), 122.44(i), and 122.48 require that NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP (Attachment E) establishes monitoring, reporting, and recordkeeping requirements that implement federal and State requirements. The following provides the rationale for the MRP requirements:

7.1. Dry Dock Surface Monitoring

The MRP establishes requirements for assessing the impact of pollutants on water flooding dry dock surfaces. It 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. Instead, the MRP requires Dischargers to collect wipe samples from randomly selected dry dock locations 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 docks before they are submerged or flooded. Wipe samples are to be collected using solvents as described in MRP section 3. Analysis of wipe samples yields pollutant values that can be compared with the copper trigger set forth in Provision 6.3.5 of the Order and described in Fact Sheet section 6.3.5.

7.2. Receiving Water Monitoring

Receiving water monitoring is necessary to characterize the effects discharges could have on receiving waters and, in some cases, to evaluate compliance with receiving water limits. The MRP also requires receiving water monitoring to establish reference water quality conditions to evaluate whether dry docks are the cause of observed receiving water conditions. Because receiving water quality will likely remain relatively stable in San Francisco Bay, the frequency of reference monitoring is limited to once per year.

7.3. Sediment Monitoring

The MRP requires collection of sediment samples near dry docks (i.e., assessment areas). It also requires sediment monitoring farther from the dry docks, in an area expected to be uninfluenced by the discharge or pollutants of concern in the assessment area and representative of other habitat characteristics of the assessment area to establish reference conditions. The monitoring frequency is consistent with the *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions*. Sediment samples are needed to determine sediment toxicity, benthic community conditions, and sediment chemistry to generate data for comparison with the sediment quality objectives.

The requirement for a Sediment Stressor Identification Study is based on section IV.A.4.f of the *Water Quality Control Plan for Enclosed Bays and Estuaries of California, Sediment Quality Provisions,* which requires Dischargers to conduct stressor identification studies when sediment monitoring determines samples are “Likely Impacted” or “Clearly Impacted.”

This Order allows Dischargers to choose to coordinate with the Regional Monitoring Program to collect and analyze sediment samples (i.e., discharger sediment samples may be collected and analyzed together with Regional

Monitoring Program sediment samples). It does not require the Regional Monitoring Program to coordinate with the Dischargers.

7.4. Landside Stormwater Monitoring

Landside stormwater monitoring is necessary to evaluate BMP effectiveness and to determine whether additional BMPs are necessary to control landside stormwater discharges.

7.5. Other Monitoring

This Order requires each Discharger to evaluate sampling data on a temporal basis to identify trends, if any. In addition, if wipe sample results indicate that the copper trigger is exceeded, the Discharger must comply with additional requirements specified in Provision 6.3.5 of the Order.

8. PUBLIC PARTICIPATION

The Regional Water Board considered 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 WDR adoption process, Regional Water Board staff developed tentative WDRs and encouraged public participation in the WDR adoption process.

8.1. Notification of Interested Parties. The Regional Water Board notified the Dischargers and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. The public had access to the agenda and any changes in dates and locations through the Regional Water Board's website at waterboards.ca.gov/sanfranciscobay.

8.2. Environmental Justice. Water Code sections 189.7 and 13149.2 require specific outreach and findings related to potential environmental justice, disadvantaged community and tribal community impact, and racial equity considerations for reissued regional WDRs. This Order requires that all discharges immediately comply with applicable water quality objectives; therefore, the nature and location of the discharges under this Order are not expected to impact environmental justice, disadvantaged communities and tribal communities, and racial equity. Nevertheless, Regional Water Board staff reached out to disadvantaged and tribal communities for consultation on this Order before the formal public comment period described in Fact Sheet section 8.3 began.

8.3. Written Comments. Interested persons were invited to submit written comments concerning the tentative WDRs as explained through the notification process. Comments were to be submitted either in person, by email, or by mail to the attention of Marcos De la Cruz.

Written comments were due at the Regional Water Board office by 5:00 p.m. on May 8, 2023.

8.4. Public Hearing. The Regional Water Board held a public hearing on the tentative Order during its regular meeting at the following date and time:

Date: June 14, 2023
Time: 9:00 a.m.
Contact: Marcos De la Cruz, (510) 622-2365,
marcos.delacruz@waterboards.ca.gov

Interested persons were provided notice of the hearing and information on how to participate. During the public hearing, the Regional Water Board heard testimony pertinent to the discharges, and Order.

Dates and venue can change. The Regional Water Board's web address is https://www.waterboards.ca.gov/sanfranciscobay, where one can access the current agenda for changes.

8.5. Reconsideration of Waste Discharge Requirements. Any person aggrieved by this Regional Water Board action may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, section 2050. The State Water Board must receive the petition at the following address within 30 calendar days of the date of Regional Water Board action:

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

A petition may also be filed by email at waterqualitypetitions@waterboards.ca.gov.

For instructions on how to file a water quality petition for review, see waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml.

8.6. Information and Copying. The Report of Waste Discharge, related supporting documents, and comments received are on file and may be inspected at the Regional Water Board address above by making an appointment with the Regional Water Board's custodian of records. Document copying may be arranged by calling (510) 622-2300.

8.7. 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 the Facility, and provide a name, address, and phone number.

8.8. Additional Information. Requests for additional information or questions regarding this Order should be directed to Marcos De la Cruz, (510) 622-2365, marcos.delacruz@waterboards.ca.gov.