

# San Diego Unified Port District



## Jurisdictional Urban Runoff Management Program

March 2008



March 2008

Port Jurisdictional Urban Runoff Management Program Document

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 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.

  
\_\_\_\_\_  
David Merk  
Director  
Environmental Services

## Acknowledgements

The development and production of this Jurisdictional Urban Runoff Management Program Document is a result of the talents and experience of several individuals. Special recognition and acknowledgement are thereby expressed to the following individuals for their contributions and insight to making this document a collective success for the environment and the Port of San Diego:

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The Port of San Diego also wishes to recognize and thank the public for their continued expressed concern for the protection and conservation of San Diego Bay's environmental resources.

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## Executive Summary

The Port of San Diego Environmental Services Department has prepared this Jurisdictional Urban Runoff Management Program Document in accordance with the requirements of San Diego Regional Water Quality Control Board Order No. 2007-0001 (NPDES Permit #CAS0108758), the Municipal Stormwater Permit. The Document describes all the activities that the Port has undertaken, is undertaking, or will undertake, to reduce discharges of pollutants and urban runoff flow to the municipal separate storm sewer system to the maximum extent practicable. The three major phases of urban development addressed by this program are the planning, the construction, and the existing development or existing use phases.

The Port JURMP has been developed to assist the Port in identifying causes or contributions to water quality impacts, tracking urban runoff related activities, and to implement to the maximum extent practicable (MEP) best management practices (BMPs) to reduce or eliminate pollutants from reaching receiving waters within the Port's jurisdiction. This JURMP was designed to be a comprehensive management program focusing several individual elements on achieving similar outcomes and objectives. The Port of San Diego Jurisdictional Urban Runoff Management Program Document serves as an informational document that provides an overall account of the program to be conducted by the Port during the five-year life of the Municipal Stormwater Permit. The programs described herein are effective as of January 24, 2008.

The Port JURMP Document contains a signed certified statement, this executive summary, the program components, as well as conclusions and recommendations. It discusses the program components required by the Municipal Permit: namely, existing development, land-use planning for new development and redevelopment, construction activities, illicit discharge detection and elimination activities, education activities, public participation activities, and enforcement activities. It also outlines the methods to be used in analyzing the effectiveness and the budget and funding JURMP requirements. The Port's Legal Certification, Article 10, facility inventories, the dry weather monitoring program to be implemented by the Port, and the accompanying maps of the Port-owned and –maintained stormwater conveyance system, are all included as appendices to the JURMP Document. The JURMP Document presents these topics in an order that was agreed upon by the Regional Copermittees in August of 2007.

Each of the Existing Development activities and Construction activities presented in the JURMP Document features a discussion of pollution prevention, source identification, threats to water quality prioritization, best management practices required for implementation for each activity, and enforcement mechanisms. Inspections are also featured as a topic for all applicable sections. The land use planning for new development and redevelopment section describes existing and planned project review and approval processes and discusses the updates to the Port SUSMP. The illicit discharge detection and elimination activities are directed at identifying and eliminating unauthorized discharges to the stormwater conveyance system, as well as identifying proper waste handling and disposal options. The education

activities discussed are those being undertaken and/or planned for Port staff, select target audiences, and the general public. Existing and planned methods for public participation are detailed in the Document. There is a discussion of the steps involved in the annual evaluation of program effectiveness and of the fiscal resources required to implement the program.

There are several appendices required to support the program described in the body of the Document. The appendices include: Article 10, the Port's Stormwater Management and Discharge Control Ordinance; inventories of facilities that are the focus of the Port Urban Runoff Management Program; the dry weather monitoring program to be implemented by the Port and the accompanying maps of the Port-owned and –maintained stormwater conveyance system.

In accordance with the Municipal Permit, the Port will submit an Annual Report documenting the program activities conducted for the year. Each Annual Report will cover the fiscal period from July 1 of the previous year to June 30 of the current year. In addition to an accounting for all the illicit discharges reported and resolved, the inspections and education efforts conducted, and the enforcement actions taken, cleaning (streets, MS4, and BMPs) efforts, and BMP tracking, the Annual Report will summarize other relevant urban runoff related data not specifically required by the permit. A proposed budget for the upcoming year and instances of water quality improvement or degradation will be reported. The report will discuss the public participation mechanism used during implementation of the Port Urban Runoff Management Program. Finally, management measures proven to be ineffective in reducing urban runoff pollutants and flow will be identified.

During the next five years, the Port is committed to establishing a better understanding of how to relate and/or coordinate jurisdictional efforts with watershed high priority water quality problems and how to improve data tracking in a manner that provides coordinated and efficient information. To accomplish those tasks, linkages between programs/activities, pollutants, and watershed hydrologic areas will be established whenever possible. Additionally, the Port will continue to expand efforts to develop information tracking systems that store, retrieve and report information within and across program components. It is anticipated that both of these efforts will significantly improve the Port's ability to document Permit compliance and, more importantly, relate urban runoff related efforts to water quality improvements.

The Port Urban Runoff Management Program is a dynamic program that will evolve with time. As characteristics, policies, and procedures continue to change in the Port's tidelands jurisdiction, so must the program and this JURMP Document. Thus, this Document is considered a living document that will be periodically modified to ensure that it adequately describes the Port's program. Where regional efforts have been initiated or will be initiated to standardize JURMP programs, the Port will work collectively with the Regional Copermittees to ensure that Port JURMP efforts and actions remain consistent with the final regional standards. Any proposed revisions to the Port JURMP Document will be made part of the Annual Report required by Permit Sections I and K.

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## 1.1 Introduction

San Diego Bay is one of the most spectacular natural bays in the world and treasured for the aesthetic and recreational benefits it provides. There is continual concern that San Diego Bay is being impacted by pollution associated with urban and stormwater runoff. Controlling pollution in runoff is critical to preserving aquatic resources and the economic viability of San Diego Bay. The importance of preventing stormwater pollution from entering the waters of the state of California for the protection of human health and the environment are well documented. Urban runoff during both the dry season and wet season has been shown to cause negative impacts to receiving waters. Many of the industrial, construction, residential, and municipal activities occurring today are contributors of pollutants which may find their way into the storm water conveyance system and may cause violations of receiving water standards. The most common types of pollutants found in runoff include sediment, pathogens, heavy metals, petroleum products, nutrients, pesticides, herbicides, bacteria, and trash.

The Port of San Diego (Port) Jurisdictional Urban Runoff Management Program (JURMP) is just one in a series of efforts to protect the water quality of San Diego Bay. The activities that comprise the JURMP are expected to evolve and be modified as new information becomes available regarding the Bay's water quality and the program effectiveness. The Port JURMP signifies the continuation of a long-term effort to protect and enhance the water quality of the Bay. It has been developed to assist the Port in tracking the above-referenced activities and to implement to the maximum extent practicable (MEP) best management practices (BMPs) to reduce or eliminate pollutants from reaching receiving water within the Port's jurisdiction.

This Port JURMP Document contains a written account of the overall program to be conducted by the Port during the five-year life of San Diego Regional Water Quality Control Board (RWQCB) Order No.R9-2007-0001 (NPDES Permit #CAS0108758). RWQCB Order No. R9-2007-0001 will be referred to throughout this JURMP Document by the common title of the "Municipal Permit" or the "Permit."

## 1.2 Background

The Port is a special government entity, created in 1962 by an act of the California legislature. The legislature passed the San Diego Unified Port District Act (the Act) in order to create an entity to manage San Diego Harbor, and to administer approximately 5500 acres of public lands along San Diego Bay. It is the policy of the State of California to develop the harbors and ports of the State for multiple purpose use for the benefit of the people. The Port was created

to fulfill this duty. The Port has the authority to protect, preserve, and enhance: the physical access of the bay, the natural resources of the bay, including plant and animal life, and the quality of water in the bay. The Act defines the Port as a public corporation that holds those lands granted to it in public trust. To that end, the Port has been granted both police powers and the authority to levy taxes.

“Tidelands”, properly speaking, are lands between the lines of mean high tide and mean low tide. By contrast, “submerged lands” are those lands seaward of the low tide and not uncovered in the ordinary ebb and flow of the tide. The area of San Diego Bay encompassed by the historic mean high tide line amounts to approximately 15,000 acres of filled and submerged lands. The shoreline around San Diego Bay is approximately 54 miles in length. San Diego Bay tidelands are owned or controlled by the Federal Government, the State of California, the County of San Diego, the cities of San Diego and Coronado, and the Port.

The Port’s jurisdictional boundary is limited to a portion of San Diego Bay and the San Diego Bay tidelands. Approximately 5500 acres, or 37%, of tidelands has been granted to the Port. Approximately half of the total acreage controlled by the Port is actually submerged lands. The Port controls approximately 33 miles, or 61%, of the total bay shoreline. Figure 1-1 depicts the Port jurisdictional boundaries. The Port’s jurisdiction includes both tidelands and submerged lands, which for convenience are both referred to as “Port tidelands” or “tidelands” throughout this JURMP document.

The Port’s jurisdiction lies completely within the San Diego Bay Watershed Management Area (WMA) (as defined in the Municipal Stormwater Permit, Table 2). This WMA is comprised of three of hydrologic units listed in the San Diego Basin Plan, adopted by the RWQCB, each of which drains to San Diego Bay. The hydrologic units are the Pueblo San Diego (908.00), the Sweetwater (909.00), and the Otay (910.00). The San Diego Bay WMA encompasses a 415 square mile area that extends approximately 50 miles to the east - all the way to the Laguna Mountains. The major surface water features in these three hydrologic units include San Diego Bay, the Sweetwater River, the Otay River, and the Pacific Ocean. In addition to those waters, other tributaries to San Diego Bay include Chollas Creek, Paleta Creek, Paradise Creek, and Switzer Creek. The Municipal Stormwater Permit also identifies the Port as the “Lead Watershed Copermitttee” for the San Diego Bay WMA.

The Port’s jurisdiction also encompasses portions of the cities of Chula Vista, Coronado, National City, Imperial Beach, and San Diego. These municipalities have easements for the portions of their stormwater conveyance systems that cross the Port tidelands and discharge into San Diego Bay. The majority of the Port-owned and maintained stormwater conveyance system serves the Tenth Avenue Marine Terminal, the National City Marine Terminal, the Cruise Ship Terminal, Shelter Island, Harbor Island, Bayside Park in Chula Vista, Dunes Park in Imperial Beach, and Tidelands Park in Coronado. There are approximately 200 stormwater outfalls discharging into San Diego Bay.

Approximately 300 tenants and subtenants operate businesses on lands under lease from the Port. Tenant businesses include hotels, restaurants, marinas and yacht clubs, retail shopping villages, boat repair and shipbuilding, manufacturing, a power plant, seafood processing, sportfishing landings, and other commercial, recreational, and industrial waterfront-related business activities.

## 1.3 Purpose and Objectives

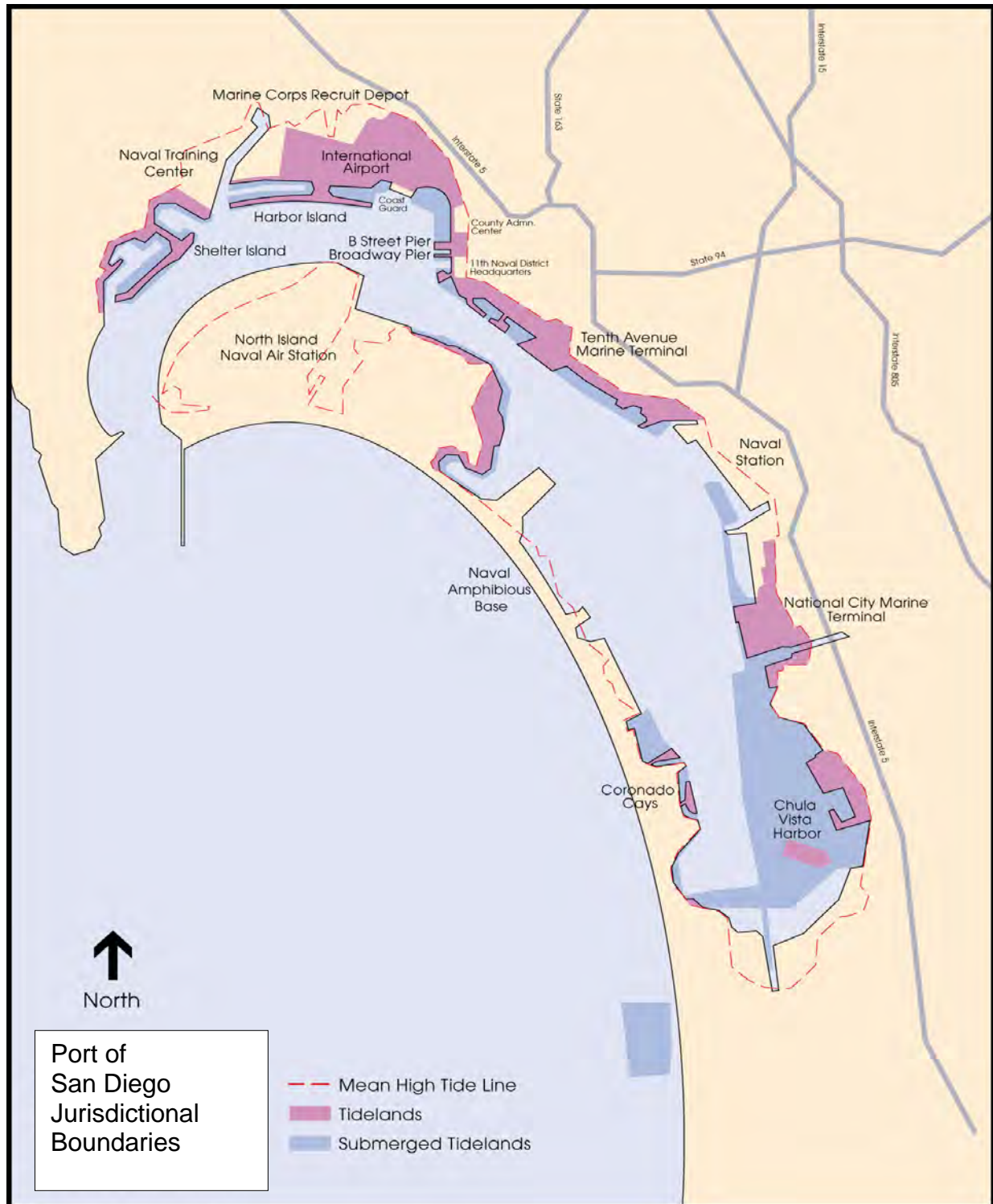
As stated above, the Port was created to protect, preserve, and enhance the physical access of the bay, the natural resources of the bay, and the quality of water in the bay. The Port JURMP has been developed to assist the Port in identifying causes or contributions to water quality impacts, tracking urban runoff related activities, and to implement to the MEP best management practices to reduce or eliminate pollutants from reaching receiving waters within the Port's jurisdiction. This JURMP was designed to be a comprehensive management program focusing several individual elements on achieving similar outcomes and objectives. To that end, the Port is able to comply with the municipal permit and conduct stormwater and urban runoff program management efforts in the most coordinated, cost effective manner possible.

The Port JURMP objectives are

- To improve water quality in the bay and adjacent receiving waters;
- To minimize the urban runoff discharges from Port tidelands; and
- To improve program management efforts related to urban runoff

To comply with the requirements of the Municipal Permit and to meet the Port's objectives, the Port will engage a number of activities that will reduce or eliminate pollutants in the MS4. These activities may include the following, separately or in combination: employee training, tenant and public education/outreach, source identification, water quality monitoring, BMP development and implementation, inspections, code enforcement and coordination with adjacent cities. The measures and actions outlined in each and every component of the Port JURMP Document are intended to effectively protect and enhance the quality of the tideland's environmental resources, wherever possible.

Figure 1-1. Port Of San Diego Jurisdictional Boundaries.



## 1.4 Regulatory Requirements

The Federal Clean Water Act (CWA) Section 402 prohibits the discharge of pollutants into waters of the United States from any point source without a National Pollution Discharge Elimination System (NPDES) permit. In 1983, the Environmental Protection Agency (EPA) reported in a summary of the Nationwide Urban Runoff Program (NURP) that urban storm water was one of the primary causes of water quality impairment across the nation. As such, the US EPA used the authorities of the CWA to adopt regulations for urban runoff and stormwater.

In many states, the US EPA has delegated administration of the NPDES permit program to the state water quality control authority. In California, the State Water Resources Control Board (SWRCB) and its RWQCBs administer the NPDES permit program. The RWQCBs implement the municipal urban runoff NPDES permit program. The RWQCBs generally issue area-wide permits for urban areas that are considerable sources of pollutants or contribute to water quality standard violations. Regardless of population, the area-wide permits cover all municipalities within the defined urban area.

### **1.4.1 San Diego Municipal Permit**

Recently, on January 24, 2007, the San Diego RWQCB adopted Order No. R9-2007-0001, NPDES Permit #CAS018758. This Order represents the third Municipal Stormwater Permit issued to the San Diego County Copermittees. The Permit in Section D specifies the requirements necessary for the Copermittees to reduce the discharge of pollutants in urban runoff to the MEP. Although the Copermittees have been implementing a JURMP program pursuant to the previous Permit (Order No. 2000-01), Order No. R9-2007-0001 specifies new or modified requirements for discharges of urban runoff from MS4s draining the watersheds of the County of San Diego, the San Diego County Regional Airport Authority, the 18 incorporated cities of San Diego County, and the San Diego Unified Port District.

The Municipal Permit outlines the responsibilities of the Copermittees including, but not limited to, the updating and implementation of:

- Development Planning;
- Construction ;
- Existing Development; and
- Watershed and Regional Urban Runoff Management.

The Permit requires the Copermittees to update their JURMP Documents within one year of permit adoption, that is, by January 24, 2008.

### **1.4.2 Environmentally Sensitive Areas**

The RWQCB defines "Environmentally Sensitive Areas" in Section D.1.d(2)(g) of the Municipal Permit. The term defined the areas to include, but not be limited to:

- All Clean Water Act 303(d) impaired water bodies;
- Areas designated as an "Area of Special Biological Significance" (ASBS) by the State Water Resources Control Board;
- Water bodies designated as having a RARE beneficial use by the State Water Resources Control Board, or
- Areas designated as preserves or their equivalent under the Multiple Species Conservation Program (MSCP) within the Cities and County of San Diego.

The San Diego Bay has been designated, in its entirety, as having a RARE beneficial use in the San Diego Basin Plan. Neither the 303(d) listings, nor the MSCP areas add any more area to those encompassed by the RARE designation.

### **1.4.3 CWA 303(d) and Toxic Hot Spots**

The CWA Section 303(d) pollutants of concern and/or water quality effect in San Diego Bay are presented in Table 2 of the Municipal Stormwater Permit. As of the most recent adoption of the 303(d) list by the State of California, various reaches of San Diego Bay are listed for impacts due to bacteria, PAHs, PCBs, and metals. The water quality effects on the bay are listed as sediment toxicity and benthic community effect. These impacts are associated with urban runoff.

Urban runoff also appears to be a significant contributor to the creation and persistence of Toxic Hot Spots in San Diego Bay. California Water Code §13395 requires the RWQCBs to reevaluate waste discharge requirements (WDRs) that are associated with toxic hot spots. The SWRCB adopted the Consolidated Toxic Hot Spot Cleanup Plan in June 1999. The Plan states: "The reevaluation of WDRs associated with toxic hot spots shall consist of (1) an assessment of the WDRs that may influence the creation or further pollution of the known toxic hot spot, (2) an assessment of which WDRs need to be modified to improve environmental conditions at the known toxic hot spot, and (3) a schedule for completion of any WDR modifications deemed appropriate." There are four Toxic Hot Spots in San Diego Bay, namely;

the mouth of Chollas Creek, the Seventh Street Channel, the mouth of Switzer Creek, and an area near the B Street/Broadway Pier.

## 1.5 JURMP Document Layout

The Port JURMP Document describes the actions the Port will take to reduce discharges of pollutants and urban runoff flow during each of three major phases of urban development, namely, the planning, the construction, and the existing development or existing use phases. This JURMP Document was prepared in accordance with the Permit requirements and describes all the activities that the Port has undertaken, is undertaking, or will undertake, to implement the requirements of each component outlined in Section D of the Permit.

The order in which these topics are presented conforms to a standard outline agreed upon by the Regional Copermittees in August of 2007. Adoption of the standard outline by the Copermittees represents a collaborative effort undertaken in accordance with Permit Section L. It should be noted that the unique nature in which the Port operates, namely in having jurisdictional authority over portions of member city lands, having limited allowable land uses on tidelands properties, and operating through tenant lease agreements (rather than business licensing agreements) made it somewhat difficult to present all information concisely within the standard format. As such, the Port has elected to vary slightly from this outline in the following chapters of this JURMP Document; Land Use Planning, Industrial/Commercial, Residential, and Municipal.

The Port JURMP document contains the executive summary, introduction, conclusions, recommendations, and signed certified statement required by the Permit. The document also discusses the Permit sections listed below:

- D. Jurisdictional Urban Runoff Management Program
  - D.1. Development Planning
  - D.2. Construction
  - D.3. Existing Development
  - D.4. Illicit Discharge Detection and Elimination Component
  - D.5. Education
  - D.6. Public Participation

Similar to the statement made above, the unique manner in which the Port was developed and conducts operations makes some of the Permit requirements difficult to achieve or not applicable to Port operations. For example, residential land uses and other Municipal Permit identified facilities and/or activities are not allowed on state tidelands as legislated by the Port Act. Where these discrepancies occur, the appropriate sections of this JURMP Document will make note of the limitations and not attempt to discuss them further during the five-year life of this Permit.

Additionally, as specified in the Municipal Permit, the Copermittees must also assess the effectiveness of their JURMP programs. To accomplish this task, the Copermittees have developed a framework for assessing the effectiveness of their programs. The 2003 Regional Copermittee document, "*A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*" (Framework Document) provides a complete description of the effectiveness assessment process and the target outcome concept. A crucial step of this process was the development of "six levels" of target outcomes of the overall program implementation. These six levels will assist and focus the Copermittee to advance their programs from activity-based to water quality-based outcomes. A complete discussion of the assessment program the Port has developed to comply with the Municipal Permit is included in Chapter 13. Individual JURMP component assessments are included in each JURMP chapter.



The Port is committed to ensuring compliance with the Permit. To this end, the Port has committed significant staff positions and external resources to effectively implementing stormwater and pollution prevention practices in several operational departments while also managing effective stormwater programs for its tidelands tenants. The Port has adopted the “Stormwater Management and Discharge Control Ordinance,” Article 10 of the Port of San Diego Code (Appendix B), to regulate urban runoff within the Port’s jurisdiction. This ordinance will herein be referred to as “Article 10” throughout this document. This ordinance requires the prevention, control, treatment, or diversion of storm water discharges, through a program of education and enforcement of general and specific prohibitions and requirements. Article 10 applies to all dischargers and locations within the Port’s jurisdiction.

## 2.1 Departmental Roles and Responsibilities

Several Port departments play key roles in stormwater management and implementation based on their day-to-day duties, their coordination with tenants, and their authority to approve development and/or lease agreements. This section discusses the roles and responsibilities related to stormwater management within various departments throughout the Port, and the ways in which they interact. The primary and secondary departmental responsibilities for the implementation of the Stormwater Program are discussed below and are provided in Table 2-1. Additionally, Figures 2-1, 2-2, and 2-3 provide organizational charts for the departments at the Port that are related to stormwater management, the Environmental Services Department, and the General Services Department. Port contact information is provided in Table 2-2.

### 2.1.1 *Environmental Services Department*

The Environmental Services Department is the primary department responsible for developing and implementing the Port’s Stormwater Program. Within the Environmental Services Department, specific staff are dedicated to various components of Municipal Permit compliance. One Senior Environmental Specialist oversees the coordination and enforcement of the JURMP and WURMP requirements and manages the Stormwater Program as a whole. Within the Stormwater Program, Environmental Specialists are assigned to manage each of the following programs: (1) public participation and education compliance; (2) land use planning and construction compliance; (3) industrial, commercial and municipal compliance; (4) watershed management; (5) monitoring requirements; and (6) database and GIS management. Additionally, a staff of three to four interns provide support with Illicit Discharges/Illicit

Connection response, Dry and Wet Weather monitoring, tenant inspections, and other projects as needed. Responsibilities regarding enforcement are distributed throughout the entire staff.

The Environmental Services Department also consists of staff responsible for other elements of environmental protection. Two Senior Environmental Specialists are dedicated to the management of the Site Assessment/Remediation Program and the Green Port Program. Both of these programs relate to the Stormwater Program in various ways, and staff assigned to these programs often interact within elements of the Stormwater Program. The Department is led by a Director who provides oversight to the entire department and acts as a liaison between the department and upper management and an Assistant Director, who is responsible for natural resources management. Additionally, three administrative assistants provide support to the staff.

### **2.1.2 *General Services Department***

The General Services Department is responsible for many aspects of the Port's stormwater management, including the Integrated Pest Management Program, building maintenance, landscaping, parks and recreational facilities, the stormwater conveyance system, streets and parking lots, and vehicle maintenance. Their secondary responsibilities include education, program assessment, fiscal analysis, household hazardous waste, and municipal facilities.

The General Services Department is managed by a Director, who oversees an Administration Manager and an Assistant Director. The Administration Manager oversees the Work Coordination Center, the Fleet Maintenance Technicians, and the Equipment Operators. The Assistant Director oversees the Electricians, the Gardeners, the Maintenance Mechanics, the Maintenance Workers, the Building Maintenance Coordinator, the Custodians, the Carpenters, the Plumbers, and the Painters.

### **2.1.3 *Harbor Police***

The San Diego Harbor Police Department is in charge of non-emergency fire fighting. They also are the primary department for issuing stormwater related judicial enforcement authorities. Harbor Police reports spills and other environmental incidents to the Environmental Services Department. Harbor Police's secondary responsibilities include education, program assessment, and fiscal analysis.

### **2.1.4 *Land Use and Planning Department***

The Land Use planning Department is primarily responsible for land use planning and

conducting environmental reviews of development projects. Their secondary responsibilities include education, program assessment, and fiscal analysis.

### **2.1.5 Real Estate Department**

The Real Estate Department primarily oversees municipal, industrial and commercial facilities and plays an integral role in coordinating tenant development projects. They are also responsible for referring various tenant environmental issues to the Environmental Services Department. Their secondary responsibilities include education, enforcement, inventories, program assessment, fiscal analysis, buildings, parking facilities, engineering, and construction.

### **2.1.6 Maritime Department**

The Maritime Division is primarily responsible for maritime industrial and commercial uses. They are also responsible for reporting spills and other environmental incidents to the Environmental Services Department. Additionally, a subset of their staff are involved in the Port's compliance with Wet Weather Monitoring requirements as required by the General Industrial Permit. Their secondary responsibilities include education, program assessment, fiscal analysis, municipal facilities, and buildings.

### **2.1.7 Facilities and Engineering Department**

The Facilities and Engineering Department is primarily responsible for development/design of capitol development projects and construction issues. They are also responsible for incorporating stormwater requirements within the design process. Their secondary responsibilities include education, program assessment, fiscal analysis, municipal facilities, landscaping, recreational facilities, buildings, parking facilities, streets, and the stormwater conveyance system.

**Table 2-2.** Port Of San Diego Contact List.

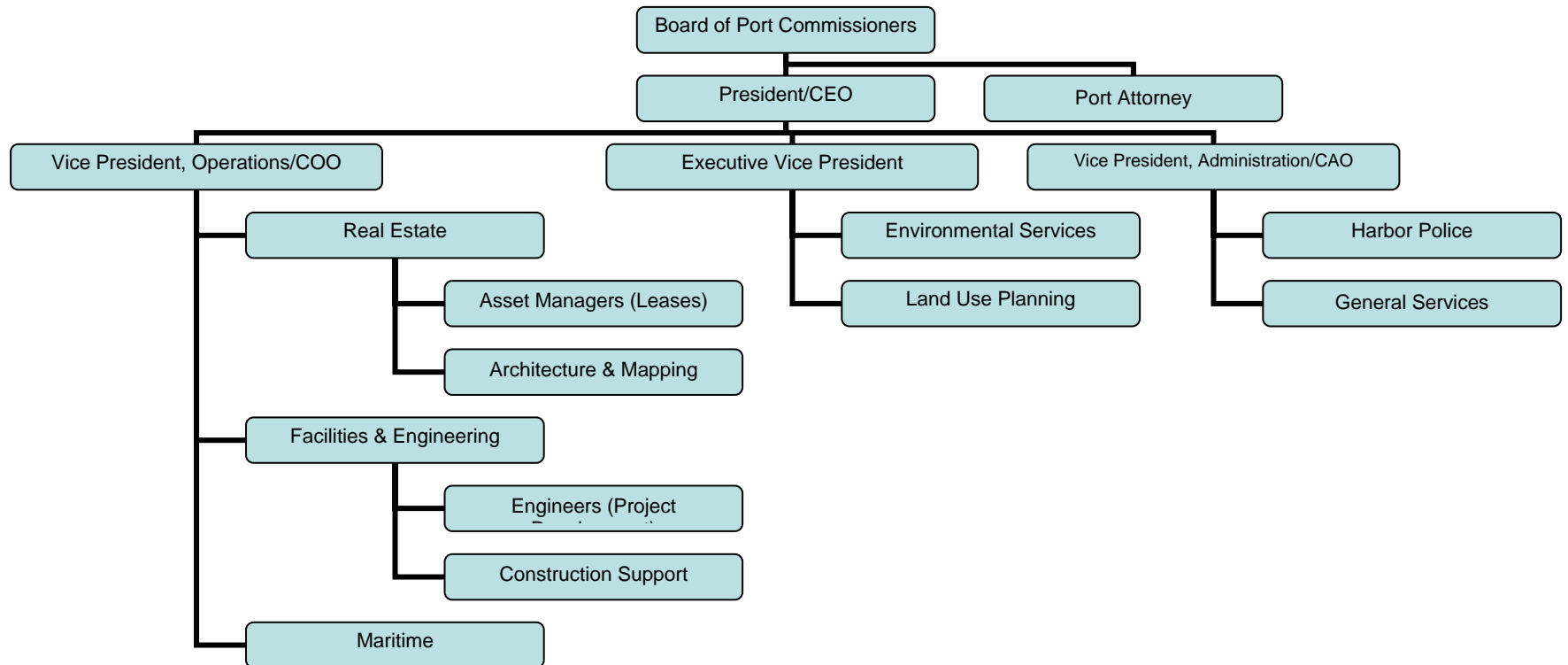
<b>AGENCY</b>	<b>PHONE NUMBER</b>
Environmental Services Department Main Number	(619) 686-6254
Port of San Diego Customer Service	(619) 686-6200
Coast Guard (Spill or Discharge)	(619) 295-3121
San Diego Harbor Police	(619) 686-6272
San Diego Regional Stormwater Hotline	(888) 846-0800

**Table 2-2.** Department Responsibilities For Urban Runoff Activities.

PROGRAM / ACTIVITY	ENVIRONMENTAL SERVICES	GENERAL SERVICES DEPARTMENT	HARBOR POLICE	LAND USE AND PLANNING DEPARTMENT	REAL ESTATE DEPARTMENT	MARITIME DEPARTMENT	FACILITIES & ENGINEERING DEPARTMENT
Public Participation	P						
Education	P	S	S	S	S	S	S
Enforcement	P		P		S		
Water Quality Monitoring	P						
Inventories	P				S		
Watershed Planning	P						
Program Assessment	P	S	S	S	S	S	S
Fiscal Analysis	P	S	S	S	S	S	S
Integrated Pest Management	S	P					
Household Hazardous Waste	P	S					
Municipal Facilities	S	S			P	S	S
Buildings	S	P			S	S	S
Landscape & Recreational Facilities	S	P					S
Parking Facilities	S	P			S		S
Stormwater Conveyance System	S	P					S
Streets	S	P					S
Vehicle Maintenance	S	P					
Industrial & Commercial Uses	S				P	P	
Land Use Planning	S			P			
Environmental Review	S			P			
Engineering	S				S		P
Construction	S				S		P
Non-emergency Fire Fighting	S		P				

P= PRIMARY  
 S=SECONDARY

Figure 2-1. Organizational Chart Of Port Departments Related To Stormwater Management.



Further information on the General Services Department organizational structure is provided in Figure 2-3.

Figure 2-2. Environmental Services Department Organization Chart.

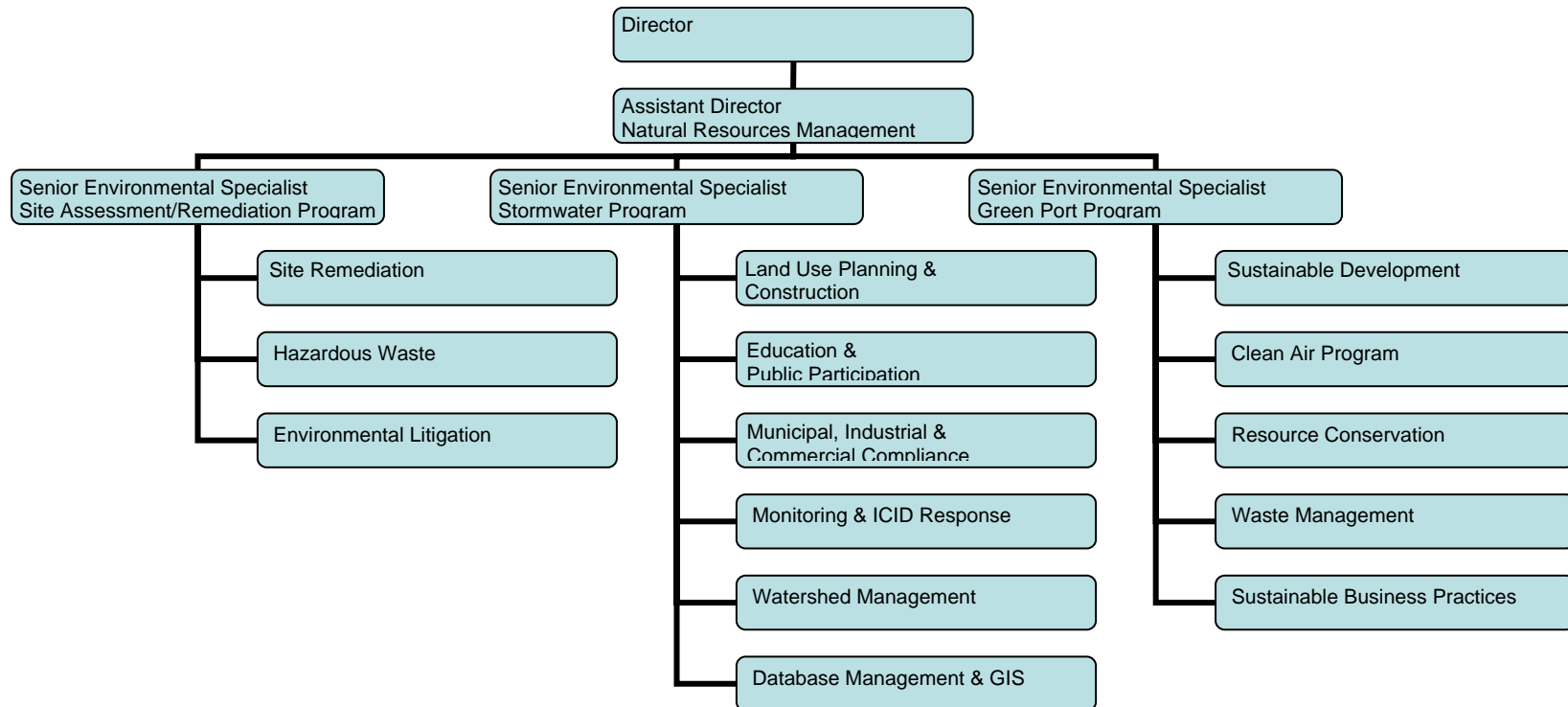
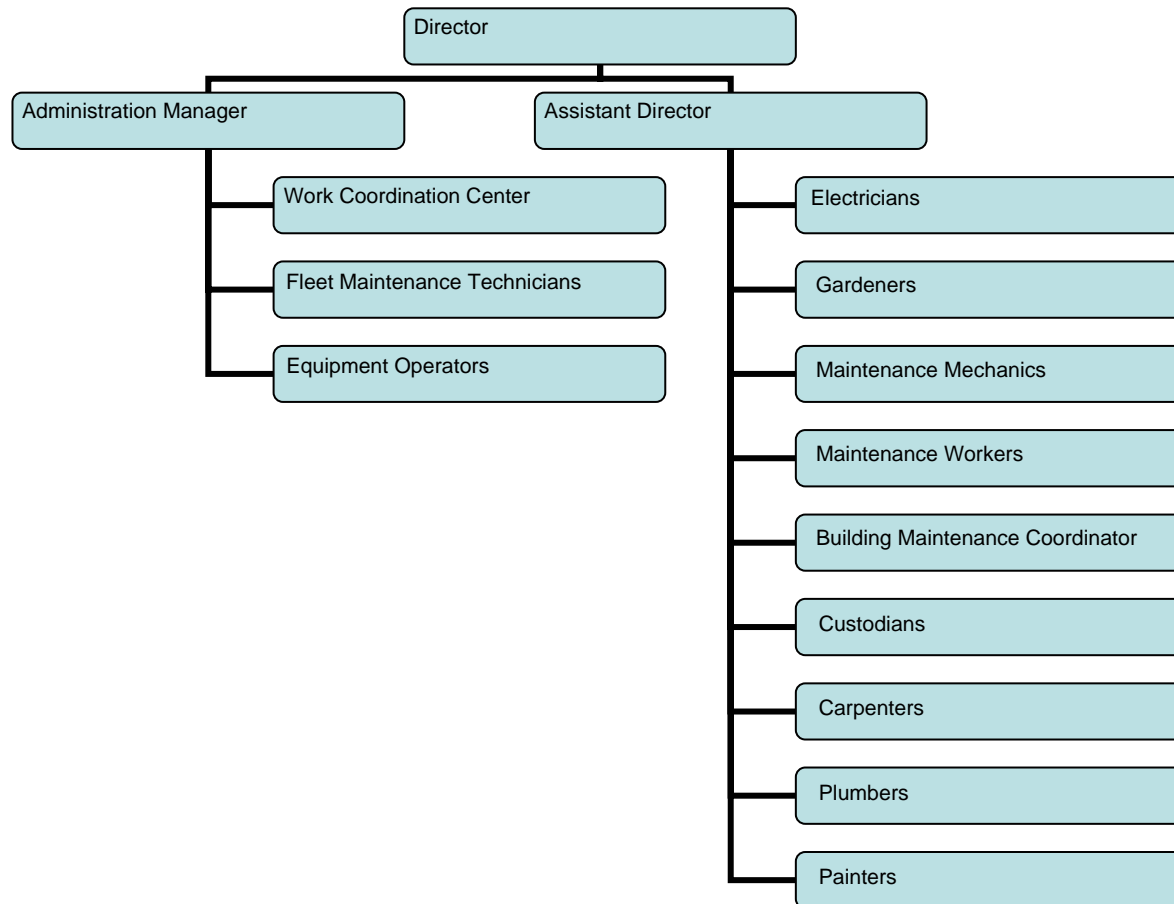


Figure 2-3. General Services Department Organizational Chart.



## 2.2 Legal Authority

The Port has established and will maintain an enforceable legal authority to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means. This legal authority is provided in Article 10. Article 10 specifies criteria for the allowable types of discharges to the storm drain conveyance system, procedures for controlling pollutants, eliminating illicit connections and illegal discharges, reducing stormwater pollutants, and inspecting facilities and operations. In addition, the ordinance allows enforcement activities, providing for both administrative and judicial authorities, when necessary.

Article 10 was originally enacted in 2000 in preparation for the upcoming 2001 Municipal Permit. In December 2007, Article 10 was updated and amended. This followed a lengthy process which involved comparing current Port enforcement operations with the new Permit requirements, and incorporating input from other Port departments and Port tenants. The updates were included to ensure that the Port was in compliance and had enforcement capabilities consistent with the new 2007 Permit requirements. This section identifies and describes all relevant legal authorities available to the Port in implementing the requirements of the Permit.

### **2.2.1 BMP Requirements**

Pursuant to the Article 10, the Port has required minimum BMPs to be implemented for specific activities and facilities, where applicable and feasible. These minimum BMPs are briefly described in Article 10 and are later more fully defined in the applicable sections of this JURMP document. Updates to the BMP section of Article 10 include specific minimum BMP requirements for industrial and commercial activities, mobile businesses and construction activities. These minimum BMPs comply with the requirements of the Municipal Stormwater Permit. BMP maintenance requirements and requirements for inspection and repair of treatment control BMPs were also added. Lastly, Article 10 was updated to include the need for written verification for approved treatment control BMPs.

### **2.2.2 Inspections**

Pursuant to the Article 10, the Port has the authority to inspect activities and facilities, whether or not occupied, at reasonable times, in a reasonable manner, and with reasonable notice to carry out the purposes of the Municipal Stormwater Permit.



Inspections may include all actions necessary to determine whether any illegal discharges or illicit connections exist, whether the BMPs installed and implemented are adequate to comply with Article 10, whether those BMPs are being properly maintained, investigating the source of any discharge, whether the facility or activity complies with other requirements of Article 10, and to abate or correct or prevent pollutants from entering the stormwater conveyance system or receiving waters. This may include but not limited to sampling, taking measurements, metering, and the placement of any devices necessary to sample or monitor or meter or record, visual inspections, and records review.

If an inspector identifies a violation, some level of enforcement may be required. (see Enforcement). When samples are collected the owner or operator may request and receive split samples. Records, reports, analyses, or other information required under Article 10 may be inspected and copied, and photographs taken to document a condition and/or violation.

### **2.2.3 *Development and Redevelopment Projects***

As part of the ordinance amendment, the Port has included specific requirements for all development and redevelopment activities. Post-construction BMPs are addressed and required for all projects falling under the state's General Construction Permit. Article 10 also specifically requires SUSMPs for all priority development projects. Minimum BMPs consistent with Port SUSMP require the use of LID BMPs, as well as source control and treatment control BMPs. Additionally, a post-construction stormwater management plan must also be included for all SUSMP projects.

### **2.2.4 *Prohibitions***

The prohibitions in Article 10 were modified in the December 2007 amendment to better correlate with the Permit prohibition categories. All Permit required prohibitions are included in Article 10.

### **2.2.5 *Enforcement***

The Port can enforce its ordinances and regulations for all facilities and activities. The Port employs several enforcement mechanisms and penalties to ensure the compliance with its ordinances. The levels of enforcement and associated penalties are typically issued at the discretion of the authorized enforcement staff with consideration of relevant circumstances regarding the violation. It should be stated that the Port is not required to utilize the court system to enforce stormwater violations. Specific administrative authorities, as listed below and fully detailed in Article 10, allow several options to be used that may have a more immediate

resolution, including the ability to assess fines. Please note, however, that there are limitations to the types and amounts of penalties that can occur within each option. The different types of enforcement actions used by the Port are summarized below.

It should be noted that other agencies, such as the RWQCB, also exercise enforcement rights if violations fall within their jurisdiction. Often the penalties associated with the enforcement actions of these agencies are more severe than the Port's.

#### Administrative Authorities

- (1) *Cease and Desist Order.* Written and/or verbal orders may be issued to stop any action in violation of Article 10, including the elimination of illegal discharges and/or the removal of illegal connections
- (2) *Notice and Order to Abate Violation.* Written and/or verbal orders may be issued to perform abatement and/or corrective and/or remedial and/or mitigation activities, including those listed in Section 10.06 (Specific BMPs) of Article 10 or any other relevant Sections of the District Code.
- (3) *Administrative Citation.* A written administrative citation may be issued and civil penalties may be imposed whenever a violation of one or more of the provisions of Article 10 has occurred or continues to exist.
- (4) *Stop Work Orders.* Whenever any work is being done contrary to the provisions of Article 10, or other laws implemented through enforcement of this Article, the Executive Director may order work stopped by notice in writing served on any person engaged in the doing or causing such work to be done, and any such person shall immediately stop such work until authorized to proceed.
- (5) *Nuisance Abatement.* The Executive Director may abate any public nuisance created by or resulting from a violation of Article 10, including summary abatement. If the Executive Director determines that a public nuisance exists and immediate action is necessary, the Port may summarily abate the nuisance by any reasonable means without notice or hearing, however, challenges to the abatement will be resolved through the hearing procedures identified in Section 0.11.
- (6) *Permit Suspension and Revocation.* Violations of Article 10 may be grounds for suspension or revocation of any permit or approval or other Port license. This includes violations of lease agreements. Suspensions and revocations shall occur in accordance with the hearing procedures identified in Section 0.11.

### Judicial Authorities

- (1) *Injunctive or Declaratory Relief.* Any violation of Article 10 may be enforced by a judicial action for injunctive or declaratory relief.
- (2) *Civil Penalties and Remedies.* The Port Attorney (or City or District Attorney) is authorized to file actions in Superior Court to enforce Article 10, seeking civil penalties and/or other remedies as provided in Section 10.11 and in Section 10.12 (Penalties). There is no requirement that administrative enforcement procedures be pursued before such actions are filed.
- (3) *Criminal Arrest or Field Citation.* The assistance of a peace officer may be enlisted to arrest violators as provided in California Penal Code, Ordinances 5, 5c, Title 3, Part 2 (or as amended) and/or a citation and notice to appear as prescribed in Ordinance 5c of Title 3, Part 2 of the Penal Code, including Section 853.6 (or as amended) may be issued. There is no requirement that administrative enforcement authorities be used before such actions are filed.

### Administrative Penalties

Administrative penalties may be imposed pursuant to Section 0.11 (Penalties) of the District Code. The Executive Director may charge any violation of Article 10 as subject to an Administrative fine or penalty at his discretion.

### Criminal Penalties

Criminal penalties may be imposed pursuant to Section 0.11 (Penalties) of the District Code.

- (1) *Misdemeanor.* Non-compliance with any part of Article 10 constitutes a misdemeanor and may be enforced and punished as prescribed in District Code Section 0.11, and other applicable state laws, the California Penal Code and Government Code.
- (2) *Infractions.* The Executive Director may charge any violation of Article 10 as an infraction at his discretion. Infractions may be abated as a nuisance or enforced and punished in District Code Section 0.11, the California Penal Code, and the Government Code.

### Civil Penalties

The following may be awarded without monetary limitations in any civil action, except where a maximum monetary amount is specified.

- Injunctive Relief
- Costs to investigate, inspect, monitor, survey, or litigate

- Costs to place or remove soils or erosion control materials, costs to correct any violation, and costs to restore environmental damage or to end any other adverse effects of the violation
- Compensatory damages for losses to the District or any other plaintiff caused by violations; and/or restitution to third parties for losses caused by violations
- Civil penalties in accordance with Section 0.11(i) and
- Attorney fees and court costs.

#### Cost Recovery

The Executive Director may impose a monetary penalty without limitation to recover the costs, including staff time and materials, to investigate or monitor any violation of Article 10.

#### Attorney Fees

In any action, administrative proceeding or special proceeding to enforce Article 10 and abate a nuisance, the prevailing party may recover attorney fees.

#### Penalties and Remedies Not Exclusive

Penalties and remedies under the Article 10 may be cumulative and in addition to other administrative, civil or criminal remedies.

### **2.2.6 Certification of Legal Authority**

The Port of San Diego has the legal authority to implement the requirements of the Municipal Permit as stated in the “Signed URMP Certification” located in Appendix A of this document. Enforcement, appeal, and administrative order/injunction processes are described in Section 2.2 “Legal Authority” and Section 9.0 “Illicit Discharge Detection and Elimination Component” and in Article 10 (Appendix B).

Section B of the Municipal Permit requires each Copermittee to effectively prohibit all types of non-storm water discharges into its Municipal Separate Storm Sewer System (MS4) unless such discharges are either authorized by a separate NPDES permit, or not prohibited in accordance with B.2 and B.3 of the permit. Appendix B contains a copy of Article 10, which includes prohibited discharges, allowable discharges, fines, BMP requirements, definitions and other regulatory provisions. Article 10 adequately meets the Permit requirements to prohibit all types of non-stormwater discharges into the MS4 and receiving waters from activities and facilities on Port tidelands.

### 3.1 Non-Stormwater Discharge Categories

Section B.2 of the Permit lists the categories of non-storm water discharges that, in accordance with the federal NPDES regulations, need only be prohibited from entering an MS4 if such categories of discharges are identified by the Copermittee as being a significant source of pollutants to waters of the United States. There are 17 categories of non-stormwater discharges listed in Permit Section B.2. Of these categories, ten have not been determined to be a significant source of pollutants from facilities and/or activities within the Port. As such, these categories are considered exempt at this time.

- Air conditioning condensate;
- Springs;
- Foundation drains (not including active groundwater dewatering systems);
- Diverted stream flows (provided required permits are obtained);
- Flows from riparian habitats and wetlands;
- Rising ground water/tidal influence;
- Uncontaminated groundwater infiltration to MS4s;
- Uncontaminated pumped groundwater (provided required permits are obtained);
- Discharges from potable water sources not subject to an NPDES permit, No. CAG679001, other than main water breaks;
- Dechlorinated swimming pool discharges.

If established at a later date that any of the above non-stormwater discharges may cause or contribute to a receiving water violation, BMP control measures will be established.

The following categories of non-stormwater discharges are not prohibited, but as identified in Article 10, are considered conditionally exempt discharges. As such, those responsible for such discharges are required to implement control measures such as BMPs to reduce the amount of pollutants within the discharge to the MEP. The responsible dischargers must install, implement, and maintain the specifically applicable minimum BMPs, and must comply with any order issued pursuant to Article 10 for the following discharge categories:

- Irrigation water, including recycled water used for irrigation, landscape irrigation, and lawn watering.
- Water line flushing;
- Water from crawl space pumps; and
- Water from footing drains (not including active groundwater dewatering systems).

It should be noted that the Permit required category, “Individual residential car washing”, does not apply to the Port, since the Port does not have residential activities and/or uses within Port tidelands. As such, this category is not considered further.

## 3.2 Prohibited Non-Stormwater Discharge Categories

The Permit requires the Copermittees to identify and prohibit all types of discharges into the MS4 unless the discharges are either authorized by a separate NPDES Permit or not prohibited in accordance with Permit Sections B.2 and B.3. The Port has used its authority under Article 10 to effectively prohibit all types of non-stormwater discharges, excluding those aforementioned in Section 3.1 above.

In accordance with Permit Section B.2, when a discharge category is identified as a significant source of pollutants to waters of the United States, the Port must either prohibit the discharge from entering its MS4, or not prohibit the discharge and implement BMPs which will reduce pollutants to the MEP. At this time the Port has not prohibited any of the non-stormwater discharges listed in Permit Section B.2, however, the following section describes the non-stormwater discharge categories that require control measures to be implemented and discusses how the BMPs will be required for each category of discharge.

### 3.3 Control Measures for Allowable Non-stormwater Discharges

As required by the Permit, the Port has identified control measures for non-stormwater discharge categories that may contribute a significant amount of pollutants to the MS4 or receiving waters. The type of control measures used may take into account the nature and severity of any effects caused by the discharge and the time required to design, engineer, fund, procure, construct, and make appropriate BMPs operational. Such BMPs may include, but are not limited to, filters or berms to slow the speed of water prior to its entry into the MS4, use of landscaped areas for line flushing, minimization of run-on on to pervious surfaces, and use of Integrated Pest Management (IPM) practices or smart irrigation for landscaping.

For each discharge category identified as conditionally exempt above, the responsible discharger(s) shall identify and describe, as necessary and appropriate to the category, evidence that the discharges are not sources of pollutants to the receiving waters. Otherwise, they shall describe how they are implementing the applicable control measures identified above to eliminate adverse impacts of such sources, including the procedures and performance standards for their implementation, the procedures for notifying the Port of these discharges and the procedures for monitoring and record management, when applicable.

### 3.4 Program for Non-emergency Fire Fighting Flows

The Municipal Stormwater Permit requires that the Port develop a program for reducing pollutants from non-emergency fire fighting flows. The Port does not provide municipal structure fire suppression/fighting services in the tidelands. In general, the municipalities, namely, Chula Vista, Coronado, Imperial Beach, National City, and San Diego, provide and maintain structure fire-fighting resources. The Port does, however, provide for emergency fire fighting on the waters of San Diego Bay. The following discussion outlines the programs in place to reduce pollutants from the non-emergency fire fighting flows associated with this service. The programs include BMPs used during training and testing exercises.

#### On-the-Water Fire Fighting

The Port utilizes its Harbor Police patrol boats for fire suppression on San Diego Bay. These fires are usually associated with boats and other watercraft. The Harbor Police have five boats with fire-fighting capabilities. These boats draw water from the bay to fight fires and do not connect to any land-based water lines. Harbor Police officers are trained to fight fires from these boats. Harbor Police officers regularly perform training maneuvers on San Diego Bay. During these maneuvers, Harbor Police will either spray the water directly into the open Bay or onto a practice vessel in the water. Water does not come into contact with the land or any pollutants, and therefore, is not a source of urban runoff pollution.

### Emergency Circumstances

Discharges of trauma scenes post-cleanup residues and other discharges determined by the Executive Director to be necessary to protect public health and safety are not prohibited, provided any conditions on such discharges imposed by the Executive Director are satisfied. A determination by the Executive Director that a discharge is necessary may be provided orally.



## 4.1 Introduction

The Municipal Permit requires that the Port evaluate and modify its existing land use planning policies and principles, as necessary to minimize the short and long-term impacts of development activities on receiving water quality. The focus of this effort is to ensure the implementation of a program aimed at reducing pollutants and runoff flows from new development and redevelopment to the maximum extent practicable. Specifically, the Permit directs the Port to evaluate the Port Master Plan (PMP), the California Environmental Quality Act (CEQA) and the environmental review processes, and to develop the Port Standard Urban Stormwater Mitigation Plan (SUSMP) and required minimum BMPs.

The approval process for development on Port tidelands differs significantly from its member cities and the Regional Copermittees. Although the Port reviews all development against CEQA and Coastal Act regulations and issues CEQA and Coastal Determinations, the Port defers to the issuance of applicable building or grading permits to the member cities. Due to the absence of this permitting function, the Port has built other mechanisms into the review, approval, and verification process to ensure the pertinent project components are reviewed in a consistent manner and appropriate conditions for approval are established.

This chapter provides a background of the relevant environmental regulatory documents involved in the evaluation of a development project and describes how each is used in the planning process. Both the documents and the processes were evaluated for compliance with the Municipal Permit and the results are summarized herein. Where discrepancies have been identified between the requirements of the Municipal Permit and the Port's planning processes, modifications are proposed. Moreover, this chapter discusses the addition of new elements to the Port's planning, review, and approval process, some of which include the incorporation of minimum BMPs applicable to all developments, the update of the Port SUSMP, and the addition of the Hydromodification Management Plan (HMP).

This chapter also describes the steps the Port will use to verify and assess Municipal Permit compliance with respect to the Port's internal review process and with individual development projects. Compliance verification procedures include source characterization, BMP requirements, inspections, and BMP tracking.

## 4.2 Land Use Planning

This section provides information on the Port's land use planning policies as they relate to

stormwater. In particular, background is provided on the PMP, Environmental Review, and Port SUSMP. Each document was evaluated for compliance with the Municipal Permit and how the results apply to the planning process. Where needed, updates to these policies are also proposed as discussed below.

#### **4.2.1 Port Master Plan and Coastal Development Permits**

The PMP was initially adopted by the Board of Port Commissioners in 1964. It was developed in response to the 1962 San Diego Unified Port District Act which provided for the creation of the Port and contained the provision that “the board (Board of Port Commissioners) draft a master plan for harbor and port improvement and for the use of all tidelands and submerged lands”, which are conveyed to the Port. The PMP also serves a dual purpose acting concurrently as the local coastal program for the Port as directed by the Coastal Act of 1976, and as certified by the California Coastal Commission (CCC) in 1981.

The PMP provides the official planning policies for the physical development of the tidelands conveyed and granted in trust to the Port. The policies are expressed in written form and graphically on official maps. The PMP relates directly to its status as an official statement of the public policy adopted by the Board of Port Commissioners. Among other things, it serves as a guide for policy decisions, as the basis for protecting existing development, for capital improvement programming, and as a source of information.

The PMP is submitted to the CCC for review and certification in conformance with the Coastal Act. Upon PMP certification, either in whole or in part, coastal development permit authority for projects occurring within the Port’s jurisdiction resides with the Board of Port Commissioners. Contained within the coastal development permits are conditions of project approval; including applicable water quality protection measures. For those portions of the PMP not certified, the uncertified areas remain under the permit authority of the CCC.

Section II of the PMP contains 14 Planning Goals which are used as the basis for the creation and implementation of Port’s policies. Five of those goals are relevant to water quality and watershed protection policies and principles, and are listed in Table 4-1.

**Table 4-1.** Port Master Plan Goals With Relevance To Water Quality.

<p>VI -</p> <ul style="list-style-type: none"> <li>▪ Improved automobile linkages, parking programs and facilities, so as to minimize the use of waterfront for parking purposes.</li> </ul>
<p>VIII -</p> <ul style="list-style-type: none"> <li>▪ The Port District will enhance and maintain the Bay and Tidelands as an attractive physical and biological entity.</li> <li>▪ Each activity, development*, and construction should be designed to best facilitate its particular function, which function should be integrated with and related to the site and surroundings of that activity.</li> <li>▪ Establish guidelines and standards facilitating the retention and development of an aesthetically pleasing tideland environment free of noxious odors, excessive noise, and hazards to the health and welfare of the people of California.</li> </ul>
<p>X -</p> <ul style="list-style-type: none"> <li>▪ The quality of water in San Diego Bay will be maintained at such a level as will permit human water contact activities.</li> <li>▪ Maintain a program of flotsam and debris cleanup.</li> <li>▪ Insure through lease agreements that Port District tenants do not contribute to water pollution.</li> <li>▪ Cooperate with the Regional Water Quality Control Board, the County Health Department, and other public agencies in a continual program of monitoring water quality and identifying source of any pollutant.</li> <li>▪ Adopt ordinances, and take other legal and remedial action to eliminate sources of pollution.</li> </ul>
<p>XI -</p> <ul style="list-style-type: none"> <li>▪ The Port District will protect, preserve, and enhance natural resources, including natural plant and animal life in the Bay as a desirable amenity, an ecological necessity, and a valuable and usable resource.</li> <li>▪ Promote and advance public knowledge of natural resources through environmental educational materials.</li> <li>▪ Identify existing and potential assets.</li> <li>▪ Keep appraised of the growing body of knowledge on ecological balance and interrelationships.</li> <li>▪ Administer the natural resources so that impacts upon natural resource values remain compatible with the preservation requirements of the public trust.</li> </ul>
<p>XIII -</p> <ul style="list-style-type: none"> <li>▪ The Port District will maintain its Master Plan current, relevant, and workable, in tune with circumstances, technology, and interest of the people of California.</li> <li>▪ Curb the misuse of land so that it will not injuriously affect the people of the State of California through the prevention of substandard construction or unnecessarily add inappropriate developments.</li> <li>▪ Prevent the abuse of land by curtailing abortive development and unfounded pollution contributors.</li> <li>▪ Regulate the non-use or disuse of land by clearing unmarketable titles, withholding land from premature development, and restraining activities that would lead to discontinued use.</li> <li>▪ Guide the reuse of land for more appropriate purposes by the clearance and redevelopment of the obsolete.</li> </ul>

Source: 2007 Port Master Plan

*\*Under the California Coastal Act, "development" means: on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility. As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line (California Public Resources Code §30106).*

**Update to Port Master Plan**

The Municipal Permit requires that the Port evaluate the PMP to ensure that effective water quality and watershed protection principles are integrated into land use decisions, and that policies are included that require implementation of consistent water quality protection measures for development. The PMP was reviewed for consistency with the Municipal Permit requirements. The results are shown in Table 4-2.

**Table 4-2.** Port Master Plan Goals And Relevant Municipal Permit Requirements.

MASTER PLAN GOALS	PERMIT ELEMENTS
Goal VI - Port will integrate the Tidelands into a functional regional transportation network	D.1.c(3)
Goal VIII - Port will enhance and maintain the Bay and Tidelands as an attractive physical and biological entity	D.1.c(3)
Goal X - Quality of water in San Diego Bay will be maintained at such a level as will permit human water contact activities	D.1.c
Goal XI - Port will protect, preserve, and enhance natural resources, including natural plant and animal life in the bay as a desirable amenity, an ecological necessity, and a valuable and usable resource	D.1.c
Goal XIII - Port will maintain MP current, relevant, and workable, in tune with circumstances, technology, and interest of the people of CA	D.1.a

As shown in Table 4-2, the required permit elements are adequately addressed in the current PMP goals. Since the PMP’s established goals are consistent with the Municipal Permit, no revisions to the PMP are necessary.

**4.2.2 Environmental Review: California Environmental Quality Act (CEQA) and CEQA Determinations**

Environmental review involves the evaluation of a project against CEQA regulations. CEQA applies to “discretionary” government action. This may involve activities directly undertaken by the Port, activities financed in whole or part by the Port, or private activities that require approval by the Port. A discretionary project requires the Port to use its judgment in deciding whether to approve or disapprove a project. If the project will be approved, the Port then must decide how it will be approved. Where the law requires a governmental agency to act on a project in a set way without allowing the agency to use its own judgment, the project is “ministerial” and CEQA does not apply.

The Port will comply with CEQA as set forth in the Port CEQA Guidelines whenever the Port proposes to carry out, or approve, an activity. CEQA review, preparation, and certification of appropriate documentation occur prior to granting an approval of private projects or authorization of public projects. Environmental Impact Reports and Negative Declarations are prepared as early as possible in the planning process to enable environmental considerations

to influence project program and design, yet late enough to provide meaningful information for environmental assessment.

The Port’s Initial Study is a tool used in the preliminary project review to determine if a proposed project may result in significant effects on the environment. Using questions in the Initial Study (Table 4-3), the Port is able to identify potential impacts to the environment including impacts to water quality.

**Table 4-3.** Port Initial Study Questions With Relevance To Water Quality.

<b>PORT INITIAL STUDY QUESTIONS</b>
<b>BIOLOGICAL RESOURCES -- Would the project:</b>
a) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
<b>HYDROLOGY AND WATER QUALITY -- Would the project:</b>
a) Violate any water quality standards or waste discharge requirements?
b) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial erosion or siltation on- or off-site?
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
e) Otherwise substantially degrade water quality?
<b>UTILITIES AND SERVICE SYSTEMS -- Would the project:</b>
a) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
<b>MANDATORY FINDINGS OF SIGNIFICANCE -- Does the project:</b>
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
b) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**Update to Environmental Review**

The Municipal Permit requires the Port to revise, as needed, the current environmental review processes to ensure that it accurately evaluates water quality impacts, cumulative impacts, and that it identifies appropriate measures to avoid, minimize and mitigate those impacts for all development projects. The Port Initial Study is the tool in the environmental review process that prompts this water quality impact evaluation, as the findings of the Port Initial Study identify

potential impacts that would need to be mitigated and addressed in the final approval documents. The questions contained in the Port Initial Study were evaluated for consistency with the Municipal Permit requirements (Table 4-4).

**Table 4-4.** Port Initial Study Goals Relevant To Municipal Permit Requirements.

PORT INITIAL STUDY QUESTIONS	PERMIT ELEMENTS
<b>BIOLOGICAL RESOURCES -- Would the project:</b>	
a) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	D.1.a; D.1.c.(1)-(3); D.1.d
<b>HYDROLOGY AND WATER QUALITY -- Would the project:</b>	
a) Violate any water quality standards or waste discharge requirements?	D.1
b) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	D.1.c.(2); D.1.d; D.1.d.(10); D.1.g
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	D.1.d.(4); D.1.g
d) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	D.1.d.(4); D.1.g
e) Otherwise substantially degrade water quality?	D.1.c
<b>UTILITIES AND SERVICE SYSTEMS -- Would the project:</b>	
a) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	D.1.d.(6)
<b>MANDATORY FINDINGS OF SIGNIFICANCE -- Does the project:</b>	
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	D.1
b) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	D.1

As shown in Table 4-4, the questions in the Port's Initial Study currently address the required Municipal Permit elements. However, upon final approval of the HMP, discussed below, the Port may modify the checklist to ensure projects are adequately characterized. If this occurs, the changes to the Initial Study will be incorporated into the Port's environmental review process by the Land Use Planning Department.

### **4.2.3 Port SUSMP**

The previous Municipal Permit (Order No. 2001-01) required the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects. One requirement of this program was the development of a SUSMP.

The Port SUSMP was developed to address post-construction urban runoff pollution from new development and redevelopment projects that fall under “priority project” categories. The Port SUSMP meets the Permit requirements and was designed according to the Model SUSMP Document, collectively developed by the Copermittees and approved by the Regional Board on June 12, 2002. The goal of the Port SUSMP is to develop and implement viable policies to ensure, to the maximum extent practicable, that development does not increase pollutant loads from a project site. It takes into account urban runoff flow rates and velocities. This goal is achieved through site-specific controls and/or drainage area-based or shared structural treatment controls.

All new development and redevelopment projects that fall into the Municipal Permit’s “priority project” categories are subject to the Port SUSMP and are required to submit a project specific Urban Stormwater Mitigation Plan (USMP). Definitions of these priority project types are included in the Port SUSMP. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to Port SUSMP requirements.

The Port SUSMP utilizes the correlation of land use development type (project category) to anticipated and potential pollutants of concern; and a correlation of pollutants to sources and activities that generate those pollutants. Use of these correlations is integral to the BMP selection process. The following general pollutant categories are addressed and the sources and activities generating them are described in the SUSMP: sediments, nutrients, metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides.

Using this information, all priority projects are required, where applicable and feasible, to consider, incorporate and implement stormwater BMPs into the project design and in the following progression:

Site Design BMPs ➡ Source Control BMPs ➡ Treatment Control BMPs

The Port approves the USMP as part of the development plan approval process. USMPs are submitted to Port’s Environmental Services, where a review is performed and a determination of adequacy is made. Approved USMPs will receive an approval memo. A memo with recommendations for approval and a requirement to resubmit will be issued for rejected USMPs.

## **Port SUSMP Update**

The Municipal Permit requires the Port to update the Port SUSMP requirements and the Port SUSMP document as necessary to comply with the Permit. The update to the Port SUSMP was required by January 24, 2008, in concert with the update of the County of San Diego Draft Model SUSMP. The Port SUSMP updates reflect the new requirements of the Municipal Permit and are consistent with the Draft Model SUSMP. A copy of the updated Port SUSMP is included in Appendix C.

The update to the Port SUSMP includes a revision of the priority development project categories. Table 4-5 highlights the changes made to the categories.

**Table 4-5.** Port Updated Priority Development Project Categories.

PROJECT TYPE*	PRIORITY DEVELOPMENT PROJECT? (YES/NO)
1) Housing subdivisions of 10 or more dwelling units.	Yes
2) Commercial developments greater than one acre.	Yes
3) Developments of heavy industry greater than one acre.	Yes
4) Automotive Repair Shop of any size. See definition of "Automotive Repair Shop."	Yes
5) Restaurants of any size. See definition of "Restaurant."	Yes
6) All hillside development greater than 5,000 square feet.	Yes
7) Environmentally Sensitive Areas (ESAs).	Yes
8) Parking Lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.	Yes
9) Streets, roads, highways, and freeways with a project footprint that is 5,000 square feet or more.	Yes
10) Retail Gasoline Outlets (RGOs) that are a) 5,000 square feet or more or b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	Yes
. Any trenching and resurfacing associated with utility work . Any resurfacing and reconfiguring of surface parking lots . Application of asphalt overlay to existing pavement . New sidewalk or pedestrian ramp construction . Construction of bike-lanes on existing roads	No
. Replacement of damaged pavement or impervious surfaces as part of routine maintenance activities. . Replacement of any amount of impervious surface area where impervious material(s) may or may not be removed, but underlying soils are not exposed during construction.	No
Projects (except mandatory categories above) that create less than 2,500 square feet of impervious surfaces or do not increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition.	No

\*Shaded information denotes updates as required by the 2007 Permit.



In accordance with the Municipal Permit, the Port also updated the BMP requirements listed in its SUSMP. The BMB requirements were modified to ensure greater reliance on Low Impact Development (LID). With this modification, priority development projects are required to implement LID BMPs in order to collectively minimize directly connected impervious areas and promote infiltration. The use of LID BMPs at new development projects can be an effective means for minimizing the impact of urban runoff discharges from the development projects on receiving waters. LID BMPs help preserve and restore the natural hydrologic cycle of the site, allowing for filtration and infiltration which can greatly reduce the volume, peak flow rate, velocity, and pollutant loads of urban runoff. As such, LID and source control BMP requirements that meet or exceed the requirements of Municipal Permit Sections D.1.d.(4) and D.1.d.(5) were added, and LID BMPs that can be used for treatment, such as bioretention cells, bioretention swales, etc were also added. Finally, obsolete or ineffective BMPs were removed and a revised table showing treatment control BMP pollutant removal efficiencies was inserted.

The Municipal Permit also requires the Port to include hydromodification requirements in its SUSMP. The Municipal Permit requires the Port to develop and implement an HMP in order to manage increases in runoff discharge rates and durations from all priority development projects. The HMP will manage runoff where increased rates and durations are likely to cause increased erosion of channel beds and banks, sediment pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force. The HMP will require post-project runoff discharge rates and durations to not exceed estimated pre-project discharge rates and durations. This is applicable when the increased discharge rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses that are attributable to changes in the discharge rates and durations.

Hydromodification requirements will be added to the Port SUSMP within 180 days of approval by the Regional Board. The Port SUSMP will be updated to include all requirements included in the Port's HMP, which will include the requirements discussed in Permit sections D.1.g.(1)-(6). In the short-term, the Port will use the Interim Hydromodification Criteria collectively developed by the Regional Copermittees. This information is included in Appendix C.

#### **4.2.4 Minimum Best Management Practices Requirements**

For all proposed development projects<sup>1</sup>, the Port will incorporate into the project approval, the necessary requirements to ensure that discharges of pollutants from the municipal separate storm sewers will be reduced to the maximum extent practicable (MEP), will not cause or contribute to a violation of water quality standards, and will comply with all Port ordinances,

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<sup>1</sup> Development project as defined in the Municipal Permit refers to new development and redevelopment with land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, and land subdivision.

permits, plans, and requirements, as well as with the Municipal Permit. The Port requires, at a minimum, that the following are included in a development project's plans during the approval process:

- Source control BMPs that reduce stormwater pollutants of concern in urban runoff, including storm drain system stenciling and signage, properly designed outdoor material storage areas, properly designed trash storage areas, and implementation of efficient irrigation systems.
- LID BMPs, where feasible, which maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.
- Buffer zones for natural water bodies, where feasible. Where buffer zones are infeasible, require project proponent to implement other buffers such as trees, access restrictions, etc. where feasible.
- Measures necessary so that grading or other construction activities meet the provisions specified in section D.2 of the Municipal Permit.
- Submittal of proof of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.
- Hydromodification BMP requirements required by the HMP to manage increases in runoff discharge rates and durations from priority development projects.
- Priority development projects requiring treatment control BMPs must implement any/all control BMPs specified in the Port SUSMP required for that priority category.

### 4.3 Development Project Approval

This section describes the approval processes for development and redevelopment projects occurring on Port tidelands as they relate to water quality protection and mitigation. In accordance with the planning policies and principles described in the preceding section, all development projects on Port tidelands undergo Coastal Act and CEQA review. Projects are evaluated for environmental impacts, and mitigation measures are imposed to eliminate or minimize determined impacts. It is through this review process that priority projects are identified and appropriate BMPs and SUSMP conditions are added to approval documents.

Development on Port tidelands happens either by the Port, through its capital development and major maintenance projects (hereafter referred to as “capital projects”), or by tenants of the Port doing improvements to leaseholds (hereafter referred to as “tenant projects”). The Port has different project approval processes for capital and tenant projects, and therefore has slightly

different USMP review and approval processes. The project approval process for each is described below.

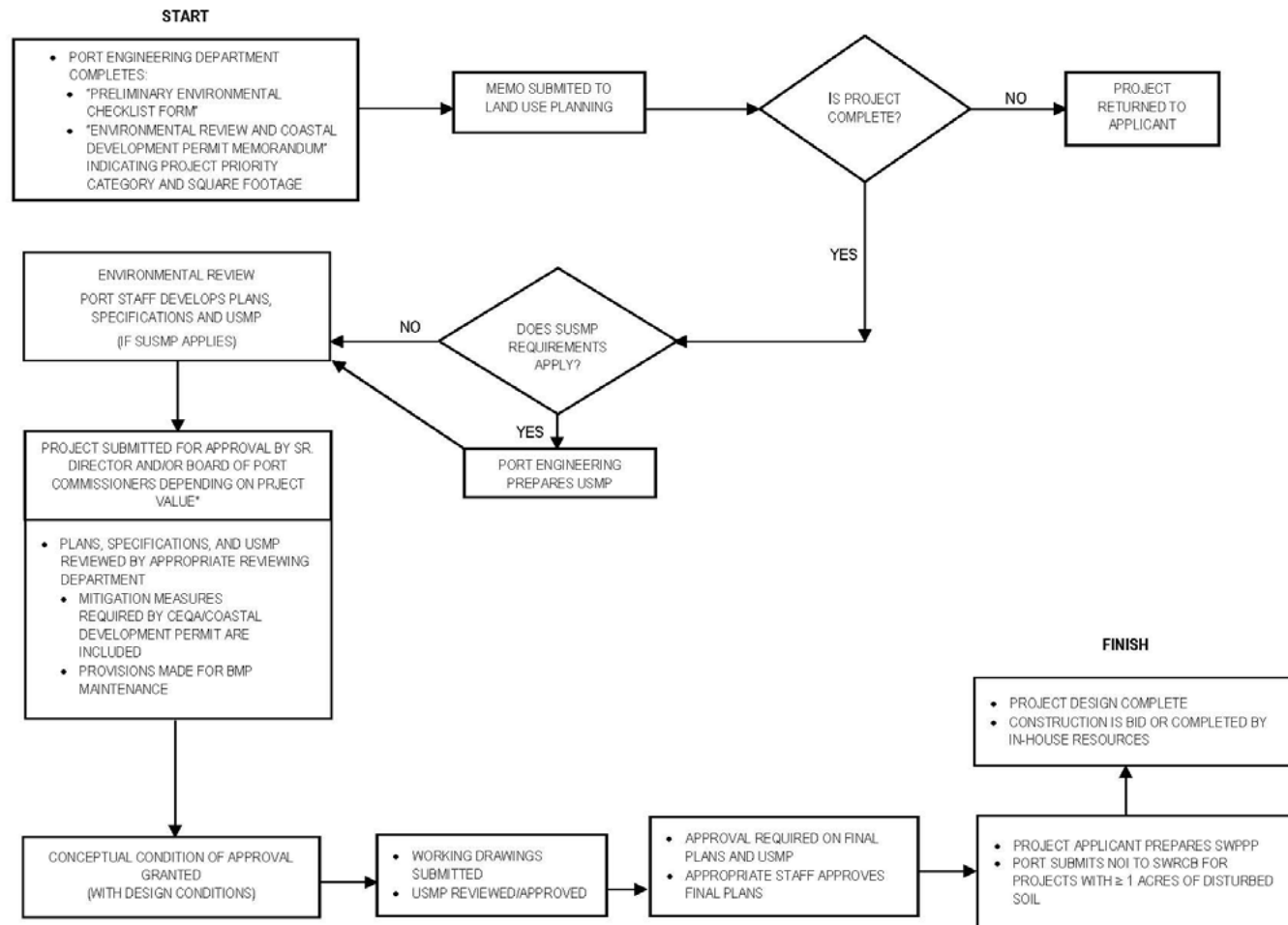
### **4.3.1 Capitol Projects**

Capital projects (comparable to public works projects undertaken by a municipality) are evaluated, designed, and approved in accordance with the same environmental permitting standards that are applied to any development on Port tidelands.

The process for implementing SUSMP requirements for capital projects is outlined in the flow chart in Figure 4-1.

The capital project review process is initiated upon the submittal of an Environmental Review and coastal development permit Application Memorandum to the Port's Land Use Planning Department. Review of this Memorandum is assisted by other Port departments, including Port ESD. The SUSMP priority category and the project square footage are included in the Memorandum. Upon review of the Memorandum, a determination is made on SUSMP applicability using general guidelines provided in Table 4-5. If applicable, the Port prepares the USMP document alongside the plans and specifications for the project. The SUSMP requirements are incorporated into the coastal development permit as a mitigation monitoring and reporting program for the project. Upon approval of the coastal development permit by the Board of Port Commissioners, Port ESD performs a final review comparing the USMP document with the final design plans to ensure that SUSMP requirements are met. If approved, ESD issues an approval memo. If the USMP is rejected, the plan is returned along with recommendations for to obtain approval and a requirement to resubmit. This process ensures that SUSMP requirements are incorporated into the project design and shown on the plans prior to bidding for construction contracts or completion of construction work by Port staff.

**FIGURE 4-1**  
**PORT CAPITAL PROJECT PLAN PROCESSING AND APPROVAL**



\*Point of "Lawful Approval"

Revised: 3/13/2008

### **4.3.2 Tenant Projects**

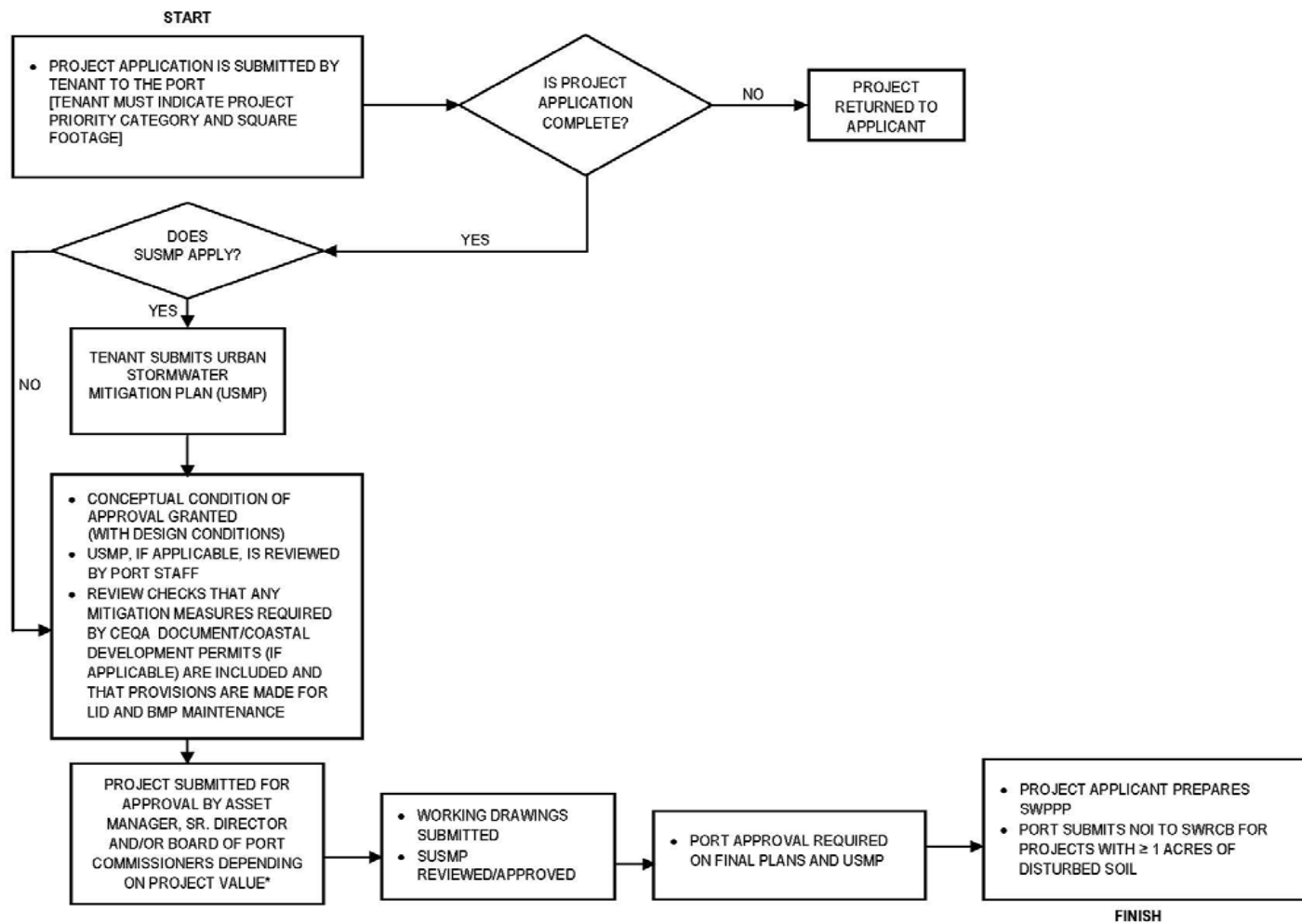
Port tenants carrying out new construction, reconstruction, modification, or demolition must submit a request for authorization. The review process is outlined in the flow chart in Figure 4-2 and is further described below.

Project approval starts with the tenant's submittal of a Tenant Project Plan form to the Port. Upon receipt of the submittal, a project completeness check is conducted by the Port Real Estate Department. The request must be accompanied by plans and specifications, which indicate the nature and extent of the proposed work, and must conform to Port policies, all relevant laws, ordinances, rules, and regulations. The plans may include references to specific sections or parts of the Uniform Building Code or other applicable codes, ordinances, or laws. All projects must indicate the SUSMP priority category and the project square footage with the project request.

The project is then forwarded to the appropriate parties for review. Port staff then verifies whether SUSMP requirements apply to the project. Guidelines are provided in Table 4-5 to assist project proponents and Port staff in determining whether SUSMP requirements apply. If SUSMP requirements apply, the tenant must submit an USMP describing how the project will meet SUSMP requirements for the project application to be considered complete. Once the project application is complete, a Project Architect is assigned. A technical review and approval of the project including obtaining reviews from other Port departments is coordinated. The Port reviews the USMP document and design plans to ensure that SUSMP requirements are met.

The SUSMP requirements are incorporated into the coastal development permit as a mitigation monitoring and reporting program for the project. Upon approval of the coastal development permit by the Board of Port Commissioners or the Executive Officer, Port ESD performs a final review comparing the USMP document with the final design plans to ensure that SUSMP requirements are met and that the BMPs are adequate. If approved, ESD issues an approval memo. If the USMP is rejected, the plan is returned along with recommendations for to obtain approval and a requirement to resubmit. The approval of a Port tenant project becomes part of the lease or part of a use permit. For discretionary projects, any mitigation measures required by the environmental review process, such as implementation and maintenance of stormwater BMPs, become part of the lease or use permit.

FIGURE 4-2  
 PORT TENANT PLAN PROCESSING AND PROJECT APPROVAL



\*Point of "Lawful Approval"

Revised: 3/13/2008

## 4.4 Program Implementation

This section identifies how the JURMP Development Planning will be implemented over the course of the Permit. Specific subsections focused on individual Development Planning programs or activities are presented to better describe how the Port will implement each program/activity.

### **Document Review**

The Port's supporting documents discussed in Section 4.2 of this chapter were assessed for compliance with the Municipal Permit. The description of each of the document's review process and compliance status, and a discussion of how the modifications will be implemented are fully discussed in Section 4.2 and not detailed here.

#### **4.4.1 Education**

The Port will conduct education efforts focusing on new development and redevelopment projects and their relationship to urban runoff impacts on water quality. The objective of the education is to increase the knowledge of Port decision makers, Port staff, project proponents, consulting planners, architects, engineers and the general public regarding the potential water quality impacts associated with development and to the means to prevent or minimize those impacts. The Port's education plan for the development component is described in detail in the JURMP, Chapter 10 –Education Component. Annual assessments of the Development Planning education efforts will be reported in the Education Component Section.

#### **4.4.2 Inspection**

Inspections are required to ensure that all priority development projects incorporate the appropriate BMPs. Upon completion of the construction phase of a priority development project, the Port inspectors will verify that the approved USMP BMPs have been constructed in compliance with all specifications, plans, permits, and ordinances. Inspectors will verify that all required BMPs identified in the project USMP are in place as specified. They will also verify that they were built according to plans. They will also verify that an O&M plan exists and the responsible parties are aware of their requirements. A finding of failure to comply with the conditions of the approved USMP will be followed by corrective actions and, as necessary, further enforcement.

Furthermore, verification of effective operation and long-term maintenance will be accomplished through inspections and using the BMP tracking program described in the following section.

### **4.4.3 BMP Tracking and Verification**

The Port will develop and utilize a watershed-based database to track and inventory approved treatment control BMPs and treatment control BMP maintenance within the tidelands. Inventory information is included in Appendix D. The database will include information on treatment control BMP type, location, watershed, date of construction, party responsible for maintenance, maintenance certifications or verifications, inspections, inspection findings, and corrective actions.

The Port will verify that approved treatment control BMPs are operating effectively and have been adequately maintained. The Port will implement BMP tracking and verification in the following manner:

- An annual inventory of all approved treatment control BMPs within the Port's jurisdiction, including all treatment control BMPs approved during the previous permit cycle will be developed.
- The Port will prioritize all projects with approved treatment control BMPs into high, medium, and low priority categories. At a minimum, projects with drainage insert treatment control BMPs will be designated as at least a medium priority. The prioritization of other projects with treatment control BMPs will consider treatment control BMP size, recommended maintenance frequency, likelihood of operational and maintenance issues, location, receiving water quality, and other pertinent factors during the prioritization process.
- The Port will inspect annually 100% of projects with treatment control BMPs that are high priority. The Port will inspect annually 50% of projects with drainage insert treatment control BMPs. Treatment controls that are low priority will be inspected by the Port as needed. The Port will inspect a minimum of 20% of the total number of projects with approved treatment control BMPs, and a maximum of 200% of the average number of projects with approved treatment control BMPs. The Port's inspections will verify effective operation and maintenance of the treatment control BMPs and compliance with all applicable ordinances and permits.

The Port will require an annual verification of effective operation and maintenance of each approved treatment control BMP by the party responsible for the treatment control BMP maintenance. The verification may include annual certifications of effective operation and maintenance or through verification during inspections.



## 4.5 Development Planning Component Effectiveness

Section I.1 of the Permit requires each jurisdiction to assess the effectiveness of their Development Planning program. Part of the assessment involves using the Permit-required target outcome levels, where applicable. The Port recognizes that conducting regular effectiveness assessments are essential for administering successful programs. The effectiveness assessment enhances program development by providing continual feedback about the Port's strategy for reducing pollutants and runoff flows from new development and redevelopment to the maximum extent practicable and refining the strategy when needed.

As discussed in Chapter 13 of this JURMP Document, the Regional Copermittees are developing a process to standardize the reporting and tracking of a portion of the Copermittee assessment information. The Port intends to incorporate as applicable, these standard assessment mechanisms once they are finalized. In the interim, the Port will use the assessment approach discussed in Section 13.2 to develop JURMP Component assessment and annual assessment targets.

The following section presents the current mechanisms that will be used by the Port to assess the effectiveness of its Development Planning program. Appendix H, Table H-1, indicates the Port's assessment methods and target metrics for effectiveness assessment. This table will also identify where Permit compliance information can be located within this JURMP Document (one-time updates) and will distinguish what information will be captured and tracked in JURMP Annual Reports.

### ***Level 1: Compliance with Activity-Based Permit Requirements***

A Level 1 assessment requires the Port to verify that its program meets the applicable Permit requirements. Level 1 documentation will be fairly straightforward as it will be presented in terms of Permit compliance. A verification of program implementation efforts will be compared to the specific Permit requirements to determine if Level 1 targets have been met. The applicable Permit requirements and the methods used to maintain and comply with the Permit requirements are presented in tabular form as identified in Table H-1.

### ***Level 2: Changes in Knowledge/Awareness***

The Level 2 measures attempt to identify changes in knowledge and awareness that occur as a result of implementing the Development Planning program. There is little ability to identify knowledge/awareness changes in the project review/approval process because compliance with project approval specifications and BMP requirements must occur regardless of whether the project proponent has improved their knowledge. However, education and training efforts, both internal and external, may indicate a Level 2 assessment. To this effort, the Port will develop educational outreach material as part of its Educational Program (Section 10) to highlight stormwater regulations with regard to new development and redevelopment.

Information pertaining to Level 2 effectiveness will be tracked annually and documented as part of the Education Component Effectiveness (Table H-6).

### ***Level 3: Behavioral Change/BMP Implementation***

A Level 3 assessment is designed to evaluate changes in behavior that lead to the implementation of effective BMPs. The use of proper BMPs are considered effective techniques to reduce discharges of pollutants and improve water quality. Level 3 outcomes can be reached using the data gathered through on-going maintenance and inspection of high priority treatment control BMPs. The level of behavior change can be inferred through annual evaluation of appropriate BMP construction, installation, and maintenance over the functional life of the BMP. Information pertaining to Level 3 effectiveness will be tracked annually as identified in Table H-1.

### ***Level 4: Load Reduction/Source Abatement***

A Level 4 evaluation is aimed at preventing pollutants from entering the MS4 and receiving waters through the effective use of BMPs. Level 4 requires the development and implementation of specifically designed scientific studies, and require pre-development and post development monitoring data collection. As such, the assessments for this component will not be focused on Level 4 target outcomes.

### ***Level 5: Changes in Urban Runoff and Discharge Quality***

A Level 5 assessment is aimed at identifying the ability to impact changes in urban runoff and discharge quality. As with Level 4 assessments, Level 5 assessments require the development and implementation of specifically designed scientific studies and require several years of data collection. As such, the assessments for this component will not be focused on Level 5 target outcomes.

### ***Level 6: Changes in Receiving Water Quality***

A Level 6 assessment involves the measurement of overall water quality in receiving waters and evaluates changes in water quality with respect to established regulatory benchmarks, biological integrity, beneficial use, and protection. Similar to Level 5 assessments, Level 6 assessments require the development and implementation of specifically designed scientific studies and require several years of data collection. As such, the assessments for this component will not be focused on Level 6 outcomes.

The purpose of this hierarchal evaluation is to recognize successes of the Development Program and identify programmatic elements that need improvement. The overall Development Program will be assessed through an evaluation of the activities that take place throughout each reporting period. The results of these activities will be compared to the targets provided in Table H-1, and a determination will be made on whether the activity was

effective. Information on the number of activities determined to be effective, the number of activities conducted overall, and how well the activities were able to meet the targets will be analyzed. Once this analysis is completed, best professional judgment will be utilized to determine if the overall Development Planning Component was effective.

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## Chapter 5

## Construction Component

### 5.1 Introduction

There are a variety of activities at a construction site that can contribute to stormwater pollution. Typical pollutants from these activities include sediment, debris, hazardous materials, concrete and slurry, wood products, and recyclable materials. The goal of this program component is to minimize the impact of construction activities on water quality by minimizing pollution in urban runoff.

The Port of San Diego will regulate construction activities by characterizing the potential sources of pollutants at a project site, assessing each project's potential threat to water quality and requiring the use of commensurate pollution prevention strategies and the implementation of BMPs. The success of the program will be assessed by using appropriate project tracking methods, using inspection and documentation, education and training and enforcement.

### 5.2 Ordinance Update

The Port is required by the Municipal Permit to review and update its grading ordinance and other ordinances and approvals as necessary to comply with permit requirements. As discussed in the previous JURMP Document (2002), the Port has not adopted a grading ordinance. The absence of a grading ordinance is largely due to two facts: 1) mass grading activities are generally not necessary with most construction activities in the Port's jurisdiction because the tidelands are relatively flat and, thus, most sites are ready for buildings; and 2) grading ordinances are generally adopted by municipalities in order to regulate activities on private property. Additionally, as noted in Chapter 1 of this Document – there is no private property in the Port's jurisdiction. The Port defers the issuance of applicable building and grading permits to the member cities. Due to the absence of this permitting function, the Port has built other mechanisms into the review, approval, and verification process to ensure the pertinent project components are reviewed in a consistent manner and appropriate conditions for approval are established. The mechanisms are discussed below and in the following sections.

As discussed in Chapter 4, the approval of a development or improvement project carried out on Port tidelands includes the imposition of environmental mitigation measures as necessary, to address development related impacts. These mitigation measures address the construction phase of development including the type of impacts that a grading ordinance would typically address. Such measures include the requirement that designated BMPs and other measures are implemented to reduce discharged pollutants, that a SWPPP is created and submitted for

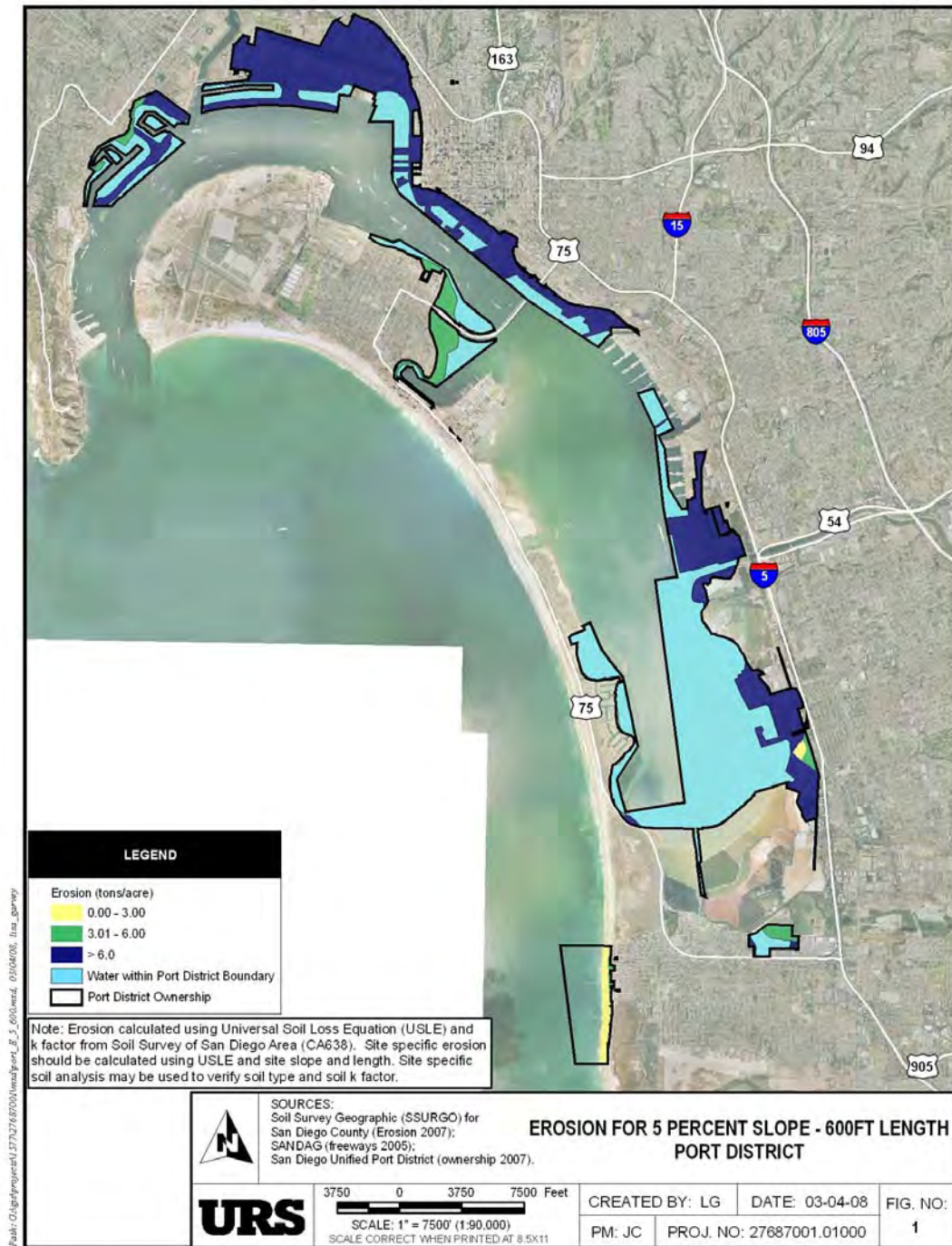
review by the Port and, if applicable, that the project obtain coverage under the General Construction Permit.

### 5.3 Source Characterization and Project Prioritization

The Municipal Permit requires that construction sites are assessed on their potential threat to water quality. The Permit also states that the following factors should be considered in evaluating the threat to water quality posed by construction sites: 1) soil erosion potential; 2) site slope; 3) project size and type; 4) sensitivity of receiving water bodies; 5) proximity to receiving water bodies; 6) non-stormwater discharges; 7) past record of non-compliance of operators of the construction site; and 8) any other relevant factors.

The Port considered each of the above listed factors and analyzed the applicability of each in determining a threat to water quality on tidelands. This analysis revealed that with respect to construction activities on Port tidelands, site slope and soil erosion potential are not significant or distinguishing factors in determining the threat to water quality. This conclusion is based on the minimal variability of erosion potential and slope on tidelands (Figure 1). Further, the sediment transport risk factor also showed little variation because most of the area is less than 5 % slope.

Figure 1. Erosion Potential For Port Tideland.



Factors that will be considered are project size and type, proximity to receiving waters, sensitivity of receiving water, whether the activity will occur during the wet season and the hydrologic soil group classification of the site soils. A project's size and type will be considered since the extent of grading, clearing, or soil disturbing activities increases the threat of sediment transport to the receiving waters. Similarly, a project's proximity to the receiving water will be considered because although there is minimal variation in the distance of construction projects on Port tidelands from the receiving waters, there are instances where a project is within or over the water and as such warrant a higher priority. Sensitivity of the receiving water is also included in the analysis because San Diego Bay has been classified as an environmentally sensitive area (ESA) and per the Municipal Permit, construction projects within or adjacent to or discharging directly to an ESA require the implementation of additional controls. The hydrologic soil group classification of the soil within the project boundary will also be considered as it impacts the potential risk for sediment or other pollutants to migrate offsite. Soil erosion is highest in Hydrologic Soil Group D, due to the presence of fine silts and clays. As shown in Figure 2, much of the Port's tidelands contain Hydrologic Soil Group D, however; this is a generalized depiction of soil on tidelands. Site specific soils analysis may be used to verify soil type and Hydrologic Soil Group.

Every construction project on Port tidelands is assessed and is prioritized based on the project's threat level during the project approval process. The priority level will be noted in the project SWPPP and on the SWPPP inspection checklist. The outcome of this assessment dictates construction inspection frequencies, temporary BMP requirements, and the need for advanced treatment systems discussed in Section 5.4.5. It should be noted, that the Port may reconsider and reassign a higher priority level of a construction site if a violation occurs during the course of the project or if the factors of the project change.

Based on the factors assessed above, the Port has developed guidelines for prioritizing Port construction sites. The highest priority category under which a project falls will be the priority classification. Each construction project will be categorized into one of the following priority levels:

Low Priority - Projects less than one acre in size that are not in or over a receiving water.

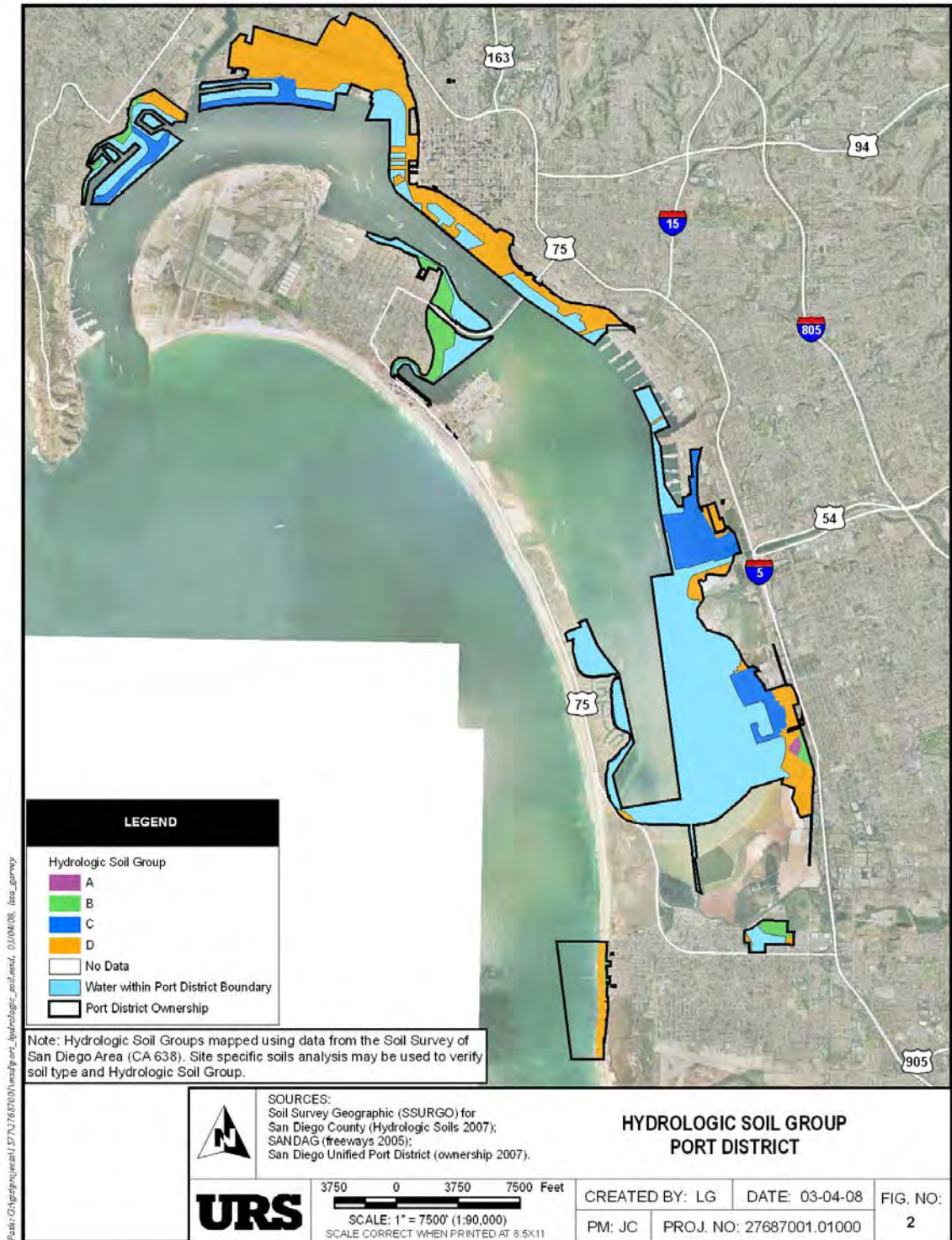
Medium Priority - Projects one to five acres of soil disturbance that are not in or over a receiving water or projects less than one acre of soil disturbance, that are not in or over a receiving water, where construction activities occur during more than one wet season.

High Priority - Projects between five and 50 acres of soil disturbance and occurring during the wet season or any project occurring in or over receiving waters.

Exceptional Priority - Projects greater than 50 acres where construction activities occur during the wet season and, contain Hydrologic Soil Group D soils.



Figure 2. Hydrologic Soil Groups On Port Tideland.



### **5.3.1 Site Inventory**

The Municipal Permit requires that the Port maintain an inventory of all the construction sites within the Port's jurisdiction. The inventory is to be categorized by watershed and updated monthly. The most recent inventory is included in Appendix D of this document. Currently the Port uses a database to manage construction site information. The Port believes that with modifications to address some new permit elements, this database can adequately meet site inventory needs for the next permit cycle.

### **5.3.2 Updating the Inventory**

As required by the Municipal Permit, the Port maintains and updates an inventory of all construction sites located within Port jurisdiction (Appendix D). The inventory is updated and tracked monthly using various mechanisms such as a database, approval processes, and inspections.

New projects are entered into the inventory by the Port Environmental staff upon receipt of a Coastal Development permit copy or a project concept approval document from the Port's Engineering Department or the Port's Real Estate Department. Entering the project into the database triggers the project tracking process which continues onto SWPPP review and the inspection process.

## **5.4 Best Management Practices - Minimum Requirements**

The Municipal Permit directs the Port to require a minimum set of BMPs at all construction and grading projects. The minimum BMPs are required to ensure a reduction of potential pollutants from the project site to the MEP. These BMPs also ensure that all construction and grading activities are in compliance with applicable Port ordinances and other environmental laws.

The Port will require the implementation of designated minimum BMPs and any necessary measures at each construction site in its jurisdiction year round but these may vary based on wet and dry seasons. The BMPs shall include general site management BMPs and erosion and sediment control BMPs. Notwithstanding seasonal variation, projects occurring during the dry season will be required to plan for and be able to address rain events that may occur.

For every project in the Port tidelands that is subject to the General Construction Permit, the Port will hold evidence that coverage has been obtained, because whether the project is undertaken by the Port or by a tenant, the Port is the "landowner" and as such must sign the Notices of Intent to comply.

### 5.4.1 Updated BMP Requirements

This section provides a designation of the minimum BMPs for construction activities in the Port tidelands. The BMPs are described in general terms. Each BMP includes a title and an alphanumeric descriptor. The titles and descriptors correlate to the designation numbers and nomenclature found in the “California Stormwater Best Management Practice Handbooks, September 2004,” produced and published by the California Stormwater Quality Association (CASQA) (<http://www.casqa.org>) or the “Construction Site Best Management Practices Manual”, March 2003, produced by the State of California Department of Transportation (Caltrans). Detailed descriptions of the BMPs can be found in the handbooks.

The particular BMPs to be implemented at a construction site depend on site specific activities. Erosion prevention is to be used as the most important measure for keeping sediment on site during construction, but never as the single method. Further, sediment controls, are to be used as a supplement to erosion prevention for keeping sediment on-site during construction.

The following minimum BMPs are required for all construction sites, depending on their applicability to the activity at hand. Proper implementation and maintenance of these BMPs are critical to the effectiveness of each in preventing or reducing stormwater pollution.

#### **MINIMUM BMPs FOR CONSTRUCTION SITES**

General Site Management BMPs must include:

- Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction;
- Pollution prevention, where appropriate;

#### **Construction Practices**

- Dewatering Operations – NS-2
- Paving Operations – NS-3

#### **Materials Management**

- Structure Construction and Painting – CA3
- Materials Delivery and Storage – WM-1
- Material Use – WM-2
- Stockpile Management – WM-3
- Spill Prevention and Control – WM-4

#### **Waste Management**

- Solid Waste Management – WM-5
- Hazardous Waste Management – WM-6
- Contaminated Soil Management – WM-7

- Concrete Waste Management – WM-8
- Sanitary/Septic Waste Management – WM-9

#### Vehicle and Equipment Management

- Vehicle and Equipment Cleaning – NS-8
- Vehicle and Equipment Fueling – NS-9
- Vehicle and Equipment Maintenance – NS-10
- Development and implementation of a stormwater management plan (i.e., SWPPP or mini-SWPPP);
- Preservation of Existing Vegetation – SS-2
- Minimization of exposure time of disturbed soil areas;
- Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods to the extent feasible;<sup>1</sup>
- Scheduling – SS-1

Temporary stabilization and reseeded of disturbed soil areas as rapidly as feasible;

- Hydraulic Mulching – SS-3
- Soil Binders – SS-5
- Straw Mulches - SS-6
- Wood Mulching - SS-8
- Geotextiles, Plastic Covers & Erosion Control Blankets – SS-7
- Wind Erosion Control – WE-1
- Temporary Stream Crossing – NS-4
- Construction Road Stabilization – TC-2
- Stabilized Construction Entrances – TC-1
- Earth Dikes, Drainage Swales, and Ditches – SS-9
- Slope Drains – SS-11
- Outlet Protection – SS-10
- Slope Roughening – PPDG
- Preservation of natural hydrologic features where feasible;
- Preservation of riparian buffers and corridors where feasible;
- Maintenance of all BMPs, until removed;
- Contractor Training;
- Employee/Subcontractor Training

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<sup>1</sup> Limitation of grading to a maximum disturbed area, determined by the Port to be 5 acres during the rainy season and 17 acres during the non-rainy season, before either temporary or permanent erosion controls are implemented to prevent stormwater pollution (See Section 5.4.3 for additional information).

- Retention, reduction, and proper management of all pollutant discharges on site to the MEP standard.

Erosion and Sediment Controls BMPs must include:

- Silt Fence – SC-1
- Street Sweeping and Vacuuming – SC-7
- Straw Bale Barrier – SC-9
- Sand Bag Barrier – SC-8
- Brush or Rock Filter – CESC53
- Storm Drain Inlet Protection – SC-10
- Sediment Trap – SC-3
- Sediment Basin – SC-2
- Check Dams – SC-4
- Fiber Rolls – SC-5
- Gravel Bag Berms – SC-6
- Wheel Wash – TC-3
- Slope stabilization on all inactive slopes during the rainy season and during rain events in the dry season;
- Slope stabilization on all active slopes during rain events regardless of the season; and
- Permanent revegetation or landscaping as early as feasible.

#### **5.4.2 Additional Controls for Construction Sites**

The minimum BMPs referenced in the previous section were considered for and are applicable to projects discharging directly into San Diego Bay and other environmentally sensitive areas.

The Municipal Permit requires construction sites tributary to CWA section 303(d) Listed Waters (impaired for sediment) or those discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas (ESA), to implement additional controls, in addition to the required minimum BMPs, as necessary. There are no water bodies within the Port's jurisdiction that are 303(d) listed waters for sediment impairment. However, San Diego Bay is a designated ESA. As such, additional BMPs may be assigned by the Port beyond the minimum BMPs listed. The additional BMPs or controls may include more frequent inspections during the wet and dry season, turbidity curtains, coffer dams, clear water diversions, and advanced treatment controls for sediment.

### **5.4.3 Maximum Disturbed Area for Erosion Controls**

The Port restricts the size of the project's total disturbed soil area (DSA) to 5 acres during the rainy season and 17 acres during the non-rainy season. These grading limits are recognized standards within the industry. The Port has the option to temporarily increase these limits if the individual site is in compliance with applicable stormwater regulations and the site has adequate control practices implemented to prevent stormwater pollution. The authority to temporarily increase the grading limits of a project site is with the Port construction inspector in cooperation with Port stormwater staff. If the amount of DSA is temporarily increased beyond the above limits, the contractor shall have the BMP material(s) required to implement the appropriate control practices available onsite and amend the Project SWPPP to reflect this change. A mobilization plan including a description of the delivery and deployment of the appropriate BMP material to the jobsite prior to all predicted rain events shall also be submitted to the Port for approval and shall be included in the Project SWPPP. Run-on controls shall be in place prior to opening any additional DSA.

### **5.4.4 Advanced Treatment Methods**

In accordance with the Municipal Permit, the Port will require implementation of advanced treatment methods for sediment at construction sites determined to be exceptional threats to water quality. A site determined to be an exceptional priority or risk to water quality is described in Section 5.3. Advanced treatment may also be required for high priority sites based upon stormwater inspections and past record of non-compliance by the operators of the construction site. In the event of non-compliance with the water quality objectives for turbidity established in the Basin Plan, a project site must consider or use an advanced treatment method.

## **5.5 Program Implementation**

The Permit requires the Port to verify the implementation of designated minimum BMPs and any additional measures necessary for its construction projects in order to ensure compliance year round. Verification of compliance is accomplished through project approvals, including stormwater requirements in project specifications, inspections, enforcement, reporting non-compliance, tracking, and training and outreach. The subsections below discuss the implementation of these aforementioned elements.

### **5.5.1 Approval**

Prior to the approval of a construction project, the Port requires that all applicable minimum BMPs have been identified and the proposed methods of implementation are appropriate to the project site. Designated BMPs for a project are included in a required project-specific SWPPP or equivalent SWPPP. Implementation of these BMPs will ensure that pollutants from the site will be reduced to the MEP and will not cause or contribute to a violation of water quality standards. If the project is subject to the General Construction Permit, then a SWPPP prepared in accordance with the General Construction Permit will be required. If the project is not subject to the General Construction Permit, a “mini-SWPPP” will be required. The mini-SWPPP includes many of the same elements as a standard SWPPP except for most post-construction BMPs and a monitoring plan.

The implementation of a project’s designated BMPs is verified during a review of the project SWPPP. The Port reviews the SWPPP to verify compliance with their ordinance and applicable permits and then issues an approval memo. Port approval on all SWPPPs and mini-SWPPPs is required prior to any work beginning on a project.

### **5.5.2 Specifications**

A stormwater compliance section is included in all specifications for Port projects. Included in the section are references to applicable stormwater regulations, BMP guidance, SWPPP requirements, and reference to the Port’s SWPPP template. The Port requires the use of a standard SWPPP template or an equivalent for construction projects. The BMPs required by the Port through these plans are those BMPs provided in the CASQA and Caltrans construction BMP handbooks.

The Port does not maintain the staff or equipment necessary to conduct construction projects. Work carried out as a development project by the Port (“public works projects,” per se) is done under contract with a development/engineering/construction company. The contract specifies that the construction and grading activities incorporate stormwater pollution prevention BMPs.

### **5.5.3 Inspections**

The Municipal Permit requires that the Port conduct inspections of construction sites to monitor compliance with the Port’s ordinances, permits, approvals, and the Municipal Permit. Due to the unique circumstances under which the Port operates (namely, that the Port holds all the tidelands in trust), the Port has a vested interest in all the developments or improvements completed in the tidelands, whether undertaken by the Port or its tenants. As such, the Port is concerned with every aspect of a construction project, and therefore, has a dedicated staff that

is responsible for inspecting all improvements in the Port's jurisdiction. The Port Construction Support Department is responsible for inspecting all construction activities on an almost daily-basis. Furthermore, because the Port must verify either contract compliance for Port "public works-type" projects or lease/use permit compliance for tenant projects, the Construction Support staff make every effort to inspect sites prior to and during rain events. These inspection frequencies apply to any project at any time of the year, thus fulfilling the Port's obligations under the Municipal Permit.

Port Construction Support staff and Environmental Services Department (ESD) staff also conduct supplemental inspections. The inspection will include a review of the adequacy and effectiveness of each of the BMPs being implemented at the site. If the project is subject to the General Construction Permit, then the inspection will also include review of: 1) the SWPPP and supporting documentation; 2) contractor site inspection records; and 3) any available monitoring results. The inspection will assess the compliance with the Port's ordinances and permits related to urban runoff, including implementation and maintenance of designated minimum BMPs from these permits. Previous inspection records for the site will be reviewed prior to any inspection.

The inspectors carry the following forms and equipment during inspections:

Inspection Form: This inspection form includes a section for visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.

SWPPP Checklist: To review SWPPP if applicable.

BMP Checklist: To verify implementation of minimum BMPs.

Stormwater Discharge Parameter Benchmarks: This table of generally acceptable analyte values for stormwater discharges may be used by the inspector during the review of monitoring results.

Camera: To document site conditions.

A copy of the completed Inspection form, the SWPPP Checklist, and the BMP Checklist is provided to the site supervisor at the end of the inspection, or the next day. The inspector reviews the results of the inspection with the site supervisor. Any education and outreach on stormwater pollution prevention needed for the site may be verbally provided at the time of the inspection by the Port.

Any BMP violations noted, and/or exceedances of the benchmark water quality parameters are discussed with the site supervisor. If BMP violations and/or elevated levels are not being addressed by the site supervisor, the inspector will require the submittal of a written explanation and description of the actions that will be taken to correct the problem. The site



supervisor will be given a corrective action on the inspection form for each violation documented during the inspection. Corrective actions must be addressed as soon as possible by the site supervisor (given safety considerations).

If violations discovered during an inspection are not resolved voluntarily by the site supervisor, the Port will pursue appropriate enforcement actions as detailed in Article 10 and described in Section 5.5.5 below.

### **5.5.4 Inspection Frequency**

The Municipal Permit specifies that during the wet season, October 1 through April 30, the following sites are to be inspected at least biweekly (every two weeks): all construction sites that are 50 acres or more in size with grading occurring during the wet season; projects that are one acre or more and tributary to a CWA section 303(d) water body segment impaired for sediment or within or directly adjacent to or discharging directly to a receiving water within an ESA; any other sites determined by the Port or the Regional Board as a significant threat to water quality are to be inspected at least biweekly. Furthermore, the Permit requires the inspection of all construction sites during the dry season on an as needed basis.

Using these criteria coupled with the project priority level, the Port has created an inspection schedule that is summarized in the table below.

**Table 5-2.** Port Inspection Frequencies According To Priority Level.

PROJECT PRIORITY LEVEL	INSPECTION FREQUENCY	
	Dry Season	Wet Season
Low	As needed or at least monthly	As needed or at least monthly
Medium	As needed or at least monthly	At Least Biweekly
High	As needed or at least monthly	At Least Biweekly
Exceptional	As needed or at least monthly	At Least Biweekly

The San Diego Bay is an ESA and in general, Port tidelands are directly adjacent to or discharging directly to the bay. All construction Port sites that are one acre or more, that have been prioritized as medium, high, or exceptional threats to water quality will be inspected biweekly during the wet season and as needed or at least monthly during the dry season. Sites less than one acre, that have been characterized as low priority will be inspected as needed or at least monthly year round.

### **5.5.5 Enforcement**

As stated in Section C of the Municipal Permit, the Port must be able to prohibit discharges and enforce stormwater regulations. For enforcing the construction program, Section D.2.e requires the Port to identify under what condition each enforcement mechanism will be used and how they will escalate. This enforcement process facilitates prompt corrective actions at construction sites for violations of water quality protection permit requirements and ordinances.

Article 10 enables the Port, including Port inspectors, to prohibit discharges and require management practices so that discharges on tidelands do not cause or contribute to water quality problems. Article 10 establishes enforcement procedures to ensure that construction related activities and responsible dischargers are held accountable for their contributions and /or flows. In addition to Article 10 general provisions and specific sections applicable to the construction component.

Enforcement mechanisms applicable to the construction component include the following administrative and judicial authorities. Please refer to either Section 2 of this JUMRP Document or Appendix B (Article 10) for complete details on each item.

#### Administrative Authorities

- Cease and Desist Order
- Notice and Order to Abate Violation
- Administrative Citations
- Stop Work Orders
- Nuisance Abatement
- Permit Suspension and Revocation

#### Judicial Authorities

- Injunctive or Declaratory Relief
- Civil Penalties and Remedies
- Criminal Arrest or Field Citation

Generally, enforcement actions are triggered during routine inspections or when investigating a complaint. Port staff will make efforts to use escalating enforcement, initially starting with verbal warnings and progressing to administrative written warnings. Please note that both

Cease and Desist Orders and Notice and Order to Abate Violations may be initially administered while on site either verbally or by written document, such as the corrective action portion of an inspection form, which could be the first step in enforcement actions. On occasions where the initial corrective actions are not appropriately addressed or the discharge is not stopped, Port staff may also use Administrative Citations which would either identify a (monetary) fine structure for future non-compliance or, when necessary, include the issuance of a monetary penalty.

For most incidents, the actions stated above are adequate to achieve compliance. However, in instances where a discharge is determined to be a significant threat to human health or the environment, Port staff can also use Stop Work Orders or Nuisance Abatement to require immediate cessation of the activity. Finally, in severe cases or in instances where responsible parties refuse to comply or appear to act in a threatening manner, Port staff can enlist Harbor Police services and use the judicial authorities identified above.

### **5.5.6 Reporting of Non-compliant Sites**

Construction activities undertaken in the Port's jurisdiction are required to maintain compliance with Article 10, the Municipal Permit, the General Construction Permit (if applicable), and any requirements established in this JURMP Document.

Sites are considered non-compliant if one or more violations are discovered at a site. If an incident or practice of non-compliance occurs, Port ESD staff will then determine if the incident poses a threat to human or environmental health by considering the following criteria:

- Characteristics, quantity, and toxicity of substances/materials involved;
- Proximity of site to a sensitive water body (San Diego Bay or its tributaries);
- Proximity of site to an impaired water body (San Diego Bay, Chollas Creek);
- Proximity of site to a sensitive habitat/endangered species;
- Estimated volume of actual and/or potential discharge; and
- Discharges to storm drain and condition of storm drain (clog, etc.).

If an incident of non-compliance is determined to pose a threat to human or environmental health, the Port will provide oral notification to the San Diego RWQCB within 24 hours. A written notification shall also be provided within five (5) days of the time the Port becomes aware of the circumstances.

### **5.5.7 Tracking**

The Port will track construction projects using a database. The database tracks SWPPP reviews from current and past construction sites. It also tracks site name, project status, size, inspection dates and comments, and project close-out information such as final inspection date, close-out report submittal, and status of coverage under the General Construction Permit. The database indicates the review process status for recently submitted SWPPPs and allows the Port to maintain the current status (e.g., active, closed, postponed) of its construction sites to verify that the sites are inspected at the minimum frequencies required.

Commencement of a construction project initiates regular inspections of the implementation of the project's SWPPP. Therefore, regularly scheduled inspections act as a mechanism for monthly, at a minimum, updates to the inventory database. The database is also updated when a close-out inspection and report is conducted at the completion of a project and again when a Notice of Termination (NOT) is submitted by the Port to the San Diego RWQCB. Upon approval of the NOT, if the project has a SUSMP, then the project is added to the Port's SUSMP tracking database and post-construction inspections begin. The treatment control BMPs approved for each site are tracked and inventoried. Upon construction of the treatment control BMPs, information such as BMP type, location, watershed, and date of construction can be tracked.

### **5.5.8 Training and Outreach**

Construction and development activities can alter natural drainage patterns and contribute pollutants to stormwater. Improperly managed stormwater runoff from construction sites can be a significant source of water pollution causing habitat disturbance and destruction, decline in wildlife, and restrictions on water use and enjoyment of these resources. The objective of the training and outreach is to increase the knowledge and awareness of Port decision makers, Port staff, project proponents, architects, engineers, contractors and the general public regarding the potential water quality impacts associated with construction and to the means to prevent or minimize those impacts. The Port's education plan for the construction component will meet the required training frequency, and address the required target audiences and topics. This information is described in detail in the JURMP Education Component, Chapter 10. Annual assessments of the education program for construction activities will also be reported in the Education Component Section.

## 5.6 Construction Activities Effectiveness Assessment

Section I.1 of the Permit requires each jurisdiction to assess the effectiveness of their Construction program. Part of the assessment involves using the Permit-required target outcome levels, where applicable. The Port recognizes that conducting regular effectiveness assessments are essential for administering successful programs. The effectiveness assessment enhances program development by providing continual feedback about the Port's strategy for reducing pollutants and runoff flows from construction sites to the maximum extent practicable and refining the strategy when needed.

As discussed in Chapter 13 of this JURMP Document, the Regional Copermittees are developing a process to standardize the reporting and tracking of the Copermittee assessment information. The Port intends to incorporate as applicable, these standard assessment mechanisms once they are finalized. In the interim, the Port will use the assessment approach discussed in Section 13.2 to develop JURMP Component assessment and annual assessment targets.

The following section presents the current mechanisms that will be used by the Port to assess the effectiveness of its Construction program. Table H-2 located in Appendix H indicates the Port's assessment methods and target metrics for effectiveness assessment. This table will also identify where Permit compliance information can be located within this JURMP Document (one-time updates) and will distinguish what information will be captured and tracked in JURMP Annual Reports.

### **5.6.1 *Level 1: Compliance with Activity-Based Permit Requirements***

A Level 1 assessment requires the Port to verify that its program meets the applicable Permit requirements. Level 1 documentation will be presented in terms of Permit compliance. A verification of program implementation efforts will be compared to the specific Permit requirements to determine if Level 1 targets have been met. The applicable Permit requirements and the methods used to maintain and comply with the Permit requirements are presented in Table H-2.

### **5.6.2 *Level 2: Changes in Knowledge/Awareness***

The Level 2 measures attempt to identify changes in knowledge and awareness that occur as a result of the Construction program. Level 2 has limited applicability to this component as there is little ability to identify knowledge/awareness changes in the project review/approval process

because compliance with project approval specifications and BMP requirements must occur regardless of whether the project proponent has improved their knowledge. However, education and training efforts, both internal and external, may indicate a Level 2 assessment. To this effort, the Port will develop educational outreach material as part of its Educational Program (Section 10) to highlight stormwater regulations with regard to construction activities. Information pertaining to Level 2 effectiveness will be tracked annually and documented as part of the Education Component Effectiveness described in Chapter 10 and Table H-6.

### **5.6.3 Level 3: Behavioral Change/BMP Implementation**

A Level 3 assessment is designed to evaluate changes in behavior that lead to the implementation of effective BMPs. Level 3 outcomes can be reached using the data gathered through regular inspections and through regular SWPPP reviews. The assessment will be based upon the results of inspections, looking at instances where corrective actions were required of the contractor to properly implement BMPs described in the project SWPPP. This assessment will also take in to account whether projects were identified that did not have a SWPPP in place when one was required. Using this information, the Port can infer that minimal corrective actions indicate a positive change in behavior and BMP implementation

### **5.6.4 Level 4: Load Reduction/Source Abatement**

A Level 4 evaluation is aimed at preventing pollutants from entering the MS4 and receiving waters through the effective use of BMPs. Due to the temporary nature of construction activities, Level 4 assessments are very difficult to capture if the focus is on long-term load reduction and source abatement, which will require monitoring data. Load reduction and source abatement in the construction context could be inferred, however, through verification of proper installation and maintenance of BMPs, through the use of site stabilization BMPs, and through the immediate response and stop of unauthorized discharges from a construction site. The Port may elect to evaluate this data and include it in the annual assessment, when applicable, if it can relate to Level 4 assessments.

### **5.6.5 Level 5: Changes in Urban Runoff and Discharge Quality**

A Level 5 assessment is aimed at identifying the ability to impact changes in urban runoff and discharge quality. Level 5 assessments require the development and implementation of specifically designed scientific studies that can provide background monitoring data that directly relate to urban runoff and discharge quality of the site prior to the construction activities and then data collected during the actual construction activity. Due to the temporary nature of

construction activities on tidelands, collection of these data would require a significant amount of data collection and even with that, the overall change in urban runoff and discharge quality will still be a rough estimate showing short-term and not permanent changes. As such, the assessments for this component will not be focused on Level 5 target outcomes.

### **5.6.6 Level 6: Changes in Receiving Water Quality**

A Level 6 assessment involves the measurement of overall water quality in receiving waters and evaluates changes in water quality with respect to established regulatory benchmarks, biological integrity, beneficial use, and protection. Level 6 assessments require the development and implementation of specifically designed scientific studies and require several years of data collection. As such, the assessments for this component will not be focused on Level 6 outcomes.

The purpose of this hierarchal evaluation is to recognize successes of the Construction Program and identify programmatic elements that need improvement. The overall Construction Program will be assessed through an evaluation of the activities that take place throughout each reporting period. The results of these activities will be compared to the targets provided in Table H-2, and a determination will be made on whether the activity was effective. Elements such as the amount of activities determined to be effective, the number of activities conducted overall, how well the activities covered the required topics, and if the required target audiences were reached will be analyzed. Once this analysis is completed, best professional judgment will be utilized to determine if the overall Construction Program was effective.

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## Chapter 6

## Municipal Component

### 6.1 Introduction

More than 28,000 people work in the Port tidelands on a daily basis, and tens of thousands more visit the tidelands each day. The Port has developed a municipal infrastructure to maintain the quality of life enjoyed by these visitors and the employees of both the Port and the Port tenants. The activities supported by the Port's municipal infrastructure contribute to the impacts of urban runoff on the water quality of San Diego Bay. Proper development and maintenance of this infrastructure can help to control the water quality impacts of urban runoff.

Section D.3.a of the Permit requires that each Copermittee develop and implement a program to reduce or prevent municipal discharges of pollutants from the MS4 to the MEP. In general, the Permit requires that all municipal activities and areas be identified and prioritized, minimum BMPs are established, and that a process for ensuring the application of these BMPs is implemented and enforced by the Port.

The goal of the Municipal Component of this JURMP Document is to minimize or avoid the impacts of the Port's municipal activities on San Diego Bay itself (as well as the receiving waters discharging into the bay) and the environmental resources in and around the bay. As with all the components of this JURMP Document, the Municipal component also hopes to enhance the quality of these resources, wherever possible. This section of the JURMP Document identifies the programs and activities the Port has developed and will implement to address urban runoff from municipal facilities activities.

### 6.2 Inventories

As required by the Permit, Section D.3.a(1), the Port has developed an inventory of all municipal land use areas and activities managed or controlled by the Port. The inventory includes the name, address or location, a general description of each area or activity type, and the priority of the area or activity in terms of threat to water quality due to urban runoff, including potential pollutants for which San Diego Bay is listed. The complete inventory of existing municipal area and activity types in the Port jurisdiction is presented in Appendix D. In accordance with the Permit, the inventory is further categorized by watershed. The Port is utilizing a database to maintain a current and accurate inventory.

It should be noted that not all municipal facilities outlined in Permit are present on Port tidelands. Flood management projects and flood control devices, municipal landfills, publicly owned treatment works, solid waste transfer facilities, land application sites, and household

hazardous waste collection facilities are not located on Port Tidelands. Therefore, these municipal facilities, areas, and activities will not be discussed further. Also taking in consideration of item D.3.a(7)(a)iii in the Permit, in general all of Port tidelands are tributary to an environmentally sensitive area (San Diego Bay), thus the Port has addressed this situation individually for each facility, area, and activity occurring on Port tidelands.

It is also important to note that there are municipal areas and activities within the Port's tidelands jurisdiction that are not managed or controlled by the Port. The jurisdiction of the Port is such that the five member cities (Chula Vista, Coronado, Imperial Beach, National City, and San Diego) or other governmental entities (US Navy) may actually control what are defined by the Permit as "municipal land areas and activities" within the Port's tidelands. These municipal land use areas and activities are also presented in Appendix D. Other than annually updating the information, the Port's Municipal Component does not address these items further.

Inventory information presented in the subsections below will be updated annually as required by the Permit. The information will be maintained in the Port Stormwater database. Continual refinements to the Stormwater database will result in up-to-date, detailed, and informative inventories.

### **6.2.1 *Inventory of Port Facilities and Operations Buildings***

Port municipal facilities and operations buildings are located in several areas throughout Port tidelands. Various Port departments utilize these facilities and are responsible for all operations and activities at each of these facilities. The Port facilities inventory, including the potential pollutants for each, is identified on Table 6-1.

- Marine Terminals<sup>1</sup>
- Administration Facilities
- General Services Facilities
- Harbor Police Facilities

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<sup>1</sup> On December 6, 1991, the Port was granted approval by the State Water Resource Control Board (SWRCB) to include its industrial lessees at the three marine terminals, Tenth Avenue Marine Terminal (WDID #937S006106), the National City Marine Terminal (WDID #937S006108), and the Cruise Ship Terminal (WDID #937S006167), as Copermitees under the General Industrial Stormwater Permit (SWRCB Order #97-03-DWQ). Under this arrangement, the Port, as principal permittee, and its lessees and operators, as terminal Copermitees, are each responsible for operations directly under their control at each industrial facility. As such, these facilities including all lessee operations are considered under this municipal component as part of the Permit.

**Table 6-1.** Inventory Of Port Facilities And Operations Buildings.

FACILITY NAME	ADDRESS NUMBER	STREET NAME	CITY	STATE	ZIP CODE	POTENTIAL POLLUTANTS								
						POTENTIAL POLLUTANTS THAT MAY BE GENERATED BY THE FACILITY.								
						Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
Tenth Avenue Marine Terminal		Crosby Street	San Diego	CA	92101		X	X	X	X	X		X	X
National City Marine Terminal	1400	Bay Marina Drive	National City	CA	92123			X		X	X		X	X
Cruise Ship Terminal	1150	N. Harbor Drive	San Diego	CA	92101			X		X	X		X	X
Administration Building and Annex	3165	Pacific Highway	San Diego	CA	92101			X		X				X
Corporate Learning Center	2980	Pacific Highway	San Diego	CA	92101									X
Material Support and Management Center	1411	Palm Avenue	San Diego	CA	92101					X				X
General Services Work Control Center	1400	Tidelands Avenue	National City	CA	92123	X	X	X	X	X	X	X	X	X
Boat Mechanic and Dive Locker	1401	Shelter Island Drive	San Diego	CA	92106	X	X	X		X	X			X
Boat Demolition Yard	891	G Street	Chula Vista	CA	91910	X	X	X	X	X	X		X	X
Harbor Police Headquarters	3380	N. Harbor Drive	San Diego	CA	92101		X	X		X				X
HP Dispatch and Mooring Office*	1401	Shelter Island Drive	San Diego	CA	92106									X
Harbor Police South Bay Sub-station*	950	Marina Way	Chula Vista	CA	91910									X

\* These facilities represent the facility structure only, the general area around the facility is included within the park, parking lot, and/or boat launch ramp areas.

## 6.2.2 Inventory of Municipal Areas

The Port municipal areas consist of roads, streets, parking lots, the MS4 and parks (including fishing piers and boat launch ramps). The Port is responsible for maintaining approximately 30 miles of roads and/or streets, 44 parking lots, 18 parks, 852 catch basins or stormdrain inlets, and approximately 20 miles of stormdrain conveyance system through out the tidelands. These roads and streets are limited to the areas of Harbor Island, Shelter Island, and Harbor Drive from the Cruise Ship Terminal to Seaport Village, the ingress/egress roads to North and South Embarcadero Parks, and ingress/egress to the GSD facilities. The municipal areas inventory, including the potential pollutants for each area, is identified on Table 6-2. Due to the proximity to San Diego Bay, all Port maintained roads, streets, and parking lots have been identified as high priority and are identified as such on Table 6-2.

**Table 6-2.** Inventory Of Municipal Areas.

MUNICIPAL AREA	TOTAL INVENTORY	UNIT OF MEASURE	PRIORITY	POTENTIAL POLLUTANTS								
				POTENTIAL POLLUTANTS THAT MAY BE GENERATED BY THE FACILITY. A FACILITY CAN BE IDENTIFIED AS HAVING MORE THAN ONE POLLUTANT.								
				Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
Roads and Streets	30	Miles	High	X	X	X		X			X	X
Parking lots	44	Each	High	X	X	X		X			X	X
MS4 (catch basins and inlets)*	852	Each	To be determined upon initial two years of inspections	X	X	X	X	X	X	X	X	X
MS4 (stormwater conveyance system)*	20	Miles	To be determined upon initial two years of inspections	X	X	X	X	X	X	X	X	X
Parks (including fishing piers and boat launch ramps)	18	Each	High	X	X	X	X	X	X	X	X	X

\* Total inventory is based on current MS4 GIS layer.

## 6.3 Source Characterization

The Permit requires the Port to identify potential pollutants at all municipal facilities and areas. The following section discusses the potential pollutants present at Port facilities and municipal areas.

### **6.3.1 Source Characterization for Port Facilities and Operations**

A variety of activities occur at the Port municipal facilities and operations buildings; however the majority of Port facilities consist of offices which utilizes indoor storage and indoor operations. All outdoor areas and activities are required to comply with the regulations outlined in the Permit.

#### **a. Marine Terminals**

Tenth Avenue Marine Terminal (TAMT) is a 96-acre complex that was opened in 1958. It is situated north of the Coronado Bay Bridge in the City of San Diego. It contains many of the bulk handling operations for the Port, including a cold storage facility, sand importation operations, cement importation operations, importation of windmill components, and a bunker fuel delivery system for ship refueling. The Port stores the following materials at this facility: gravel, dirt, landscaping materials, asphalt, broken up concrete, broken up asphalt, broken pilings/bay debris, sandbags, and dumpsters. Stormwater from TAMT drains into the MS4 and directly into San Diego Bay which is a 303(d) listed impaired water body. However the activities at TAMT do not generate pollutants for which San Diego Bay is listed.

National City Marine Terminal (NCMT) is a 125-acre complex, of which 99% is covered by impervious surfaces. It is situated south of the Coronado Bay Bridge in the City of National City. It is in the center of commercial shipping activity for the importation of automobiles and lumber. The Port does not store materials at NCMT. Stormwater from NCMT drains into the MS4 and directly into San Diego Bay which is a 303(d) listed impaired water body. However the activities at NCMT do not generate pollutants for which San Diego Bay is listed.

Cruise Ship Terminal (CST) is a 9-acre complex that was originally opened in the 1920's. This facility is situated on the embarcadero on San Diego Bay in the City of San Diego. It is the center of cruise ship activity on San Diego Bay. Approximately 244 vessels arrive per year, utilizing the facility on average 3 days per week. The Port stores ramps, planters, trash dumpsters, and other cruise ship support materials on the terminal. Stormwater from CST drains into the MS4 and directly into San Diego Bay which is a 303(d) listed impaired water body. However the activities at CST do not generate pollutants for which San Diego Bay is listed.

#### **b. Port Administration, General Services, and Harbor Police Buildings**

The Port utilizes three administration facilities including the Port administration building and annex (3165 Pacific Highway), the corporate learning center (2980 Pacific Highway), and the material support facility (1411 Palm Avenue). These administration facilities are utilized as offices and meeting rooms for the Port's daily business activities. The material support facility is the receiving warehouse for the Port. There is no outdoor storage or activity at any of these locations, the only source of pollution from these locations is incidental leaks from vehicles in

the parking areas. Therefore, the Port's administration facilities are not considered as contributing a significant pollutant load to the MS4.

The Port's General Services Department (GSD) utilizes three facilities on Port tidelands. These include GSD work control center (1400 Tidelands Avenue in National City), the boat mechanic and dive locker (1401 Shelter Island Drive), and the boat demolition yard (891 G Street in Chula Vista). Each of these facilities is utilized by the Port as either a work area or storage. The potential pollutants for each facility are described below.

The GSD work control center contains administrative offices, automotive shop, maintenance mechanics shop, small engine shop, park division storage, paint shop, carpentry shop, sign shop, plumbing shop, electric shop, marine section, outdoor storage, vehicle fueling, and vehicle wash area. The GSD is responsible for lawn maintenance, relamping street lighting, street sweeping, trash collection, and tree trimming for all municipal areas on Port tidelands. GSD also responds to work request for all electrical needs, facilities support, and fleet services for all Port facilities. The majority of activities occurring at the GSD facility are conducted indoors; however there is an outdoor waste storage area, and vehicle and equipment parking and storage. The GSD work control center also contains an outdoor vehicle and equipment wash area and fueling area.

The boat mechanic and dive locker are located at the end of Shelter Island next to the Harbor Police Department (HPD) mooring office. These facilities include a dock for in-water storage of Port water vessels. Regular preventative maintenance on the HPD and Port water vessels is conducted at this facility. All vessels with inboard engines are maintained in the water and smaller vessels with outboard engines are removed from the water for maintenance. The boat mechanic shop stores oil, grease, fuel, and some solvents within a garage and office area. The dive locker is utilized by Port divers as an office and indoor storage area for dive equipment, there are no pollutants stored at the dive locker.

The GSD boat demolition yard is a 2-acre area, of which 100% is covered by impervious surfaces. The demolition yard is situated north of the Chula Vista Marina in the City of Chula Vista. All boat demolition activities are conducted outside within a paved and bermed area. There are no storm drains within the demolition area. Hazardous waste removed from vessels during the demolition process are stored in sealed and labeled 55-gallon drums, within the bermed containment area and removed immediately following demolition activities. In addition to boat demolition activities, temporary storage of derelict vessels occurs at the facility.

The HPD utilizes three facilities on Port tidelands, including HPD headquarters (3380 N. Harbor Drive), the dispatch center and mooring office (1401 Shelter Island Drive), and the South Bay sub-station (950 Marina Way in Chula Vista).

The HPD headquarters consists of a main building, six leased trailers located outdoors, and a metal annex building. The headquarters building contains offices, conference rooms, evidence room, detention area, locker rooms, and an armory. The metal annex building is utilized for general storage and defensive tactics training. The outdoor trailers are utilized as offices, locker rooms, and a break room. There is also an outdoor K-9 kennel area, two flammable liquid storage cabinets, and two parking areas. The K-9 kennel area is maintained by the K-9 handlers; there are no stormdrains located in or around this area. The two flammable storage cabinets are also located away from stormdrains.

The dispatch office center and mooring office consist of offices and a boat dock for Harbor Police and public vessels. The dispatch office center and mooring office is adjacent to the GSD boat mechanic and dive locker. The South Bay station consists of offices and a restroom. There are no outdoor operations or storage at this facility. The parking areas at each of these facilities is swept and maintained by the GSD.

### **6.3.2 Source Characterization for Municipal Areas**

Roads, streets, and parking lots are generally considered sources of urban runoff pollutants due to vehicular traffic use. Deterioration of these surfaces, themselves, can generate sediment and other particulate stormwater pollutants. Motor vehicles are the source of petroleum, heavy metals, and other toxic pollutants from engine exhaust, brake linings, and leaking fluids that are deposited on roads, streets, and parking facilities. In addition, roads, streets, and parking lots tend to collect litter and other debris generated by nearby activities. Roads, streets, and parking lots are generally impervious and designed to quickly transport stormwater off the driving surface in order to reduce flooding and associated traffic safety hazards. However, stagnant water can occasionally collect in gutters, depressions, and other “low spots”. As such these areas have the potential to discharge pollutants to the MS4.

The MS4 also has the potential to discharge to the receiving water. The MS4 receives pollutants generated by motor vehicles, namely, heavy metals, oil and grease, and other toxic pollutants from engine exhaust, brake linings, and leaking fluids. Waste liquids, such as oil and paint, can also be illegally dumped into conveyance system structures. Illegal connections can be made to the MS4 and potentially introduce a wide variety of pollutants to the system. Street curbs and gutters, stormwater inlets, culverts and channels typically collect litter discarded in urban areas. As such, all of these pollutants can reach the MS4 with each rainfall event, and in turn, be carried to receiving water bodies.

Port parks are utilized by the public for daily use, small parties, and large special events. Trash, pet waste, and illegal discharges are the primary concerns at parks, fishing piers, and boat launch ramps. Potential pollutants can be generated by routine landscaping and the management of pesticides, herbicides, and fertilizers within the parks located on Port tidelands.

As such, parks have the potential to generate a significant amount of pollutants, which could reach the MS4 or the receiving water.

## 6.4 BMP Requirements and Pollution Prevention Methods

Protecting and improving water quality requires the incorporation of pollution prevention practices, source control and treatment control BMPs. Pollution prevention practices reduce or eliminate pollution at the source. Pollution prevention occurs when raw materials, water, energy and other resources are utilized more efficiently, or when less harmful substances are substituted for hazardous ones. Source control BMPs (both structural and non-structural) generally reduce contact between pollutants and runoff by keeping pollutants protected from exposure to the weather. Treatment control (structural) BMPs physically remove pollutants from runoff through a variety of processes. The use of pollution prevention practices along with source and treatment control BMPs will help to minimize or eliminate discharges to the MS4 and the receiving water. Permit section D.3.a(2), requires each municipal facility and area to implement and maintain minimum BMPs and pollution prevention methods in order to reduce or eliminate potential pollutants from entering the MS4 and the receiving water.

At the onset of the Permit reissuance, the Port evaluated the minimum BMPs required for all Port facilities (industrial, commercial, and municipal) and developed overall pollutant generating activities (PGA) categories based on common activities. After, the PGA categories were established, minimum BMPs for each PGA category were developed. Utilizing the PGA categories and evaluating minimum BMPs for each category allows the Port to standardize information across all JURMP components. The minimum BMPs are required for each PGA category regardless of the facility type.

Table 6-3 identifies the minimum BMPs and pollution practices required for all Port municipal facilities where applicable and feasible. A detailed description of each BMP will be discussed in Section 6.6, where implementation of BMPs is fully described. The following sections describe the minimum BMPs, pollution prevention methods, and additional controls required for each municipal facility and area within Port tidelands.



**Table 6-3. Required Minimum BMPs For Port Municipal Facilities And Areas.**

PGA	General Operations and Housekeeping					Non-Stormwater Management				Waste Handling and Recycling			Outdoor Material Storage			Outdoor Drainage from Indoor Activity	Outdoor Parking	Vehicles and Equipment						Education and Training	Outdoor Activity and Operation												
	BMP	Conduct routine inspections of BMPs and stormwater conveyance	Properly maintain stormwater conveyance system	Properly dispose of debris from stormwater conveyance system	Conduct outdoor sweeping to adequately control dust and debris	Keep outdoor areas neat and clean	Keep facility clear of illicit connections and illegal discharges	Keep site clear of unauthorized non-stormwater discharges	Have spill response materials available at the facility	A written spill response plan is recommended	Keep waste containers at acceptable levels (not overflowing)	Properly dispose of hazardous waste	Keep waste containers covered or lids closed	Keep outdoor storage areas clean and dry	Keep stored materials closed and secure with proper labels	Keep materials stored under overhead cover or within secondary containment	Keep facility clear from indoor activity being tracked outdoors	Prohibit any material storage in outdoor parking areas	Keep facility clear of leaking fluids from vehicles and equipment	Regularly conduct preventive maintenance on all vehicles and equipment	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site	Capture, contain, or treat all vehicle and equipment wash water	Minimize the volume of cleaning water to decrease wastewater	Train employees in stormwater, spill response, and pollution prevention	Keep outdoor activity and operation area clean from spills and debris	Capture, contain, or treat all wash water											
Facility																																					
Tenth Avenue Marine Terminal	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
National City Marine Terminal	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Cruise Ship Terminal	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Port Administration Building and Annex	X	X	X	X	X	X	X	X	X	X	X	X					X	X	X	X															X		
Corporate Learning Center*				X	X	X	X	X	X																										X		

<b>Table 6-3. Required Minimum BMPs For Port Municipal Facilities And Areas (continued).</b>																									
PGA	General Operations and Housekeeping					Non-Stormwater Management				Waste Handling and Recycling			Outdoor Material Storage			Outdoor Drainage from Indoor Activity	Outdoor Parking	Vehicles and Equipment					Education and Training	Outdoor Activity and Operation	
BMP	Conduct routine inspections of BMPs and stormwater conveyance	Properly maintain stormwater conveyance system	Properly dispose of debris from stormwater conveyance system	Conduct outdoor sweeping to adequately control dust and debris	Keep outdoor areas neat and clean	Keep facility clear of illicit connections and illegal discharges	Keep site clear of unauthorized non-stormwater discharges	Have spill response materials available at the facility	A written spill response plan is recommended	Keep waste containers at acceptable levels (not overflowing)	Properly dispose of hazardous waste	Keep waste containers covered or lids closed	Keep outdoor storage areas clean and dry	Keep stored materials closed and secure with proper labels	Keep materials stored under overhead cover or within secondary containment	Keep facility clear from indoor activity being tracked outdoors	Prohibit any material storage in outdoor parking areas	Keep facility clear of leaking fluids from vehicles and equipment	Regularly conduct preventive maintenance on all vehicles and equipment	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site	Capture, contain, or treat all vehicle and equipment wash water	Minimize the volume of cleaning water to decrease wastewater	Train employees in stormwater, spill response, and pollution prevention	Keep outdoor activity and operation area clean from spills and debris	Capture, contain, or treat all wash water
Facility																									
General Services Work Center	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Boat Mechanic and Dive Locker				X	X	X	X	X	X	X	X	X	X										X	X	
Boat Demolition Yard	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								X	X	X
Harbor Police Headquarters	X	X	X	X	X	X	X	X	X	X	X	X	X										X	X	
Harbor Police Dispatch and Mooring Office*				X	X	X	X	X	X														X		
Harbor Police South Bay Substation*				X	X	X	X	X	X														X		

\* These facilities represent only the building, all outdoor BMPs are found within additional municipal activities outlined in this section.

**Table 6-3.** Required Minimum BMPs For Port Municipal Facilities And Areas (continued).

PGA	General Operations and Housekeeping					Non-Stormwater Management				Waste Handling and Recycling			Outdoor Material Storage			Outdoor Drainage from Indoor Activity	Outdoor Parking	Vehicles and Equipment					Education and Training	Outdoor Activity and Operation					
	BMP	Conduct routine inspections of BMPs and stormwater conveyance	Properly maintain stormwater conveyance system	Properly dispose of debris from stormwater conveyance system	Conduct outdoor sweeping to adequately control dust and debris	Keep outdoor areas neat and clean	Keep facility clear of illicit connections and illegal discharges	Keep site clear of unauthorized non-stormwater discharges	Have spill response materials available at the facility	A written spill response plan is recommended	Keep waste containers at acceptable levels (not overflowing)	Properly dispose of hazardous waste	Keep waste containers covered or lids closed	Keep outdoor storage areas clean and dry	Keep stored materials closed and secure with proper labels	Keep materials stored under overhead cover or within secondary containment	Keep facility clear from indoor activity being tracked outdoors	Prohibit any material storage in outdoor parking areas	Keep facility clear of leaking fluids from vehicles and equipment	Regularly conduct preventive maintenance on all vehicles and equipment	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site	Capture, contain, or treat all vehicle and equipment wash water	Minimize the volume of cleaning water to decrease wastewater	Train employees in stormwater, spill response, and pollution prevention	Keep outdoor activity and operation area clean from spills and debris	Capture, contain, or treat all wash water			
Facility																													
MS4	X	X	X	X	X	X	X																				X		
Parking Lots	X	X	X	X	X	X	X			X	X	X						X									X		
Parks	X	X	X	X	X	X	X			X	X	X						X									X		
Roads and Streets	X	X	X	X	X	X	X																				X		

#### **6.4.1 Minimum BMPs and Pollution Prevention Methods for Port Facilities**

The Port administration facilities store all potential pollutants indoors and within secondary containment, there is no outdoor storage at these facilities. The GSD waste storage area is equipped with secondary containment and overhead cover. The vehicle washing and fueling area has full containment where all wash water is collected and diverted to the sanitary sewer; this area also has overhead cover. Several stormdrains at the GSD contain BMPs to reduce potential pollutants from entering the MS4. All HPD vehicles and water vessels have a regular maintenance schedules with GSD, Also, all patrol officers are responsible for inspecting their assigned vehicles for damage or leaks prior to use. The parking areas of all Port facilities and operations buildings are swept and maintained by the GSD.

#### **6.4.2 Additional Controls for Port Facilities and Operations Buildings**

The Port has determined that the minimum BMPs identified in Table 6-3 adequately address all facilities and areas that are tributary to San Diego Bay or generate potential pollutants for which San Diego Bay has been listed as 303(d) impaired. The minimum BMPs are also designed to address all facilities and areas that are directly adjacent to San Diego Bay, therefore additional controls to address these factors are not required.

Additional controls have been identified at the marine terminals due to the close proximity to San Diego Bay, which has been determined as an environmentally sensitive area, and under the General Industrial Permit. Additionally, Port staff annually participates in a spill response drill coordinated by the USCG with local agencies on San Diego Bay. Therefore, the Port has determined that the additional controls required should focus on spill response.

All Port maintained terminals and terminal lessees are required to develop, implement, and maintain a facility stormwater pollution prevention plan (SWPPP). The SWPPP identifies site-specific BMPs, such as a spill response plan, to reduce or prevent pollutants associated with terminal activities. Although the boat demolition yard does not require coverage under the General Industrial Permit, a SWPPP has been developed to identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of stormwater discharges and authorized non-stormwater discharges from the facility.

#### **6.4.3 Minimum BMPs and Pollution Prevention Methods for Municipal Areas**

The following minimum BMPs and pollution prevention methods have been identified for municipal areas within the Port's jurisdiction. Table 6-3 identifies the required minimum BMPs that should be implemented in all municipal areas, where applicable and feasible. A detailed

description of each BMP will be discussed in Section 6.6, where implementation of BMPs is fully described.

#### **6.4.4 Additional Controls for Municipal Areas**

The Port has implemented additional controls for the use of pesticides, herbicides, and fertilizers in parks and vegetative areas by the Port. The management of pesticides, herbicides, and fertilizers reduces the potential for nutrient, organics, and pesticides from entering the MS4. This BMP is further discussed under the management of pesticides, herbicides, and fertilizers in Section 6.7, municipal activities.

## **6.5 Inspections**

In accordance with the Permit, the Port will inspect all high priority municipal facilities and municipal areas annually. In general, annual site inspections will be conducted by ESD staff. Facility self-inspections may also occur when/where facility operators deem appropriate. Facility self-inspections are designed to ensure site specific BMPs are properly implemented and maintained. The ESD inspection procedures for municipal facilities and areas will include the following elements:

- 1) A review of facility records, where applicable, to determine whether adequate self-inspections have been performed;
- 2) A review of minimum BMP requirements and an evaluation of both the adequacy of BMP implementation and maintenance;
- 3) An assessment of the facilities efforts to make appropriate adjustments when recommended corrective actions or ineffective BMPs have been identified; and
- 4) An evaluation of the overall effectiveness of the BMPs as implemented at each site.

The inspector shall, at a minimum, provide written documentation of the inspection, including all recommended corrective actions or violations. The inspection program shall include timely follow-up inspections whenever there are recommended corrective actions or BMP deficiencies have been identified at the site. Photographic evidence to document all violations, improper BMP implementation, or areas that require corrective action is taken at the time of the inspection. Copies of all inspection reports are kept on file in ESD offices and the stormwater database.

For all Port facilities, ESD staff shall contact the facility operator to schedule and conduct a stormwater facility inspection. The inspection shall occur with the facility representative during normal working hours for the facility. The inspection will include a review of any documentation of stormwater self-inspections and BMP maintenance records. A facility site walk will occur, paying particular attention to the required minimum BMPs and verification of proper implementation and maintenance.

### **6.5.1 Port Facility Inspections**

The current inspection program conducted at the Port marine terminals (TAMT, NCMT, and CST) shall comply with conditions of the Port's program under the General Industrial Permit, but shall follow the framework of the municipal inspections, described above. Port ESD staff conducts both monthly and annual inspections of marine terminal tenant operations and activities to verify that the minimum required BMPs and pollution prevention methods are properly implemented. Marine Operations staff conducts daily observations of tenant operations and activities on all marine terminals. Storm drain catch basins are evaluated monthly to identify illicit connections and/or illegal discharges and to determine maintenance requirements. Additionally, Marine Operations conducts weekly inspections to determine each facility's cleanliness.

Joint department annual inspections are performed by appointment with each marine terminal tenant to monitor compliance with the Port's ordinance, and both the Municipal and General Industrial Permit. These inspections include an evaluation of each tenant's BMP implementation and verification that each terminal Copermittee is meeting the requirements of the General Industrial Permit. Terminal Copermittees must also perform their own annual or more frequent inspections to ensure their own compliance with the General Industrial Stormwater Permit. The preparation and retention of inspection and maintenance records is the responsibility of each Copermittee for their operational activities on the marine terminals. During the Port's annual site inspections ESD staff will review each terminal Copermittees SWPPP document, self inspection records, and employee training documentation to verify that all terminal Copermittees are adequately conducting required inspections.

Port facility maintenance staff regularly inspects, cleans, and maintains the MS4 at the Port administration buildings. The GSD and HPD facilities and operations buildings are inspected on a quarterly basis by GSD staff. Additionally Port ESD conducts annual inspections at the GSD and HPD facilities to ensure that all minimum BMPs are adequately implemented, pollution prevention methods are practiced, and stormwater regulation compliance has been achieved and maintained.

## **6.5.2 Municipal Area Inspection**

The inspection of municipal areas is conducted on an annual basis, however Port staff is continually performing routine monitoring and maintenance at all municipal areas throughout the Port tidelands. The inspection of the MS4 includes the following recorded information: 1) the number of conveyance system facilities inspected during the year; 2) the total number of conveyance system facilities cleaned during the year; and 3) the amount of debris collected (in tons).

Port ESD continually conducts inspections of the MS4 throughout Port tidelands. The MS4 will be inspected annually, at a minimum, for the first two years of program implementation. MS4 segments that are determined to receive a high volume of trash and debris, based on the results of the initial two years of inspections, shall be inspected annually between May 1 and September 30, at a minimum. MS4 facilities that do not receive a high volume of trash or debris shall also be inspected annually throughout the remainder of the year. ESD staff shall document each inspection with the date, stormdrain identification number, location, type of MS4 facility, and amount and type of trash or debris accumulated. Frequent inspections help to determine, prevent, and eliminate infiltration of seepage from sanitary sewers or illegal discharges to the MS4. All MS4 monitoring and inspections are tracked by ESD staff and include written and photographic documentation.

Additionally monthly stormdrain inspections are conducted on the marine terminals to determine BMP maintenance needs and to identify, prevent, and eliminate illegal discharges to the MS4. Structural BMPs, continuous deflective separation units, installed at TAMT shall be cleaned annually prior to the rainy season or on an as needed basis.

## **6.6 BMP Implementation**

Minimum required BMPs and pollution prevention methods were identified for all PGAs at Port facilities and municipal areas (Section 6.4). Each specific pollution prevention method and BMP shall be implemented and maintained by the appropriate Port department and trained personnel. Verification and tracking of implemented BMPs and pollution prevention methods is completed through the inspection of each Port facility and municipal area. A detailed description of the BMP implementation necessary for each PGA is included in the following subsections.

### **6.6.1 General Operations and Housekeeping**

General operations and good housekeeping BMPs are implemented to minimize contaminants and prevent them from leaving activity areas and entering the MS4. GSD performs preventive

maintenance to maintain cleanliness and to prevent pollutants from entering the MS4. The GSD cleans accumulated sediment and debris from the MS4 at each facility to ensure proper function, prevent localized flooding, and to reduce the amount of pollutants available to the receiving water. All materials removed from the MS4 are properly disposed of through a certified contractor. The Port performs sweeping for all facility parking lots as needed and uses inside storage for materials when possible.

General operations include routine inspection and proper maintenance of BMPs and the MS4. Pavement maintenance materials, such as sand and gravel, are stored and handled in a manner to prevent impacts to stormwater quality. Municipal sites are kept in good order as a matter-of-course. Maintenance debris is collected and properly stored at the job site, when necessary, until recycled, salvaged, or disposed, depending upon the nature of the material.

Good housekeeping practices are standard procedure for the GSD staff. Good housekeeping practices include keeping outdoor areas neat and clean, conducting outdoor sweeping to adequately control dust and debris, and properly disposing of debris from the MS4.

Additionally, the Port has implemented treatment controls on the marine terminals. Stormdrain inserts have been installed in the inlets at TAMT and NCMT to prevent sand and debris from entering the storm drain conveyance system. The Port has also installed a total of eight Continuous Deflection System (CDS) devices at TAMT. These units provide “end of the line” storm drain treatment. They remove trash and debris from storm water runoff by capturing the debris in a basket specifically designed to remove sediment and trash. ESD and GSD perform annual cleaning and maintenance on all CDS devices to ensure they are working properly. Stormdrain insert filter cleaning and maintenance is performed annually by a contracted consultant.

### **6.6.2 *Non-stormwater Management***

Non-stormwater management BMPs are implemented to keep Port facilities and municipal areas clear of illicit connections and illegal discharges and to keep sites clear of unauthorized non-stormwater discharges. Non-stormwater BMPs also requires that facilities have spill materials available at all time, and recommends that a written spill response plan be implemented.

Port staff has implemented all required Non-Stormwater Management BMPs at each of the Port’s corporate yards and municipal areas. Additionally each marine terminal and the boat demolition yard have a written stormwater pollution prevention plan, which included spill response procedures. A facility-specific illicit connection/illegal discharge program designed to eliminate the discharge of process waste waters and wash waters to the MS4 has also been implemented at Port facilities.



Terminal Copermittees are responsible for implementing appropriate BMPs and spill response procedures for their operational activities at the marine terminals. The Port inspects each terminal Copermittees operational area, equipment, and vehicles for spills during monthly evaluations to determine BMP compliance and to identify potential stormwater contaminants. The Port requires any unauthorized releases to be reported to the appropriate regulatory agencies as required by law.

### **6.6.3 *Waste Handling and Recycling***

All municipal facilities maintain waste and recycling areas. These areas are inspected daily to ensure waste are properly managed and not posing a threat to water quality. The waste handling and recycling areas are kept neat and clean, all containers are kept at an acceptable height (not overflowing) with the lids kept closed when not in use. All recycling and hazardous waste are separated at the GSD facility then tracked and properly disposed by a certified contractor.

The Port requires terminal Copermittees who use, store, transport, or dispose of regulated or potentially hazardous substances to manage these materials in accordance with all federal, state, and local hazardous waste control laws, and to minimize, prevent, and eliminate unauthorized releases to the environment.

### **6.6.4 *Outdoor Material Storage***

Materials and supplies stored outdoors are exposed to rain and runoff can result in stormwater pollution. The Port is taking steps to reduce contaminates from outdoors storage of materials and supplies to the maximum extent possible. These steps include minimizing outdoor storage when possible, the implementation of BMPs for all outside material storage areas, including the use of secondary containment, sloped or bermed areas, and keeping stored materials away from stormwater inlets. Outdoor storage areas are kept clean and dry, all stored materials are closed and secure in properly labeled containers. Materials stored at Port facilities have overhead cover and secondary containment, where feasible.

### **6.6.5 *Outdoor Drainage from Indoor Activity***

Marine Terminals and the GSD work control center perform a variety of activities inside of facility buildings that have the potential to contribute pollutants to the MS4. Port staff makes every effort to ensure all these activities remain indoors, therefore BMPs are implemented to prevent indoor activity from being tracked outdoors.

GSD staff prevents or reduces the discharge of stormwater pollutants from indoor activities by maintaining a “dry” shop and using as little water as possible for cleaning, implementing good housekeeping and cleaning trash and debris immediately, and regularly sweeping access paths to outdoor areas.

### **6.6.6 Outdoor Parking**

Parking lots have the potential to contribute numerous pollutants, such as bacteria, gross pollutants, metals, oil & grease, sediments, and trash to the MS4. In order to reduce, prevent, and eliminate pollutants from reaching the MS4 the storage of materials and waste are prohibited from outdoor parking areas. Also, outdoor parking areas are to be kept clean and free of trash and debris, and evidence of leaking fluids from vehicles are to be cleaned whenever observed. GSD staff conducts weekly sweeping of all Port parking areas.

### **6.6.7 Vehicle and Equipment Maintenance, Cleaning, and Fueling**

Vehicle or equipment maintenance and repair is potentially a significant source of stormwater pollution due to the use of materials and wastes created during these activities. GSD staff implements BMPs designed to eliminate potential water quality impacts from pollutants which can be generated during vehicle and equipment maintenance activities. All Port vehicles are maintained on a regular schedule. These vehicles are inspected by Port staff prior to use and are fueled and checked for leaks on a daily basis. GSD staff makes every effort to conduct maintenance and repairs indoors or under overhead cover. Indoor maintenance areas are kept clean so that oils, greases, paints, or other materials do not build-up. Drip pans are used under leaking vehicles or when removing hoses, filters, or other parts that have the potential to create a spill. Small spills are cleaned immediately with rags, larger spills are cleaned with absorbent materials. All spill material is treated and disposed of as hazardous waste.

BMPs also prevent or reduce the discharge of pollutants during vehicle and equipment cleaning and fueling. Vehicles and equipment are washed only when necessary and a minimum volume of water used. Vehicle and equipment washing is conducted in designated bermed areas located away from the stormdrain conveyance system. As such, wash water is captured, contained, and discharged to the sanitary sewer. If there is a potential to generate large amounts of wastewater or if there is potential for high concentrations of stormwater pollutants, GSD will contract vehicle and equipment washing to an off-site vendor. A spill response plan has been developed for the on-site fueling of vehicles and equipment and all fueling trucks maintain an adequate amount of spill clean-up materials on-hand. Spill response materials are also kept in the ESD vehicle and within the Port administration and GSD work control center facilities.

### **6.6.8 Education and Training**

An employee-training program has been implemented to inform the appropriate Port employees, maintenance staff, and maintenance contract managers of the goals and components of the Port's JURMP. The frequency of training is consistent with the Permit requirements and will take into account the roles of the staff involved as well as the nature and complexity of the operations under review. The training is intended to instill an overall sensitivity to stormwater pollution prevention. The effectiveness of the training program will be evaluated routinely to verify that information is being adequately communicated to employees. The training program consists of both formal and informal training. Training tools include, as appropriate:

- Employee handbooks
- Multimedia presentations
- Routine employee meetings
- "Tailgate" meetings
- Bulletin boards
- Drills

Further information on education and training for municipal staff is discussed in Chapter 10 of this JURMP Program Document.

### **6.6.9 Outdoor Activity and Operations**

GS Staff conducts multiple outdoor activities within Port tidelands, such as, landscaping and road, street, and MS4 maintenance. Each of these activities have specific BMPs outlines in this section, however, all outdoor activities and operations are required to prevent and eliminate pollutants from entering the MS4 and receiving water. Port staff conducts sweeping to keep all outdoor activity areas clean and free from trash and debris. When power washing or hosing is used, all wash water is captured or contained and treated prior to discharge or disposed of as hazardous.

### **6.6.10 Street Sweeping**

Street sweeping is widely recognized as an effective method of reducing the amount of pollutants on street surfaces that may impact stormwater. The street sweeping of Port-maintained roads, streets, and parking areas is conducted on a regular basis. Street sweeping is conducted according to a schedule developed by the GSD. All roads, streets, and parking facilities are swept weekly, or at least 50 times a year, weather permitted. GSD has

self-propelled sweepers available for street sweeping and has contracted with private companies to conduct sweeping, as the GSD Supervisors deem necessary. Street sweeping is most effective when sweepers have access to the entire length of the curb. In order to increase cleaning efforts, sweeper operators are advised to make a sufficient number of passes to maximize collection. In those areas experiencing significant and/or chronic hindrances due to parked vehicles, GSD may post temporary “No Parking” signs.

Once collected, street sweeping debris is either taken directly to a landfill or temporarily stockpiled at TAMT until the debris can be economically transported for disposal or recycling. The total amount of trash and debris will be calculated on the amount of material disposed of during the reporting period. Receipts from the landfill or recycling facility with the total weight of materials disposed will be collected following each disposal activity.

The GSD maintains a record of street sweeping activities. The street-sweeping program is re-evaluated annually to direct street sweeping to those locations where the benefits will be most significant. Each year, a copy of the evaluation will be shared and discussed with the ESD Urban Runoff Management Program staff. The annual evaluation report will contain the following: 1) the total curb-miles and number of parking lots scheduled for street sweeping during the year; 2) the total curb-miles and number of parking lots of street sweeping actually conducted during the reporting period; 3) the frequency of street sweeping actually conducted during the reporting period; 4) the amount of street sweeping debris collected (in tons); and 5) comments on any locations experiencing significant and/or chronic problems or hindrances due to parked vehicles.

### **6.6.11 Vegetation Controls**

Clippings and cuttings carried into the MS4 can degrade water quality by increasing turbidity and biological oxygen demand. The objective of this BMP is to minimize the amount of material that might potentially reach the MS4. It addresses mechanical vegetation control methods (BMPs to address the application of pesticides, herbicides, and fertilizers are discussed below in Municipal Activities Section 6.7). GSD is responsible for trimming vegetation along Port-maintained roads, streets, and parking facilities. Port employees, or private companies under contract with GSD, perform these duties. Activities include mowing grass, landscape maintenance, tree trimming, and the limited application of herbicides.

Wherever possible, existing vegetation is preserved to prevent excessive sediment erosion during rain events. Mature vegetation typically has a more extensive root system that helps hold soil in place, and thus reducing erosion. Preservation of vegetation also promotes soil stabilization by intercepting rainfall impacts to the soil and by reducing runoff velocities from the landfill cover.

It is the standard practice of GSD to implement vegetation controls that are compatible with the semi-arid climate of San Diego County. As such, GSD also plants low-maintenance native plant species and non-native vegetation, cuts less frequently and at optimal times of the season, conducts hand cutting using gas powered weed trimmers or hand tools when necessary and feasible, and collects and properly disposes of clippings and cuttings. GSD staff is trained to use best professional judgment in determining whether clippings/cuttings should be collected or left in place. This determination is generally based on the nature of the material, the topography and locale, and the distance to the MS4 and/or receiving waters. Mulches may also be used as temporary cover to protect the soil surface from erosion or as temporary protection to aid in the establishment of seeded vegetation.

### **6.6.12 MS4 Cleaning**

As a consequence of its function, the MS4 collects and transports urban runoff that may contain certain pollutants. Maintaining and cleaning catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis will remove pollutants, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding. Although some MS4 structures are constructed to be self-cleaning, they may become obstructed and are cleaned immediately. GSD cleans the accumulated sediment and debris from stormwater drain inlets, catch basins, culverts, and channels to ensure proper function, to prevent localized flooding, and to reduce the amount of pollutants available to conveyance system. Drain inlet, culvert, and channel cleaning are accomplished using suction from a vacuum truck, hand tools, or hydraulic flushing and debris collection. Cleaning to maintain proper operation of MS4 facilities is conducted when warranted by inspection and recommendation of Port staff. However, any MS4 facility that contains trash and debris in excess of 33% of designed capacity shall be cleaned in a timely manner. Cleaning is most effective when done just prior to the start of the rainy season.

### **6.6.13 General Maintenance for Roads, Streets, and MS4**

The GSD implements pollution prevention methods for maintenance activities, which focus on preventing or reducing the quantity of pollutants available to the MS4. GSD performs routine maintenance of all roads, streets parking lots, storm drain inlets, outfalls, culverts, and open channels that comprise the Port MS4. In addition to cleaning and clearing, GSD generally performs minor repairs and limited construction activities, such as the replacement of concrete structures, the placement of pipe and wire for slope protection, and the placement or replacement of riprap. Also, GSD staff routinely repairs potholes and worn surfaces to limit sediment loss. The GSD strives to make repairs that improve pollutant removal and/or hydraulic capacities. GS staff conducts regular inspections of all maintenance equipment for

leaking fluids and uses drip pans when necessary. GS staff blocks or otherwise protects catch basins and inlets, prior to maintenance activities. All maintenance materials are either covered or stored within secondary containment and kept away from catch basins and inlets. GSD collects and properly disposes or recycles all maintenance waste. GS staff are trained to remain vigilant for, and promptly report to the ESD, incidents of illegal discharges/dumping and accidental spills within and adjacent to the conveyance system.

Occasionally, the Port will contract with an outside company to complete maintenance and cleaning of the MS4. In general, contracts with companies that will be involved with the maintenance and cleaning of the MS4 contain specific language concerning the management of potential pollutants. The contracts' Scopes of Services include environmental protection requirements, minimum BMPs, and pollution prevention methods. Specialists within the Port's GSD manage the contracts to ensure compliance with the Scopes of Services, and recommend corrective actions to contractors that are not following regulations.

#### **6.6.14 Stormwater Conveyance System Signs**

Stormwater pollutant loads reaching the MS4 can be greatly reduced when prohibitions against littering and illegal dumping are strictly enforced. The Port is making every effort to ensure that each stormdrain inlet features a warning prohibiting littering and illegal dumping. Stormdrain outfalls, catch basins, and inlets have been or will be stenciled or placarded to indicate "No Dumping." In addition, ESD also intends to track MS4 information electronically. Currently, ESD has located and mapped the MS4 structures and features in a GIS layer (Appendix F). This effort is routinely updated to effectively manage information and facilitate cleaning, maintenance, and repair.

### **6.7 Municipal Activities**

Municipal activities are conducted at numerous locations on Port tidelands and generally are not associated with a specific facility. Although municipal activities are conducted routinely throughout the tidelands, the activity schedule is varied. As such, each of the following major municipal activities is discussed as a stand alone program within this subsection. These activities include the management of pesticides, herbicides, and fertilizers, power washing, pier cleaning, and special events.

#### **a. Management of pesticides, herbicides, and fertilizers**

The Permit identifies pesticides, herbicides, and fertilizers as stormwater contaminants of concern in regards to municipal areas and activities. The Port is responsible for a variety of municipal areas that require the application of these materials. The majority of these municipal

areas include landscaped areas, right-of-ways, parks, and recreational facilities. Pesticides, herbicides, and fertilizers may also be used, as necessary, at other municipal buildings and facilities throughout the tidelands.

b. Power washing activities

Power washing is a routine activity performed on Port-maintained sidewalks, park benches, picnic tables, and trash storage areas as necessary to maintain sanitary conditions at a level that protects the public health and safety; maintain proper function and use of facilities; and ensure the useful-life of the facilities.

c. Pier Cleaning

Pier cleaning is a routine activity performed on Port-maintained piers as necessary to maintain conditions that protect the public health and safety; maintain proper function and use of facilities; and ensure the useful-life of the facilities. The frequency of cleaning is based on site specific conditions and the intention to limit the concentration of organic matter removed at any one time.

d. Special event activities

The Port maintains over 250 acres of public recreational and open space areas along San Diego Bay and welcomes special events in our parks. Additionally, we are sensitive to the needs of the communities surrounding these areas. The Port's regulations contain important information for special events to ensure a successful special event that minimizes impacts on the park and water quality, as well as the nearby residents and businesses.

### **6.7.1 Source Characterization**

a. Management of Pesticides, Herbicides, and Fertilizers

Pesticides, herbicides and fertilizers are potential stormwater pollutants. Pesticides and herbicides are generally chemicals that are toxic to biota. Fertilizers are nutrients that can lead to eutrophication. These materials may inadvertently reach the stormwater conveyance system or receiving waters due to stormwater runoff from recently or improperly treated areas, over-irrigation of recently treated areas, over-spray during application, or improper storage.

b. Power Washing and Pier Cleaning

Power washing and pier cleaning have the potential to impact water quality through bacteria, gross pollutants, metals, oil and grease, organics, sediments, and trash being lifted from the cleaned surface.

c. Special Events

Special events have the potential to pose a threat to water quality through bacteria and gross pollutants leaking from waste collection areas, nutrients, organics, and pesticides being released from vegetative areas, and the release of sediments, trash, or debris from the events site.



Table 6-5 identifies the potential pollutants for each municipal activity identified above.

**Table 6-5.** Potential Pollutants For Municipal Activities.

Facility	Potential Pollutants								
	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
Pesticides, Herbicides, and Fertilizers		X		X		X	X		X
Power Washing	X	X			X			X	X
Pier Cleaning	X	X	X		X	X		X	X
Special Events	X	X		X		X	X	X	X

### 6.7.2 Minimum BMPs and Pollution Prevention Methods

The Port is responsible for ensuring minimum BMPs and pollution prevention methods are implemented and maintained during all municipal activities. Implementation of minimum BMPs will help to eliminate or reduce pollutant loading in storm water runoff from these areas. The following minimum BMPs have been designated to address the potential pollutants associated with major municipal activities, where applicable and feasible:

1. General operations and housekeeping;
2. Non-stormwater management;
3. Waste handling and removal; and
4. Employee training.

These BMPs include processes, procedures, and structural controls, as appropriate. Details on each of the minimum BMPs categories identified above are presented in section 6.6 of this document.

#### 6.7.2.1 Additional Controls

Due to the potential of considerable contaminants entering the stormwater conveyance system or the receiving waters additional controls have been identified for specific municipal activities. The following section identifies and describes the required additional controls for each municipal activity, where applicable and feasible.

- a. Management of Pesticides, Herbicides, and Fertilizers

Additional BMPs have been identified for pesticide, herbicide and fertilizer application on tidelands (Table 6-6). The purpose of these BMPs is to maximize the use of less-toxic pest control methods in all possible situations.

**Table 6-6.** Additional BMPs For Pesticide, Herbicide And Fertilizer Application.

Activity	BMP			
	Use drought-tolerant, native plants	Use IPM practices	Utilize a licensed Pest Control Advisor	Use Smart Irrigation systems
Pesticide/ Herbicide Application	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>
Fertilizer Application				<b>x</b>

#### Use Drought-Tolerant, Native Plants

The use of drought-tolerant or native plants is encouraged on tidelands. These types of plants have several benefits: (1) They require less water, which results in decreased irrigation runoff; (2) They are more likely to be resistant to local pests, thereby requiring less pest control; and (3) They are adapted to grow locally, thereby requiring less maintenance (including fertilization).

#### Use IPM Practices

The Port has had an Integrated Pest Management (IPM) Policy in place since 1997. This Policy was approved by the Board of Port Commissioners and provides the guiding principles to which the Port adheres concerning pesticides and herbicides. It commits the Port to reduce or eliminate the use of pesticide application to the maximum extent practicable and to develop and implement an IPM Program in all District facilities, operations, contracts and relevant agreements. Since the adoption of this Policy, the Port has discontinued the use of insecticides at parks and has minimized the use of herbicides to the maximum extent practicable.

The IPM Policy requires Port Gardeners to use the least toxic method of pest control to the maximum extent practicable. Port Gardeners take the appropriate measures to properly identify pests and diseases in order to ensure that the appropriate treatment is applied. They also used combinations of irrigation, trimming, mowing, hand-weeding and mulching to prevent the need for chemical pest control methods. Beneficial insects to control pests are also used when applicable.

An IPM Task Force has been in place since the adoption of the IPM Policy, and consists of Port staff involved with management of pesticides, herbicides and fertilizers. The Task Force meets

monthly and is chaired by the Port's Environmental Services Department. IPM Advisors from the University of California Cooperative Extension, Farm and Home Advisory Office attend all of the meetings to provide professional guidance. Each meeting begins with an IPM Implementation Report, during which Lead Gardeners from the Port's GS Department provide updates on IPM strategies in use, discuss problems, and seek feedback. The meetings serve as a valuable method by which IPM use on the tidelands can be evaluated and monitored, and also provides staff with the opportunity to discuss their strategies with professionals in the field of IPM.

#### Follow Recommendations of a Licensed Pest Control Advisor

The Port employs a licensed Pest Control Advisor to provide written recommendations for pesticide and herbicide application on Tidelands. This ensures that a license-holding professional assesses each application of chemical pest control.

#### Use Smart Irrigation Systems

Smart Irrigation systems are in place at several Port parks, and are scheduled to be installed in more parks during upcoming years. These systems allow all irrigation in a particular area to be controlled with a centralized computer system, making the entire system more efficient. Water use can easily be modified on a daily basis depending on weather conditions, which reduces irrigation runoff. Additionally, breaks in the irrigation lines can be monitored by the computer, allowing staff to immediately respond to water leaks to prevent runoff.

#### b. Special Events

Additional controls have been identified for special events that, 1) are in excess of 500 persons, and 2) have a greater potential to generate significant trash and litter. As such, these events require a site walk, stormdrain covers, fencing for wind blown trash, and street sweeping following the event. Verification of the proper implementation of the additional controls shall occur during inspection of the event facility prior to and following the event.

#### Site Walk

A site walk shall be conducted prior to and following the special event by event personnel and Port staff. During the site walk environmentally sensitive areas, such as stormdrain inlets and catch basins, trash collection areas, and food, portable toilets, and generator locations are identified. Trash dumpsters, portable toilets, or generators have the potential to leak into adjacent storm drains and result in a discharge to the MS4 or receiving water. Event organizers shall take every precaution to prevent and contain any leakage, to include but not limited to, placing berms around dumpsters, placing protective materials and berms around storm drains, and keeping a spill kit on site. The event organizer shall immediately address and mitigate all spills and leaks. In the case where portable toilets will be used, all portable toilets shall be

placed away from open stormdrain inlets or catch basins and away from the waters edge. All portable toilets are recommended to be placed within secondary containment.

#### Stormdrain Covers

The Port requires that catch basins and stormdrain inlets be covered by temporary screens or filters. Covers or screening are to be placed over all inlets or catch basins prior to the special event and removed in a timely manor following the conclusion of the event.

#### Fencing

The Port requires that fencing be placed around the waterside perimeter of the event to prevent any windblown trash or debris from reaching the Bay. Fencing shall be in place prior to the event and removed in a timely manor following the conclusion of the event.

#### Street Sweeping Following Special Events

Due to the high volume of traffic and people associated with special events the potential of pollutants entering the MS4 or receiving water is increased. Therefore, street sweeping of roads, streets, and parking lots associated with special events shall be conducted in a timely manor following the conclusion of the event.

### **6.7.3 Program Implementation**

#### a. Management of Pesticides, Herbicides, and Fertilizers

In addition to overseeing the Port's IPM Program, the IPM Task Force offers IPM Continuing Education Credit seminars to the San Diego County landscape and pest control industries annually. The Port considers the regional implementation of IPM programs to be a significant part of the effort to reduce and eliminate the introduction of pesticides, herbicides, and fertilizers to San Diego Bay and its tributaries. To that end, the Port offers the IPM Seminar to members of the landscaping community throughout San Diego County. These seminars provide the opportunity for the local landscaping community to learn about current IPM research from academic professionals. The seminars usually draw up to 200 participants and are an effective and educational means by which to provide IPM outreach.

The Port's IPM Program is based on:

- Continuous staff training;
- Selected use of California-friendly plant species;
- Proper irrigation scheduling;

- Appropriately scheduled fertilizer applications;
- Minimal use of chemical pesticides and herbicides;
- Proper storage and disposal of pesticides, herbicides, and fertilizer;
- Elimination of toxicity Category I and pesticides containing a carcinogen;
- Elimination of toxicity Category II pesticides;
- Identification of pests that are considered potential public health problems and the least toxic method of eliminating or controlling them; and
- Monitoring of pest population levels to determine treatment procedures.

Port Gardeners who apply pesticides and herbicides in areas such as parks, rights-of-way, and recreation areas are properly certified in accordance with state regulations and are trained to read Material Safety Data Sheets (MSDS). Additionally, training is performed by the Lead Gardeners during staff meetings. These sessions emphasize the goals and components of the Port's stormwater management and the IPM Program. The frequency of training takes into account the roles of the staff involved, current weather conditions or pest problems, as well as the nature and complexity of the operations under review. Furthermore, all Port Gardeners and Lead Gardeners participate in an annual pesticide safety training course and the annual IPM Seminar sponsored by the IPM Task Force.

In general, contracts with companies that will be involved with the application and storage of pesticides, herbicides and fertilizers contain specific language concerning these pollutants. Examples of these types of contracts include landscape management and pest control services. These contracts' "Scope of Services" language include the following requirements: (1) the service provider must prevent all debris and waste generated from all operations from entering the stormwater conveyance system; (2) all pre-emergent and post-emergent weed control must be pre-approved by the Port's representative prior to use; (3) fertilization must occur at specific rates and only at certain times of the year; (4) all pesticides shall be applied in accordance with Port-approved recommendations of a licensed Pest Control Advisor, and the service provider shall consider the least toxic method; and (5) the service provider shall comply with all rules and regulations of the Department of Food and Agriculture, the Department of Health, the Department of Industrial Relations and all other agencies which govern the use of pesticides. Specialists within the Port's General Services Department manage the contracts to ensure compliance with the Scopes of Services, and correct any contractors that are not following the regulations.

The GSD submits monthly pesticide use reports to the Department of Pesticide Regulation. This process provides a means by which to evaluate the reduction of pollutant loads through the IPM Program at Level 4 of the *Hierarchy of Targeted Outcomes*.

#### b. Power Washing and Pier Cleaning

The discharge of pollutants to receiving waters during Power washing and pier cleaning activities can be prevented or reduced by minimizing over-water activities, dry cleaning, keeping wastes out of the water, cleaning up spills and wastes immediately, and educating staff. These activities are conducted by Port GSD staff only when necessary and specific standard operating procedures (SOP) are followed. Prior to conducting any municipal activity GSD staff is trained in each municipal activity and directed to review the associated SOP. The SOP for each activity specifies the required minimum BMPs, proper implementation of each, and special requirements associated with the municipal activity, where applicable and feasible. Documentation of power washing and pier cleaning activities is submitted to ESD for tracking purposes.

#### c. Special Events

A permit for a special event is required to be approved by the Port a minimum of sixty days prior to the event. Approval of the permit shall include a site walk to review the event set-up and detail required BMPs at the event site. Areas that are frequently used for special events are considered high priority in terms of sweeping, therefore the Port shall ensure sweeping of the site is conducted following the special events. If a violation of minimum BMP requirements or a discharge occurs due to the special event, enforcement action will be taken by Port staff. All enforcement actions are discussed in Section 6.9 below.

## 6.8 RWQCB Reporting

#### a. Marine Terminals

Details of each marine terminal Copermittees annual inspection are included an Annual Report submitted to the RWQCB for each marine terminal. In the case a marine terminal Copermittee is in violation of the General Permit or the Municipal Permit, a notice of violation will be issued per the guidelines of the Port's stormwater ordinance (and outline in the enforcement section of this document). Additionally, all violations, follow-up inspections, and enforcement actions will be discussed in the Annual Report. In the event of a significant discharge from the marine terminals the RWQCB will be notified verbally within 24 hours and written notification will be made within 5 working days of the incident.

#### b. Municipal Facilities, Areas, and Activities

An Annual Report will be submitted to the RWQCB as specified in section J.3 of the Permit. The Annual Report shall contain an updated municipal inventory and prioritization of municipal activities and operations. The number of facilities inspected and verification that minimum BMPs are properly implemented and maintained. Also included in the Annual Report is an

inventory and prioritization of the MS4, including inspections, maintenance, and cleaning of MS4 facilities, The Annual Report shall include an inventory and prioritization of total curb miles and parking lots within the Port's jurisdiction and identification of total curb miles and parking lots swept, including frequencies and amount of debris collected. Confirmation that all BMPs outlined in the Port's IPM program are properly implemented and effective. The Annual Report will also contain the results of each municipal facility inspection performed and the number of violations or enforcement actions taken by the Port, including any necessary follow-up actions. The Port shall also include details of activities conducted to manage urban run-off beyond compliance.

The Port will notify the RWQCB verbally within 24 hours and written within five working days of non-stormwater discharges that pose a significant threat to water quality or human health.

## 6.9 Enforcement

The Port ESD staff (and other appropriate Port staff) will have authority to enforce stormwater pollution prevention requirements for municipal activities and areas. As stated in Section C of the Permit, the Port must be able to prohibit discharges and enforce stormwater regulations. More specifically, Section D.3.a(8) requires the Port to identify the available enforcement mechanisms and how they will be used.

Article 10 enables the Port to prohibit discharges and require management practices so that discharges on tidelands do not cause or contribute to water quality problems. Article 10 establishes enforcement procedures to ensure that municipal related activities and responsible dischargers are held accountable for their contributions and /or flows. In addition to general provisions, Article 10 also includes BMP sections applicable to the municipal component.

Enforcement mechanisms applicable to the municipal component include the following administrative and judicial authorities. Please refer to either Section 2 of this JUMRP Document or Appendix B (Article 10) for complete details on each item.

### Administrative Authorities

- Cease and Desist Order
- Notice and Order to Abate Violation
- Administrative Citations
- Stop Work Orders
- Nuisance Abatement

- Permit Suspension and Revocation

#### Judicial Authorities

- Injunctive or Declaratory Relief
- Civil Penalties and Remedies
- Criminal Arrest or Field Citation

Generally, enforcement actions are triggered during routine inspections or when investigating a complaint. Port staff will make efforts to use escalating enforcement, initially starting with verbal warnings and progressing to administrative written warnings. Please note that both *Cease and Desist Orders* and *Notice and Order to Abate Violations* may be initially administered while on site either verbally or by written document, such as the corrective action portion of an inspection form, which could be the first step in enforcement actions. On occasions where the initial corrective actions are not appropriately addressed or the discharge is not stopped, Port staff may also use *Administrative Citations* which would either identify a (monetary) fine structure for future non-compliance or, when necessary, include the issuance of a monetary penalty.

For most incidents, the actions stated above are adequate to achieve compliance. However, in instances where a discharge is determined to be a significant threat to human health or the environment, Port staff can also use *Stop Work Orders* or *Nuisance Abatement* to require immediate cessation of the activity. Finally, in severe cases or in instances where responsible parties refuse to comply or appear to act in a threatening manner, Port staff can enlist Harbor Police services and use the judicial authorities identified above.

## 6.10 Program Effectiveness Assessment for the Municipal Component

Section I.1 of the Permit requires each jurisdiction to assess the effectiveness of their program. Part of the assessment involves using the Permit-required target outcome levels, where applicable. The Port recognizes that conducting regular effectiveness assessments are essential for administering successful programs. The effectiveness assessment enhances program development by providing continual feedback about the Port's strategy to detect and eliminate pollution from industrial and commercial activities and refining the strategy when needed.

As discussed in Chapter 13 of this JURMP Document, the Regional Copermittees are developing a process to standardize the reporting and tracking of some of the Copermittee assessment information. Currently the standards are in progress, but are not completed. The Port intends to incorporate these standard assessment mechanisms once they are finalized. In



the interim, the Port will use the assessment approach discussed in Section 13.2 to develop JURMP Component assessment and annual assessment targets.

The following section presents the current mechanisms that will be used by the Port to assess the effectiveness of its Municipal program. Table H-3 located in Appendix H indicates the Port's assessment methods and target metrics for effectiveness assessment.

### **6.10.1 Level 1: Compliance with Activity-Based Permit Requirements**

A Level 1 assessment requires the Port to verify that its program meets the applicable Permit requirements. The Port's Municipal program will incorporate documentation of Level 1 assessment by presenting the applicable Permit requirements and the methods used to maintain and comply with the Permit as identified in Table H-3. Compliance information will include activities that will require annual evaluation to verify Permit compliance. This table will also identify where Permit compliance information can be located within this JURMP Document (one-time updates) and will distinguish what information will be captured and tracked in JURMP Annual Reports.

### **6.10.2 Level 2: Changes in Knowledge/Awareness**

A Level 2 assessment attempts to measure changes in knowledge and awareness that occur as a result of the Municipal program. To accomplish this objective, the Port has identified the required minimum BMPs for each municipal area and activity. Included in the minimum BMPs for all municipal areas and activities is employee training, including stormwater awareness, spill response, and pollution prevention. Additionally, ESD staff conducts stormwater training to other Port departments. In these cases ESD staff will utilize pre and post test to assess the changes in knowledge/awareness. Information pertaining to Level 2 effectiveness will be tracked annually and documented as part of the Education Component's effectiveness assessment (Table H-6).

### **6.10.3 Level 3: Behavioral Change/BMP Implementation**

A Level 3 assessment is designed to evaluate changes in behavior that lead to the implementation of effective BMPs. The proper use of BMPs is considered an effective technique to assist in reducing discharges of pollutants and improving water quality. During site inspections, ESD staff will verify that minimum BMPs are properly implemented to prevent or eliminate potential pollutant from entering the MS4 or receiving waters. In addition, ESD staff will recommend corrective actions to the facility representative, where BMP implementation is not sufficient, to prevent further discharges of pollutants. As such, ESD staff may need to

conduct a follow-up inspection to ensure that BMPs are properly implemented and effective in preventing and eliminating potential pollutants from entering the MS4 or receiving waters. The establishment of BMPs to resolve discharges of pollutants will be tracked by Port staff during initial and follow-up inspections. The Port will assess Level 3 effectiveness by comparing the number of properly implemented minimum BMPs and follow-up inspections verifying effective BMPs have been instituted by the facility. Information pertaining to Level 3 effectiveness will be tracked annually as presented in Table H-3.

#### **6.10.4 Level 4: Load Reduction/Source Abatement**

A Level 4 evaluation is aimed at preventing pollutants from entering the MS4 and receiving waters through the effective use of BMPs. Inspection details regarding municipal areas and activities will note the actions required to prevent and eliminate the discharge of pollutants, whether a follow-up investigation was necessary, and if enforcement actions took place. The Port intends to conduct a Level 4 assessment by tracking the number of recommended corrective actions and violations due to the lack of or improper BMP implementation and identifying resolved issues. Recommended corrective actions and violations will not be considered resolved until effective methods have been established to eliminate the discharge of pollutants. Tracking of BMP cleaning and maintenance will be assessed to determine the load reduction of pollutants to the receiving water, where applicable and feasible. Information pertaining to Level 4 effectiveness will be tracked annually as presented in Table H-3.

#### **6.10.5 Level 5: Changes in Urban Runoff and Discharge Quality**

A Level 5 assessment will identify, when applicable, the municipal program's ability to impact changes in urban runoff and discharge quality. Mechanisms for determining Level 5 impacts associated with the municipal program is by evaluating the effectiveness of site specific BMPs, where applicable and feasible. A Level 5 outcome can be achieved by conducting water quality sampling upstream and downstream of implemented BMPs. Additionally, the monitoring and sampling of dry weather discharges from municipal areas can be utilized to achieve a Level 5 outcome, where applicable and feasible. Level 5 outcome information will be documented in the Port's JURMP Annual Report, when applicable.

#### **6.10.6 Level 6: Changes in Receiving Water Quality**

A Level 6 assessment involves the measurement of overall water quality in receiving waters and evaluates changes in water quality with respect to established regulatory benchmarks, biological integrity, beneficial use, and protection. A Level 6 outcome is best addressed at the

programmatic level over the long term. In most cases, Level 6 assessment will not occur in the municipal program. However, there may be occasions when specific municipal discharges will require monitoring and sampling of the receiving water to ensure that the water quality does not endanger health or the environment. When applicable, this information will be documented in the Port's JURMP Annual Report.

The purpose of this hierarchal evaluation is to recognize successes of the Municipal program and identify areas that need improvement. During each annual report, compiled information regarding municipal areas and activities will be evaluated based on initial targets presented in Table H-3 and a determination will be made on whether the specific activities were effective. The Levels 1—6 effectiveness assessment aims to correlate permit requirements, activities implemented to prevent pollution from municipal areas and activities, and improvements to water quality. Evaluation of Level 1 targets which indicate noncompliance with the permit will necessitate immediate steps to institute necessary requirements. Levels 2—6 assessments will require an evaluation of whether activities are effective at meeting targets and whether targets/measures are appropriate for the specific activity. Once the analysis is completed, best professional judgment will be utilized to determine if the overall Municipal Component was effective.

## Chapter 7

## Industrial & Commercial Component

### 7.1 Introduction

Of the approximately 2500<sup>1</sup> acres of land area under the control of the Port, there are approximately 750 acres of industrial land use area and approximately 350 acres commercial land use area that comprise approximately 30 percent and 15 percent of the total land area under the Port's jurisdiction, respectively<sup>2</sup>.

The Port JURMP Document has combined the industrial and commercial programs as required in the Municipal Permit. The goal of the combined program is to reduce and prevent industrial and commercial discharges of pollutants from MS4 causing or contributing to a violation of water quality standards. This program will be implemented through source identification, BMP implementation, inspections, enforcement, and reporting of industrial non-filers. The Port will use these steps in regulating the urban runoff from industrial and commercial facilities throughout the tidelands.

### 7.2 Stationary Sources

The Permit requires the Port to develop an inventory of all commercial and industrial facilities. The Port's inventory of industrial and commercial sites/sources includes the following: facility name, address, hydrologic area, SIC code, a narrative description which reflects the principle products or services provided by the facility, potential pollutants, tributary to 303(d) water body, and the threat to water quality, at a minimum. During this permit, Copermittees are able to evaluate individual facilities and set prioritization based upon the individual facilities' threat to water quality. The Port has developed a complete and prioritized inventory of all industrial and commercial sites that could contribute a pollutant load to the MS4. This complete inventory is presented in Appendix D. Inventory information will be reviewed during facility inspections and all inventories presented in the JURMP will be updated at least annually.

#### 7.2.1 *Source Characterization and Prioritization*

The Permit requires Copermittees to evaluate all industrial and commercial facilities within its jurisdiction to determine each facility's threat to water quality. The Permit identifies several factors to be consider when making this determination and provides direction for Copermittees to use additional criteria, if they desire.

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<sup>1</sup> Compass Strategic Plan, San Diego Unified Port District, January 2007.

<sup>2</sup> Port Master Plan, San Diego Unified Port District, January 2000.

The Port has developed a methodology to evaluate these criteria and assess the overall threat to water quality for each facility (Table 7-1). The evaluation factors in all of the criteria in a consistent manner so that all aspects are considered. Furthermore, it emphasizes factors discovered in previous inspections and weights these criteria slightly higher since they represent actual site conditions, such as outdoor pollutant exposure, prior compliance history, and overall site conditions. For facilities that have yet to be inspected, the SIC code will be used to place the facility into a category, based on the Long-term Effectiveness Assessment (LTEA). Potential pollutants are associated with each LTEA facility category, which can be used to help determine the overall threat to water quality for each facility. The watershed priority pollutants for 303(d) listed water bodies (San Diego Bay) will also factor into the determination of total threat to water quality for each facility. The Port believes this ranking system adequately meets the Permit's intent and has applied it to all industrial and commercial facilities within our inventory.

**Table 7-1.** Threat To Water Evaluation Process.

Criteria	N/A	Low	Medium	High
Type of activity / Pollutant discharge potential (SIC code and materials used)				
Non-stormwater discharges				
Facility size and design (outdoor exposure potential)				
Proximity to receiving water				
Sensitivity of receiving water				
Additional Permits, No Exposure, or Notice of Non-Applicability				
Compliance history				
Pre-inspection Total				
Facility inspection				
Potential pollutants stored outdoors				
Are potential pollutants listed for 303(d) water body				
Are stormdrains located on the facility				
BMP Implementation and effectiveness				
Total				
Overall threat to water quality				

## **7.2.2 Stationary Industrial Facilities**

The Port has identified 23 industrial facilities on Port tidelands. Five facilities have been issued WDID numbers under the General Industrial Permit, 13 others hold individual NPDES Permits, and five facilities do not require coverage under the General Industrial Permit. However, three of the NPDES holders are Port owned and operated facilities, namely the two marine terminals (NCMT and TAMT) and the Cruise Ship Terminal. As such, they are considered municipal

facilities under this JURMP Document, due to the fact that the Port is the Permit holder for these facilities. These facilities are included in the Port's municipal inventory, identified in Chapter 6 of this document, and therefore not discussed further here. The inventory of industrial categories on Port tidelands includes the following types of industrial activities.

- Boatyards and Shipyards;
- Chemical and allied product manufacturing;
- Sandblasting and painting facility;
- Storage facilities;
- Food packaging and loading;
- Miscellaneous Manufacturing; and
- Wholesale building materials suppliers and storage.

### **7.2.3 Stationary Commercial Facilities**

Permit section D.3.b(1)(a) identifies the commercial facilities that are required to be included in each Copermitee's inventory. Approximately 260 commercial facilities operate on lands under lease from the Port. The large majority of these tenant businesses include hotels, restaurants, marinas and yacht clubs, retail shops, and other commercial and recreational waterfront-related business activities. The Permit identified commercial facility categories that are present within the Port's jurisdiction, as well as additional facility categories that were added to the inventory, largely due to a facility's proximity to San Diego Bay are identified below. All inventoried commercial facilities will be evaluated through the threat to water quality prioritization matrix.

- Boat repair, maintenance, fueling and/or cleaning;
- Parking lots and storage facilities;
- Retail or wholesale fueling sites;
- Eating and drinking establishments;
- Golf courses, parks, and other recreational areas/facilities;
- Building material retailers and storage;
- Marinas; and
- Museums.

A comprehensive inventory of commercial sites and sources within the Port tidelands is included in Appendix D. As with all the inventories in Appendix D, the inventory is also further categorized by watershed. In addition, the inventory presented in Appendix D will be updated at least annually.

#### **7.2.4 Best Management Practice Requirements**

Protecting and improving water quality requires the incorporation of pollution prevention practices, source control and treatment control BMPs. Pollution prevention occurs when materials and resources are utilized more efficiently, or when less harmful substances are substituted for hazardous ones. Pollution prevention practices reduce or eliminate pollution at the source. Source control BMPs (both structural and non-structural) generally reduce contact between pollutants and runoff by keeping pollutants protected from exposure to the weather. Treatment control (structural) BMPs physically remove pollutants from runoff through a variety of processes. From a cost and aesthetic perspective, treatment control BMPs that use natural processes, such as grassy swales, are usually preferred over manufactured designs, where conditions allow, and can also potentially provide beneficial habitats. However, BMPs must be designed relative to local climate and geology, site constraints, urban runoff pollution challenges, and available space.

The Port is a highly developed area, so BMPs must also be easily adapted to current conditions. Much of the Port's tidelands have the potential to discharge directly to the receiving water, including several areas in which stormdrains are inundated daily with tidal water. As such, BMPs must be tailored to accommodate these situations, yet remain effective. The use of pollution prevention practices along with source and treatment control BMPs will help to minimize or eliminate discharges to the stormwater conveyance system and the receiving water.

The California Stormwater Quality Association has developed and published a set of four BMP handbooks, including one focused on industrial and commercial facilities. These handbooks provide guidance for the implementation of BMPs, where applicable and feasible, and are available online at <http://www.cabmphandbooks.com>.

#### **Updated BMP Requirements**

During the course of the last Permit cycle, the Port made attempts to standardize BMP assessments at industrial, commercial, and municipal facilities. The outcome of this effort was the establishment of standard pollutant generating activities (PGAs) that are common to all facilities and facility operations. The Port defines PGAs as "*activity categories common to general facility operations and having the potential to generate significant amounts of pollutants during routine operations*". Once the PGAs were defined, the Port determined the minimum operational controls, or BMPs, needed to control pollutants from each PGA to the MEP. The same set of minimum BMPs are identified for each PGA regardless of the type of facility where the PGA occurs.

This section provides a description of the minimum BMPs required to reduce or eliminate the threat to water quality by industrial and commercial facilities. Proper implementation and maintenance of these BMPs are critical to the effectiveness of each in preventing or reducing stormwater pollution associated with industrial and commercial activities. Table 7-2 identifies the PGA categories, pollution prevention practices, and minimum BMPs that shall apply to all industrial and commercial facilities, where applicable and feasible.



**Table 7-2. Industrial And Commercial Facilities Minimum BMPs.**

PGA	General Operations and Housekeeping					Non-Stormwater Management				Waste Handling and Recycling			Outdoor Material Storage			Outdoor Drainage from Indoor Activity	Outdoor Parking	Vehicles and Equipment					Education and Training	Outdoor Activity and Operation	
	BMP	Conduct routine inspections of BMPs and stormwater conveyance	Properly maintain stormwater conveyance system	Properly dispose of debris from stormwater conveyance system	Conduct outdoor sweeping to adequately control dust and debris	Keep outdoor areas neat and clean	Keep facility clear of illicit connections and illegal discharges	Keep site clear of unauthorized non-stormwater discharges	Have spill response materials available at the facility	A written spill response plan is recommended	Keep waste containers at acceptable levels (not overflowing)	Properly dispose of hazardous waste	Keep waste containers covered or lids closed	Keep outdoor storage areas clean and dry	Keep stored materials closed and secure with proper labels	Keep materials stored under overhead cover or within secondary containment	Keep facility clear from indoor activity being tracked outdoors	Prohibit any material storage in outdoor parking areas	Keep facility clear of leaking fluids from vehicles and equipment	Regularly conduct preventive maintenance on all vehicles and equipment	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site	Capture, contain, or treat all vehicle and equipment wash water	Minimize the volume of cleaning water to decrease wastewater	Train employees in stormwater, spill response, and pollution prevention	Keep outdoor activity and operation area clean from spills and debris
Industrial and Commercial Facilities																									
Boatyards and Shipyards	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chemical and allied product manufacturing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X		
Sandblasting and painting facility	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X
Storage facilities	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X				X		
Food packaging and loading	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X				X		

**Table 7-2.** Industrial And Commercial Facilities Minimum BMPs (continued).

PGA	General Operations and Housekeeping					Non-Stormwater Management				Waste Handling and Recycling			Outdoor Material Storage			Outdoor Drainage from Indoor Activity	Outdoor Parking	Vehicles and Equipment						Education and Training	Outdoor Activity and Operation	
	BMP	Conduct routine inspections of BMPs and stormwater conveyance	Properly maintain stormwater conveyance system	Properly dispose of debris from stormwater conveyance system	Conduct outdoor sweeping to adequately control dust and debris	Keep outdoor areas neat and clean	Keep facility clear of illicit connections and illegal discharges	Keep site clear of unauthorized non-stormwater discharges	Have spill response materials available at the facility	A written spill response plan is recommended	Keep waste containers at acceptable levels (not overflowing)	Properly dispose of hazardous waste	Keep waste containers covered or lids closed	Keep outdoor storage areas clean and dry	Keep stored materials closed and secure with proper labels	Keep materials stored under overhead cover or within secondary containment	Keep facility clear from indoor activity being tracked outdoors	Prohibit any material storage in outdoor parking areas	Keep facility clear of leaking fluids from vehicles and equipment	Regularly conduct preventive maintenance on all vehicles and equipment	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site	Capture, contain, or treat all vehicle and equipment wash water	Minimize the volume of cleaning water to decrease wastewater	Train employees in stormwater, spill response, and pollution prevention	Keep outdoor activity and operation area clean from spills and debris	Capture, contain, or treat all wash water
Miscellaneous Manufacturing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	
Wholesale building materials suppliers and storage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	
Boat repair, maintenance, fueling and/or cleaning	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Parking lots and storage facilities	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X					X	X	X	
Retail or wholesale fueling sites	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	

**Table 7-2. Industrial And Commercial Facilities Minimum BMPs (continued).**

PGA	General Operations and Housekeeping					Non-Stormwater Management				Waste Handling and Recycling			Outdoor Material Storage			Outdoor Drainage from Indoor Activity	Outdoor Parking	Vehicles and Equipment					Education and Training	Outdoor Activity and Operation	
	BMP	Conduct routine inspections of BMPs and stormwater conveyance	Properly maintain stormwater conveyance system	Properly dispose of debris from stormwater conveyance system	Conduct outdoor sweeping to adequately control dust and debris	Keep outdoor areas neat and clean	Keep facility clear of illicit connections and illegal discharges	Keep site clear of unauthorized non-stormwater discharges	Have spill response materials available at the facility	A written spill response plan is recommended	Keep waste containers at acceptable levels (not overflowing)	Properly dispose of hazardous waste	Keep waste containers covered or lids closed	Keep outdoor storage areas clean and dry	Keep stored materials closed and secure with proper labels	Keep materials stored under overhead cover or within secondary containment	Keep facility clear from indoor activity being tracked outdoors	Prohibit any material storage in outdoor parking areas	Keep facility clear of leaking fluids from vehicles and equipment	Regularly conduct preventive maintenance on all vehicles and equipment	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site	Capture, contain, or treat all vehicle and equipment wash water	Minimize the volume of cleaning water to decrease wastewater	Train employees in stormwater, spill response, and pollution prevention	Keep outdoor activity and operation area clean from spills and debris
Industrial and Commercial Facilities	Conduct routine inspections of BMPs and stormwater conveyance	Properly maintain stormwater conveyance system	Properly dispose of debris from stormwater conveyance system	Conduct outdoor sweeping to adequately control dust and debris	Keep outdoor areas neat and clean	Keep facility clear of illicit connections and illegal discharges	Keep site clear of unauthorized non-stormwater discharges	Have spill response materials available at the facility	A written spill response plan is recommended	Keep waste containers at acceptable levels (not overflowing)	Properly dispose of hazardous waste	Keep waste containers covered or lids closed	Keep outdoor storage areas clean and dry	Keep stored materials closed and secure with proper labels	Keep materials stored under overhead cover or within secondary containment	Keep facility clear from indoor activity being tracked outdoors	Prohibit any material storage in outdoor parking areas	Keep facility clear of leaking fluids from vehicles and equipment	Regularly conduct preventive maintenance on all vehicles and equipment	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site	Capture, contain, or treat all vehicle and equipment wash water	Minimize the volume of cleaning water to decrease wastewater	Train employees in stormwater, spill response, and pollution prevention	Keep outdoor activity and operation area clean from spills and debris	Capture, contain, or treat all wash water
Eating and drinking establishments	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X						X	X	X
Golf courses, parks, and other recreational areas/facilities	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X						X	X	X
Building material retailers and storage	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X
Marinas	X	X	X	X	X	X	X	X	X	X	X	X	X				X						X	X	X
Museums	X	X	X	X	X	X	X	X	X	X	X	X	X				X						X		

### **7.2.5 Additional Controls for Stationary Industrial and Commercial Sites / Sources**

All industrial sites that are subject to coverage under the General Industrial Permit or individual NPDES regardless of threat to water quality must develop and implement a Storm Water Pollution Prevention Plan (SWPPP). Guidelines for developing a SWPPP are described in Section A of the Permit, SWRCB Water Quality Order No. 97-03-DWQ (available at <http://www.swrcb.ca.gov/stormwtr/industrial.html>), a SWPPP template can also be found on the Port's internet site at [http://www.portofsandiego.org/sandiego\\_environment/susmp.asp](http://www.portofsandiego.org/sandiego_environment/susmp.asp).

Also, commercial sites often have common, medium to large-sized parking lots, making customers potentially the largest contributors of pollution from commercial land use areas due to vehicle traffic and litter. Therefore, effective public education and participation regarding storm water issues are also important pollution prevention measures for commercial sites. Public outreach programs are further discussed in the Education chapter of this document.

Additional BMPs are required if any building repair, remodeling, or construction is being conducted at an industrial or commercial facility.

## **7.3 Mobile Sources**

In addition to established industrial and commercial sites, mobile commercial services such as vehicle washing, carpet, drape, or furniture cleaning, and pest control services operate within the Port's jurisdiction. Although no mobile businesses have established sites within the Port's jurisdictional area, Port tenants may hire mobile companies for their services.

### **7.3.1 Mobile Businesses Source Characterization and Prioritization**

Permit section D.3.b(4) requires each Copermitttee to inventory mobile business that are known to operate within their jurisdiction. The Port prohibits the operation and activity conducted by mobile businesses within municipal areas (specifically public parks) on Port tidelands. The inventory of mobile business has not previously been determined, therefore the inventory of mobile businesses shall include any mobile business that is based within the Port's jurisdiction or that is observed or reported to operate within the Port's jurisdiction. Upon discovery of mobile businesses the following information shall be collected: name, business address, owner/responsible person, potential pollutants, and a description of products/services including SIC code if applicable. The mobile business information shall be used to update the inventory. Mobile businesses shall include:

- Mobile automobile or other vehicle washing;
- Pest control services;
- Mobile carpet, drape or furniture cleaning;
- Landscaping;
- Portable sanitary services; and
- Power washing services.

Additionally, the Port would participate in working collectively with the Copermittees to further create, update, and maintain an inventory of mobile businesses known to operate within San Diego that cross jurisdictional boundaries.

### **7.3.2 Best Management Practice Requirements**

On occasion industrial and commercial facilities have used mobile businesses for certain activities, in these cases the mobile business is required to maintain all minimum BMPs required for the facility where activities are taking place.

This section provides details of the minimum BMPs required to reduce or eliminate the threat to water quality from mobile business activities. Minimum required BMPs shall be based on the type of activity the mobile business conducts. Table 7-3 identifies the PGA categories and minimum BMPs that shall apply to each mobile business activity, where applicable and feasible. Additional controls may be required upon discovery and inspection of the mobile business activity, these controls will be evaluated on an individual basis.

**Table 7-3.** Mobile Businesses Minimum BMPs.

PGA	General Operations and Housekeeping					Non-Stormwater Management				Waste Handling and Recycling			Outdoor Material Storage			Outdoor Drainage from Indoor Activity	Outdoor Parking	Vehicles and Equipment					Education and Training	Outdoor Activity and Operation	
	BMP	Conduct routine inspections of BMPs and stormwater conveyance	Properly maintain stormwater conveyance system	Properly dispose of debris from stormwater conveyance system	Conduct outdoor sweeping to adequately control dust and debris	Keep outdoor areas neat and clean	Keep facility clear of illicit connections and illegal discharges	Keep site clear of unauthorized non-stormwater discharges	Have spill response materials available at the facility	A written spill response plan is recommended	Keep waste containers at acceptable levels (not overflowing)	Properly dispose of hazardous waste	Keep waste containers covered or lids closed	Keep outdoor storage areas clean and dry	Keep stored materials closed and secure with proper labels	Keep materials stored under overhead cover or within secondary containment	Keep facility clear from indoor activity being tracked outdoors	Prohibit any material storage in outdoor parking areas	Keep facility clear of leaking fluids from vehicles and equipment	Regularly conduct preventive maintenance on all vehicles and equipment	Have absorbent booms or spill materials available when fueling vehicles and equipment on-site	Capture, contain, or treat all vehicle and equipment wash water	Minimize the volume of cleaning water to decrease wastewater	Train employees in stormwater, spill response, and pollution prevention	Keep outdoor activity and operation area clean from spills and debris
Mobile automobile or other vehicle washing	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X	X		X	X	X	X	X
Pest control services	X	X	X	X	X	X	X	X	X	X	X	X		X	X			X	X				X	X	
Mobile carpet, drape or furniture cleaning	X	X	X	X	X	X	X	X	X	X	X	X				X		X	X		X	X	X		
Landscaping	X	X	X	X	X	X	X	X	X	X	X	X						X	X	X			X	X	X
Portable sanitary services	X	X	X	X	X	X	X	X	X	X	X	X				X		X	X		X	X	X	X	X
Power washing services	X	X	X	X	X	X	X	X	X	X	X	X						X	X	X	X	X	X	X	X

## 7.4 Program Implementation

The Permit requires the Port to verify the implementation of designated minimum BMPs and any additional measures necessary to implement the industrial commercial component. The detailed organization of this section reflects the specific processes the Port will use to implement the industrial commercial component.

### 7.4.1 *Education/Outreach*

The Port has developed an education and outreach program that encompasses all components of the JURMP program, therefore all education and outreach is discussed in Chapter 10 of this document.

### 7.4.2 *Owner/Operator Notification*

#### a. Stationary Facilities

Under Permit section D.3.b(2)(c), each Copermittee is required to notify the owner/operator of each inventoried industrial and commercial facility of the BMP requirements applicable for the facility over the next three years. The Port intends to provide written notification to the owners and operators of the minimum BMP requirements for each facility based on the PGAs for each facility category. All facilities that are determined to pose a high threat to water quality will receive written notification of the minimum BMPs required for their facility in the initial year of Permit implementation, notification shall occur prior to facility inspections. Facilities that do not pose a high threat to water quality or are not to be inspected in the initial year of the Permit will receive written notification of the minimum BMPs required based on their facility category in the subsequent year of the Permit. The notifications shall be tracked in the stormwater database.

#### b. Mobile Businesses

Under Permit section D.3.b(4)(a)iii, each Copermittee is required to notify the owner/operator of mobile businesses known to operate within their jurisdiction of the minimum BMP requirements and local ordinances. The Port shall notify all mobile businesses identified in our inventory, also businesses not presently in the inventory shall receive written notification as they are discovered. As with the stationary facilities, the written notifications shall included to minimum required BMPs based on the business category and a copy of the Port's stormwater ordinance will be included. The notifications shall be tracked in the stormwater database.

### **7.4.3 Inspections**

#### **a. Stationary Facilities**

The Port is required to conduct inspections of industrial and commercial facilities to monitor compliance with the Port's ordinances, permits, and the Permit. Facility inspections will be coordinated with inspections by the RWQCB, as inspections by the RWQCB satisfy the requirement for the Port to inspect industrial and commercial sites per section 3.b.(3)(f) of the Permit. All facilities that pose a high threat to water quality, as described in section 7.2.1 above, will be inspected on an annual basis. The Permit indicates that 50% of facilities that are determined to pose a high threat to water quality and 20% of the total facilities inventoried are to be inspected in the initial year of the program, increasing to 100% and 25%, respectively, for the remainder of the Permit cycle. Facilities that do not pose a high threat to water quality will be inspected randomly to fulfill the 25% requirement, however these facilities will not be inspected more than once during this Permit cycle unless the threat to water quality is increased to high following an inspection. At this time Port staff will conduct all facility inspections, therefore third party inspections will not be considered.

Prior to any inspection, Port staff will review permit applications, past inspections, compliance history, and will notify a facility representative to schedule an inspection. Additionally, an inspection form with the PGAs specifically for the facility to be inspected will be printed. During the facility inspection Port staff will verify that the facility information in the inventory is accurate, including SIC code, threat to water quality priority, facility monitoring data, and self inspection records. Port staff will evaluate facilities for BMP implementation and effectiveness to prevent any discharge into the MS4 and receiving water. Photographic evidence to document all violations, improper BMP implementation, or areas that require corrective action will be taken at the time of the inspection.

Following each inspection, a copy of the completed inspection form will be supplied to the facility representative. The inspector will review the results of the inspection with the facility representative and a facility evaluation letter will be written based on the implementation and effectiveness of the BMPs on-site. Any BMP violations noted on the inspection form will be discussed with the facility representative and corrective actions will be recommended. A follow-up inspection will be conducted if necessary. If the facility representative has not immediately addressed BMP violations, the inspector may require the submittal of a written explanation and description of the actions that will be taken to correct the problem. A warning letter or Notice and Order may be written, including a deadline for corrective actions to be completed. If a significant and/or immediate threat to water quality is observed, appropriate actions will be taken to require the responsible party to immediately cease the discharge and/or correct the situation. If an incident of non-compliance is determined, the Port will provide oral notification to the Board within 24 hours. Such notification shall be followed up by a written report to be submitted to the Board within five days of the incident.



All inspection results will be entered into a database created by the Port to centralize inspection data for all JURMP components. The Port will utilize the database to track the number of facilities that are inspected. The database will also be used to track the number of facilities that meet the minimum BMPs required, required corrective action, required a follow-up inspection, or received a violation. Inspection results will be discussed in the JURMP Annual Report.

b. Mobile Businesses Inspection

The Permit requires that mobile businesses be inspected on an as needed basis. As such, the Port shall conduct inspections of inventoried mobile businesses based on the determination of their threat to water quality. Mobile businesses conducting activities on Port tidelands that are not currently in the inventory shall be inspected upon discovery. During the inspection, Port staff will collect the business information required for addition to the mobile business inventory and verify proper BMP implementation. Since mobile business activities are conducted randomly throughout Port tidelands the improvement of improper BMP implementation or corrective actions shall occur immediately. Standard procedures, detailed in Section 7.4.5, will be followed if further enforcement action is required. Photographic evidence to document all violations, improper BMP implementation, or recommended corrective actions will be taken at the time of inspection. All inspection results will be entered into the stormwater database.

#### **7.4.4 Reporting of Non-Fileers**

It is the responsibility of the facility owner or operator to submit a Notice of Intent (NOI) for each industrial facility that is required by U.S. EPA regulations to obtain a storm water permit from the State Water Resource Control Board (SWRCB). The Port will determine if an industrial facility requires coverage under the Industrial Storm Water General Permit (General Permit), based on SIC code, for which a NOI has not been filed. Attachment 1 of the General Permit, available at [www.waterboards.ca.gov](http://www.waterboards.ca.gov), provides a list of SIC codes for each facility covered by the General Permit. The General Permit requires that each facility requiring coverage notify the SWRCB, prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), and conduct monitoring to determine the amount of pollutants leaving the site. Verification of facility SIC code, SWPPP, monitoring data, and if a NOI has been filed (or if an individual NPDES permit has been obtained) will occur during facility inspections. The Port will notify the owner/operator and the RWQCB of failure to comply following the facility inspection. Facilities that maintain an individual NPDES permit are not required to obtain coverage under the General Permit, and as such, will not be reported to the RWQCB.

## **7.4.5 Enforcement**

As stated in Section C of the Permit, the Port must be able to prohibit discharges and enforce stormwater regulations. More specifically, Section D.3.b(5), *Enforcement of Industrial and Commercial Site/Sources* requires the Port to identify the available enforcement mechanisms and how they will be used.

Article 10 enables the Port to prohibit discharges and require management practices so that discharges on tidelands do not cause or contribute to water quality problems. Article 10 establishes enforcement procedures to ensure that industrial and commercial related activities and responsible dischargers are held accountable for their contributions and /or flows. In addition to Article 10 general provisions and specific sections applicable to the industrial and commercial component. Enforcement mechanisms applicable to the industrial and commercial component include the following administrative and judicial authorities. Please refer to either Section 2 of this JUMRP Document or Appendix B (Article 10) for complete details on each item.

### Administrative Authorities

- Cease and Desist Order
- Notice and Order to Abate Violation
- Administrative Citations
- Stop Work Orders
- Nuisance Abatement
- Permit Suspension and Revocation

### Judicial Authorities

- Injunctive or Declaratory Relief
- Civil Penalties and Remedies
- Criminal Arrest or Field Citation

Generally, enforcement actions are triggered during routine inspections or when investigating a complaint. Port staff will make efforts to use escalating enforcement, initially starting with verbal warnings and progressing to administrative written warnings. Please note that both *Cease and Desist Orders* and *Notice and Order to Abate Violations* may be initially administered while on site either verbally or by written document, such as the corrective action portion of an inspection

form, which could be the first step in enforcement actions. On occasions where the initial corrective actions are not appropriately addressed or the discharge is not stopped, Port staff may also use *Administrative Citations* which would either identify a (monetary) fine structure for future non-compliance or, when necessary, include the issuance of a monetary penalty.

For most incidents, the actions stated above are adequate to achieve compliance. However, in instances where a discharge is determined to be a significant threat to human health or the environment, Port staff can also use *Stop Work Orders* or *Nuisance Abatement* to require immediate cessation of the activity. Finally, in severe cases or in instances where responsible parties refuse to comply or appear to act in a threatening manner, Port staff can enlist Harbor Police services and use the judicial authorities identified above.

## 7.5 Industrial/Commercial Effectiveness Assessment

Section I.1 of the Permit requires each jurisdiction to assess the effectiveness of their Industrial and Commercial program. Part of the assessment involves using the Permit-required target outcome levels, where applicable. The Port recognizes that conducting regular effectiveness assessments are essential for administering successful programs. The effectiveness assessment enhances program development by providing continual feedback about the Port's strategy to detect and eliminate pollution from industrial and commercial activities and refining the strategy when needed.

As discussed in Chapter 13 of this JURMP Document, the Regional Copermittees are developing a process to standardize the reporting and tracking of some of the Copermittee assessment information. Currently the standards are in progress, but are not completed. The Port intends to incorporate these standard assessment mechanisms once they are finalized. In the interim, the Port will use the assessment approach discussed in Section 13.2 to develop JURMP Component assessment and annual assessment targets.

The following section presents the current mechanisms that will be used by the Port to assess the effectiveness of its Industrial and Commercial program. Table H-4 located in Appendix H indicates the Port's assessment methods and target metrics for effectiveness assessment.

## Chapter 8

## Residential Component

### 8.1 Introduction

The Municipal Stormwater Permit establishes requirements for local jurisdictions to develop and implement a program to reduce contaminants in urban runoff originating from existing residential areas (Section D.3.c.). It requires that high priority existing residential areas and activities be identified, that minimum BMPs be established, and that a process for ensuring the application of these BMPs be implemented and enforced.

Chapter 1 of this JURMP Document discusses the creation of the Port. It says, in part, that the Port Act (1962) created the Port to develop the harbors and ports of the State for multiple purpose use for the benefit of the people. The Port Act further identifies the Port as a public corporation that holds those lands granted to it in public trust. As such, residential uses are not permitted for Port tidelands.

During the course of the previous Permit (Order 2001-01), the Port clarified that residential uses do not exist on Port tidelands. This information was discussed with RWQCB staff during the Port's annual JURMP review meeting on June 20, 2005. At that time, it was agreed upon that the Port would not be required to address residential areas or activities. As such, this JURMP Document and all associated future JURMP Annual Reports will not address the residential requirements identified in Section D.3.c. of the Permit. It should be noted that this does not impact the requirements for developing education programs as defined in Permit Section D.5.b.(3). All education efforts are discussed in Chapter 10 of this JURMP Document.

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## Chapter 9

## Illicit Discharge Detection and Elimination Component

### 9.1 Introduction

The Municipal Permit requires that the Port establish an illicit connection and illegal discharge (IC/ID) program to actively seek and eliminate IC/IDs. The Port regulates illicit connections and illegal discharges on the tidelands to minimize urban runoff impacts by using reporting, investigation, and enforcement procedures. This section of the JURMP Document addresses the management of IC/ID within the Port's jurisdiction. The primary goal of the IC/ID Component is the development and implementation of a program that will enable the Port to find and eliminate illegal discharges and connections.

### 9.2 Public Reporting of IC/ID

The Municipal Permit requires the Port to promote, publicize, and facilitate public reporting of illegal discharges or water quality impacts associated with discharges into the MS4. The Port recognizes the effectiveness of using both a regional toll-free hotline as well as a local (jurisdictional) hotline and intends to use both mechanisms to facilitate public reporting of illegal discharges. The Regional Stormwater Hotline number is (888) 846-0800. It is answered by the County of San Diego, Department of Public Works, Mon-Fri 7:00 AM to 5:00 PM. In addition, the County of San Diego offers an on-line complaint reporting form, which can be accessed at the following internet address:

<http://www.sdcounty.ca.gov/dpw/watersheds/hold-complaints.html>

Once received, the County of San Diego will refer complaints to the appropriate jurisdiction for investigation.

The Port of San Diego also operates its own jurisdictional Stormwater Hotline to receive calls regarding IC/ID complaints on Port tidelands. This hotline number is (619) 686-6254 and is administered by the Port's Environmental Services Department (ESD) during regular business hours (Mon-Fri). Additionally, the Port Harbor Police can receive and respond to IC/ID complaints. The contact phone number for the Harbor Police is (619) 686-6272. It is operated 24 hours per day, seven days per week. Complaints in Spanish or other languages will be referred to the Port's Call Center at (619) 686-6200 for interpretation.

A summary of all reported incidents and a description of how each was resolved will be summarized in the Port's JURMP Annual Report.

## 9.3 Prevention, Reporting, and Response

The Permit requires that Copermittees coordinate spill prevention, containment and response activities throughout all departments and agencies so that maximum water quality protection is available at all times. Additionally, the Permit requires mechanisms to ensure that the Port is notified of spills or discharges from private laterals. The Port has developed a strategy for preventing, reporting, and responding to sewage and other spills into its MS4 and receiving waters. This strategy ensures that routine inspections and maintenance are occurring as required and that a standard process is in place to appropriately respond to all complaints. During the previous Permit, the Port developed an IC/ID strategy that prioritized incoming complaint reports and internally standardized the reporting and response processes. This strategy was reviewed and modified, where necessary to ensure that all new Permit requirements were met. The following section discusses the Port's prevention, reporting, and response procedures.

### 9.3.1 *Prevention of Discharges and Spills*

Article 10 states that individuals involved in activities or use of a premises which may have the potential to discharge pollutants to the MS4 or receiving waters must institute effective BMPs to prevent stormwater pollution, illegal discharges, and non-stormwater discharges. Prevention of IC/ID requires that Port staff and contractors, Port tenants, and the general public be aware of actions which contribute to pollution. To that end, Port staff has implemented an educational strategy focusing on preventing pollution from entering the MS4 and receiving waters to ensure all individuals are aware of their spill prevention responsibilities.

Specifically, education on spill and discharge prevention occurs during inspections or other various on-site visits. This education addresses proper cleanup procedures, required BMP implementation, suggestions on preventing future discharges, and environmentally friendly cleaning alternatives. Educational material is distributed in various media formats including verbal instruction, signage, brochures, and the internet. In addition, during construction activities, SWPPP and SUSMP are required of all contractors and builders operating on Port tidelands. These documents must be approved by Port staff prior to commencement of a project. This ensures that anyone undertaking a development project on tidelands is aware of their responsibilities and has taken the required steps to proactively prepare for such instances.

Another element of the Port's IC/ID prevention strategy is timely inspection and maintenance of the MS4 and sewer laterals. The Port's General Services Department provides and implements a routine inspection program of its MS4 and sewer laterals in order to prevent the occurrence of sewage leaks or spills along all private laterals leading from Port owned parcels. All lines identified through the inspection program as needing work will be repaired. All records of maintenance are documented and reported in the Annual Report.

Port tenants are required to maintain their own private laterals. Port staff work to encourage tenants to routinely inspect and maintain their own private laterals to prevent leaks or spills. Port staff assumes the responsibility to inspect tenants at any time and may report and require the repair of any leaking or faulty sewer lines. It is the tenant's responsibility to repair and assume responsibility for any and all enforcement actions that may stem from leaking private laterals.

### **9.3.2 Reporting Discharges and Spills**

Reports of possible IC/IDs may be observed by Port staff, detected during MS4 monitoring, or received through citizen complaints through either the regional or Port hotlines. The Harbor Police may also forward IC/ID reports to ESD staff. IC/ID reports often contain detailed information concerning the type of pollutant illegally discharged, its source, and when known, the responsible party. All of these reporting mechanisms aim to accumulate information regarding the nature of the discharge, its location, and a potential source. These reporting mechanisms help ESD staff efficiently respond to, and eliminate an IC/ID.

Proper reporting of the pertinent complaint details is critical to ensuring timely elimination of IC/ID. ESD staff are trained in receiving calls, completing complaint forms, and assessing the nature of calls to determine whether complaints require further attention. All incoming calls are recorded onto an incoming complaint form. This form includes all pertinent information about the complaint as well as any relevant information about the reporting party. Forms are entered into the stormwater database and each complaint is assigned a unique number. Such information is then used to initiate the appropriate spill response and investigate the complaint, when applicable. All incoming calls that are determined to require an investigation from the initial assessment are routed to trained investigative staff.

Harbor Police may also receive calls or observe discharges while patrolling the Bay. Harbor Police work closely with ESD in reporting stormwater problems. Officers have been trained in the identification of discharges and how to report discharges from the MS4. All suspected discharges are reported to ESD using the appropriate Harbor Police forms and are entered into the ESD database in a manner consistent with the complaint tracking described above.

### **9.3.3 Spill or Discharge Response**

Responding to spills, discharges, and incoming complaints is an essential part of the Port's IC/ID program. As stated previously, Port staff makes an effort to respond to all incoming complaints promptly. However, certain types of discharges warrant immediate response due to the threat it may pose to environmental and public health or the ability to eliminate or contain the discharge before it reaches receiving waters. Once an incident has been reported that



warrants further analysis, the investigation process will begin. Discharges considered to be the highest priority include on-going discharges, discharges that are directly entering or have entered the Bay, and sewage spills.

#### Ongoing Discharges

Discharges or spills that are currently occurring have the best likelihood of an effective cleanup if immediate action is taken. Ongoing discharges require immediate action to quickly stop the spill, detect and eliminate the pollutant source, and only permit a small amount of the pollutant to be discharged thereby reducing the time and effort needed for clean up. Attempts will be made to immediately investigate these discharges.

#### Spills Directly into the Bay

Spills that enter the bay can cause the most damage because they directly affect the receiving water. These spills require immediate action to stop the spill and may require additional protective measures (booms, absorbent materials, etc.) be put in place while the clean up is ongoing. Attempts will be made to immediately investigate these discharges.

#### Sewage Spills

If a reported spill is thought to be (or reported to be) sewage, investigation procedures will confirm that the reported spill is indeed sewage. All sewage spills are both an environmental and public health threat and require immediate investigations. If there is any sewage odor or any presence of solids in the discharge, Port investigators will immediately notify DEH and the other proper authorities. For sewage spills that are discharging directly into the Bay, Port investigators will also report the occurrence immediately to the Port Safety Department.

#### Other Discharges

Other reported discharges that have not entered receiving waters and do not pose an immediate threat to environmental or public health will be investigated as soon as possible to avoid environmental impacts.

## 9.4 Urban Runoff Monitoring

The Permit requires each Copermittee to conduct annual urban runoff monitoring to establish the condition of runoff water quality affecting receiving waters and to identify potential sources of runoff. The Port has established monitoring programs to assess urban runoff and identify sources within Port Tidelands. This section will describe the urban runoff monitoring programs instituted by the Port.

### **9.4.1 *MS4 Outfall Monitoring***

Section B.1 of the Receiving Waters Monitoring and Reporting Program No. R9-2007-0001 states that each Copermittee is required to coordinate and develop a monitoring program to characterize pollutant discharges from its MS4. This program is a new requirement of the Permit. As such, it is being developed from a regional perspective as part of the Regional Copermittee monitoring efforts. The completed program will be turned in to the RWQCB on July 1, 2008, as part of a Regional Monitoring Submittal, per the Permit requirements. Once fully developed, the Port intends to implement the program as required. It is anticipated that all reporting for this program will be located in the Regional Urban Runoff Monitoring Annual Reports.

### **9.4.2 *Source Identification Monitoring***

Section B.2 of the Receiving Waters Monitoring and Reporting Program No. R9-2007-0001 states that each Copermittee is required to coordinate and develop a monitoring program to identify sources of discharges of pollutants into receiving waters. This program is a new requirement of the Permit. As such, it is being developed from a regional perspective as part of the Regional Copermittee monitoring efforts. The completed program will be turned in to the RWQCB on July 1, 2008, as part of a Regional Monitoring Submittal, per the Permit requirements. Once fully developed, the Port intends to implement the program as required. It is anticipated that all reporting for this program will be located in the Regional Urban Runoff Monitoring Annual Reports.

### **9.4.3 *Dry Weather Field Screening and Analytical Monitoring***

The Dry Weather Field Screening and Analytical Monitoring program is an integral component of the Port's IC/ID program and strategy to eliminate illegal discharges from Port tidelands. Section B.3 of the Permit's Receiving Waters Monitoring and Reporting Program states that each jurisdiction shall conduct dry weather monitoring to detect and eliminate IC/IDs between May 1<sup>st</sup> and September 30<sup>th</sup> of each year. A complete description of the Port's Dry Weather Monitoring Program can be found Appendix E.

## **9.5 Investigation and Follow-up Procedures**

As part of its IC/ID program strategy, the Port has developed investigation tools, procedures, and follow-up criteria to adequately respond to and eliminate IC/IDs. These mechanisms ensure consistency during potential discharge, spill, and investigation responses. Port staff have been trained in illegal discharge identification, BMP implementation, and water sampling

protocols. The investigators are trained to understand what discharges are prohibited and the types of enforcement available to stop the discharges. During a complaint investigation, Port investigators will be prepared to conduct field screening analyses, sample for laboratory analyses, and properly document the discharge for any future enforcement. The sections below identify the process and mechanisms available to Port staff for conducting IC/ID investigations.

### **9.5.1 Investigation Tools**

This section details the tools available to ESD staff for investigating complaints. They are meant to aid in an investigation of a potential discharge so that staff may properly locate and assess the extent of a spill, identify sources, and eliminate an IC/ID. As such, any and all of these may be used during investigations, when determined applicable.

#### MS4 Map

The Permit requires each jurisdiction to develop/update a map of its entire MS4 and drainage areas. The Port has included updated MS4 maps within this document (Appendix F). The MS4 maps allow ESD staff to identify all storm drain lines affected by a discharge and recognize potential sources of pollutants. This data is an integral part of the IC/ID program as well as the Dry Weather Monitoring Program. The MS4 maps, data, and corresponding drainage areas are also available in GIS format.

#### Forms and Documentation

An investigation form will be completed for every field investigation. This investigation form will track all the pertinent information corresponding to the incident. This form will be linked in the stormwater database to the incoming complaint form or, if not from a complaint (discovered in visual monitoring, dry weather monitoring, etc), to a unique complaint number. A description of the violation will be documented in writing on the investigation form. In addition, all correspondence with the responsible party will be documented on the form. The investigation form will also accommodate the addition of any follow-up documentation to the original report as a means for easier tracking and documentation. Whenever possible, photos (digital preferred) will be taken as a visual aid in documenting the occurrence and/or clean-up action. These photos will be included and available in the file for each investigation.

#### Samples/Sampling

In the cases where the incoming complaint report (or dry weather monitoring) cannot identify a source and/or there is no identifiable point source, field screening analyses and/or sample collection for laboratory analyses may help in determining the source of the discharge. Field screening provides an onsite tool for quickly evaluating the discharge. The Field Sampling

Manual (Appendix G) will accompany every investigator when they begin an investigation. Information such as field preparation and mobilization, sampling, data recording, and QA/QC procedures are all included in detail in this manual.

Field screening will include analysis of potential contaminants. Depending on the field screening results, laboratory analyses may be needed. Analytes for laboratory sampling will be selected based on the initial field screening results. The water sampling will be conducted according to applicable evidence and sampling protocols. Sample collection will be documented on the investigation form and will include chain-of-custody transfer records. The Field Sampling Manual provides detailed descriptions of how to conduct field sampling, laboratory sample collection, and a list of analytes that may be sampled for during an investigation. Additional tests such as dye testing, smoke testing, or video inspections may be used if sampling still does not determine a source.

### **9.5.2 Investigation Procedures**

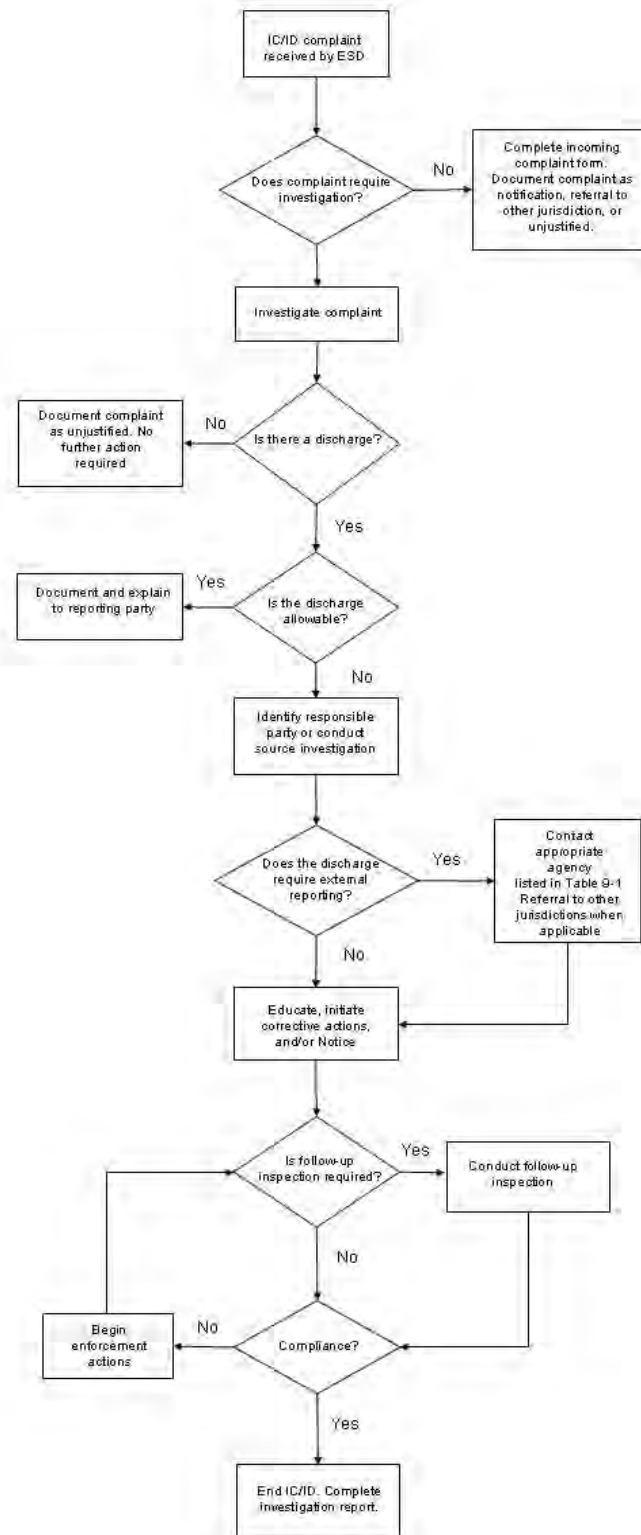
The Port's urban runoff management procedures require that reports of IC/IDs be investigated and eliminated. This section identifies the process ESD staff uses to investigate complaints. Figure 9-1 depicts the Port's IC/ID investigation and elimination process. As stated previously in Section 9.3, the Port has a standard process for determining when investigations are required. And, once it is determined that an investigation is warranted, the Port attempts to investigate the incident(s) promptly.

Upon arrival at the site, the investigator initially verifies that the report was valid and that a discharge actually exist(ed). Using the tools described above, the investigator then completes the proper documentation and attempts to identify the responsible party and eliminate the discharge.

#### Responsible Party Identification

Many times a responsible party or source cannot be determined at the time of issuance of the initial complaint. The investigation procedure aims to determine the source or responsible party of the illegal activity. Once identified, Port staff will first educate the responsible party as to why the connection or discharge is illegal and will then inform them of their legal requirement to remove the connection, stop the discharge, or conduct appropriate clean-up within an allotted time period. Discussions with the responsible party may involve specific clean up actions, installation of BMPs, or simply provide education to the responsible party about pollution

**Figure 9-1.** IC/ID Identification, Investigation, and Elimination Process.



Any directives given to a responsible party will be documented on the inspection form and may require a follow-up inspection at a later time/date. These recommendations or requirements are expected to be fulfilled by the responsible party within a reasonable period of time.

There will be times, however, when the investigator cannot determine the source or responsible party. If no responsible party can be determined it will be documented as such on the investigation form. In these cases, the Port investigator will coordinate clean up efforts with other Port departments and/or initiate further source identification investigations, where applicable.

External Reporting

When a Port investigator determines that the situation poses an immediate and severe risk to public health or the environment, there may be a need to coordinate with other agencies or teams that are specially trained to assess and mitigate emergency situations (i.e. HazMat teams, United States Coast Guard, Fire Department, etc.). Investigators will contact these agencies as soon as they determine the severity of the situation. There may be times when a discharge is identified as occurring upstream and flowing through tidelands property. If it is determined that an illegal discharge has originated in another jurisdiction, the appropriate agencies will be notified as to their responsibility. Every investigator will take a list of emergency contacts and neighboring jurisdiction stormwater contact numbers into the field during each investigation. Table 9-1 identifies the reporting requirements for spills relating to sewage and other pollution. Port investigators will also follow the listed reporting procedures when reporting leaking private laterals as well as large sewage spills into the bay.

**Table 9-1.** External Agency Reporting Requirements.

AGENCY NAME	CONTACT INFORMATION	REPORTING REQUIREMENT
SDRWQCB	9174 Sky Park Ct. Suite 100 San Diego, CA 92123-4340 (858) 467-2952	Must be notified by telephone within 24 hours of an IC/ID involving a discharge of sewage or other pollutants which endanger health or the environment. A written statement must be provided within 5 business days.
County of San Diego Department of Env. Health	1255 Imperial Ave. San Diego, CA 92101 (619) 338-2222 (800) 253-9933	Must be notified immediately by telephone of an IC/ID involving a discharge of sewage or other pollutants which contain high levels of bacteria.
State Office of Emergency Services	3650 Schriever Ave. Mather, CA 95655 (800) 852-7550	Must be notified immediately by telephone of an IC/ID involving a discharge of over 1000 gallons of sewage.
Port of San Diego Safety Dept.	3165 Pacific Hwy. San Diego, CA 92101-1128 (619) 686-6548	Must be notified immediately by telephone of an IC/ID which is threatening to human health.

### Unjustified Investigations

There will be instances when the original incoming complaint assessment will result in an investigation, yet the investigator determines that there has been no illegal activity after visiting the site. In these cases, the investigator will fill out the appropriate sections of the investigation form stating that no illegal activity was occurring. These complaints will be documented in the database as unjustified complaints.

### **9.5.3 Follow-up**

Follow-up inspections may be required to verify that an IC/ID has stopped and/or corrective actions required of a responsible party have eliminated the illegal activity and potential to discharge. Follow-up inspections may require all or some of the investigation procedures mentioned in 9.5.1. Follow-up measures may occur at either the end of the initial investigation or as a separate return visit depending on the intensity of requirements placed upon the responsible party. In most cases attempts will be made to have the same investigator perform the investigation and the follow-up to ensure proper corrective action has occurred as discussed. Documentation and photos will be included as part of the follow-up inspection to ensure the corrective action is effective. If the discharge is continuing, has not been cleaned up properly, or the proper BMPs are not in place, enforcement proceedings will begin.

A follow-up inspection may also be initiated by the exceedance of action levels for constituents associated with MS4 field screening and analytical monitoring. In the case of an exceedance of action levels, Port staff will conduct a follow-up inspection within two business days of receipt of the results. The purpose of such an inspection will be to identify a potential source and work toward eliminating the discharge. Table 9-2 presents criteria to determine whether an IC/ID requires a follow-up inspection or not. One or more of the criteria may be met to indicate whether or not a follow-up inspection must occur.

**Table 9-2.** Port Investigation Follow-Up Criteria.

<b>CRITERIA</b>	<b>ACTION</b>
<ul style="list-style-type: none"> <li>• No traces of IC/ID upon inspection.</li> <li>• IC/ID has stopped. Effective BMPs have been instituted to control runoff.</li> </ul>	No Follow-up Inspection Required
<ul style="list-style-type: none"> <li>• Water samples have been collected and results do not exceed dry weather field screening and analytical action levels criteria.</li> </ul>	
<ul style="list-style-type: none"> <li>• IC/ID routed to jurisdiction outside of Port boundaries.</li> </ul>	
<ul style="list-style-type: none"> <li>• Samples have been collected and results exceed dry weather field screening and analytical action level criteria.</li> <li>• Effective BMPs have not been instituted to control discharges.</li> <li>• Discharge has not been stopped.</li> </ul>	Follow-up Inspection Required within Two Business Days

## 9.6 Enforcement

As stated in Section D.4.f of the Permit, the Port must be able to prohibit discharges and enforce stormwater regulations. More specifically, Section J.1.a.3(h) requires the Port to identify the available enforcement mechanisms and how they will be used.

Article 10 enables the Port to prohibit discharges and require management practices so that discharges on tidelands do not cause or contribute to water quality problems. Article 10 establishes enforcement procedures to ensure that IC/ID related activities and responsible dischargers are held accountable for their contributions and /or flows. Enforcement mechanisms applicable to the IC/ID component include the following administrative and judicial authorities. Please refer to either Section 2 of this JUMRP Document or Appendix B (Article 10) for complete details on each item.

### Administrative Authorities

- Cease and Desist Order
- Notice and Order to Abate Violation
- Administrative Citations
- Stop Work Orders
- Nuisance Abatement
- Permit Suspension and Revocation

### Judicial Authorities

- Injunctive or Declaratory Relief
- Civil Penalties and Remedies
- Criminal Arrest or Field Citation

Generally, enforcement actions are triggered during routine inspections or when investigating a complaint. Port staff will make efforts to use escalating enforcement, initially starting with verbal warnings and progressing to administrative written warnings. Please note that both *Cease and Desist Orders* and *Notice and Order to Abate Violations* may be initially administered while on site either verbally or by written document, such as the corrective action portion of an inspection form, which could be the first step in enforcement actions. On occasions where the initial corrective actions are not appropriately addressed or the discharge is not stopped, Port staff may also use



*Administrative Citations* which would either identify a (monetary) fine structure for future non-compliance or, when necessary, include the issuance of a monetary penalty.

For most incidents, the actions stated above are adequate to achieve compliance. However, in instances where a discharge is determined to be a significant threat to human health or the environment, Port staff can also use *Stop Work Orders* or *Nuisance Abatement* to require immediate cessation of the activity. Finally, in severe cases or in instances where responsible parties refuse to comply or appear to act in a threatening manner, Port staff can enlist Harbor Police services and use the judicial authorities identified above.

## 9.7 Illicit Discharge Detection and Elimination Component Effectiveness Assessment

Section I.1 of the Permit requires each jurisdiction to assess the effectiveness of their IC/ID program. Part of the assessment involves using the Permit-required target outcome levels, where applicable. The Port recognizes that conducting regular effectiveness assessments are essential for administering successful programs. The effectiveness assessment enhances program development by providing continual feedback about the Port's strategy to detect and eliminate IC/IDs and refining the strategy when needed.

As discussed in Chapter 13 of this JURMP Document, the Regional Copermittees are developing a process to standardize the reporting and tracking of some of the Copermittee assessment information. Currently the standards are in progress, but are not completed. The Port intends to incorporate these standard assessment mechanisms once they are finalized. In the interim, the Port will use the assessment approach discussed in Section 13.2 to develop JURMP Component assessment and annual assessment targets.

The following section presents the current mechanisms that will be used by the Port to assess the effectiveness of its IC/ID program. Table H-5 located in Appendix H indicates the Port's assessment methods and target metrics for effectiveness assessment.

### 9.7.1 ***Level 1: Compliance with Activity-Based Permit Requirements***

A Level 1 assessment requires the Port to verify that its program meets the applicable Permit requirements. The Port's IC/ID program will incorporate documentation of Level 1 assessment by presenting the applicable Permit requirements and the methods used to maintain and comply with the Permit in Table H-5. Furthermore, Table H-5 indicates anticipated Level 1 targets for achieving Permit requirements.

### **9.7.2 Level 2: Changes in Knowledge/Awareness**

The Level 2 measures attempt to identify changes in knowledge and awareness that occur as a result of the IC/ID program. To accomplish this objective, the Port will develop educational outreach material as part of its Educational Program (Section 10) to highlight stormwater pollution and aim to prevent IC/IDs. Educational material will promote the effective use of BMPs for individuals or organizations when conducting activities which have the potential to discharge pollutants to the MS4 and/or receiving waters. Education may be presented through various media including brochures, presentations, the internet, and/or radio/television advertising. Information pertaining to Level 2 effectiveness will be tracked annually and documented as part of the Education Component Effectiveness Assessment, Table H-6.

### **9.7.3 Level 3: Behavioral Change/BMP Implementation**

A Level 3 assessment is designed to evaluate changes in behavior that lead to the implementation of effective BMPs. The use of proper BMPs are considered effective techniques to reduce discharges of pollutants and improve water quality. During an inspection, ESD staff will make an effort to educate a responsible party of why a discharge is illegal. In addition, ESD staff will educate the responsible party about proper use of BMPs and may require the responsible party to implement BMPs to prevent further discharges of pollutants. As such, ESD staff may need to conduct a follow-up inspection to ensure that BMPs are properly implemented and successful in eliminating an IC/ID. The establishment of BMPs to resolve discharges of pollutants will be tracked by Port staff during initial investigations and follow-up inspections. The Port will assess Level 3 effectiveness by a comparing the number of IC/ID's which require the implementation of BMPs and follow-up inspections verifying effective BMPs have been instituted by the responsible party. Information pertaining to Level 3 effectiveness will be tracked annually and documented in graphical or tabular format within the Port's JURMP Annual Report.

### **9.7.4 Level 4: Load Reduction/Source Abatement**

A Level 4 evaluation is aimed at preventing pollutants from entering the MS4 and receiving waters through the effective use of BMPs. The overall goal of the IC/ID program is to detect and eliminate discharges. Investigation details regarding each IC/ID will note the actions required to eliminate the IC/ID, whether a follow-up investigation was necessary, and if enforcement actions took place. The Port intends to conduct a Level 4 assessment by tracking the number of complaints which require actions to eliminate an IC/ID and whether the complaint has been resolved. IC/IDs will not be considered resolved until effective methods have been established to eliminate the discharge of pollutants. The resolution of these types of IC/IDs will be regarded as a load reduction when quantifiable information is available on the amount of loading that is no longer discharging or source abatement when BMPs have effectively eliminated a discharge but no quantifiable information is available. Information pertaining to Level 4 effectiveness will be tracked annually and documented in graphical or tabular format in the Port's JURMP Annual Report.

### **9.7.5 Level 5: Changes in Urban Runoff and Discharge Quality**

A Level 5 assessment will identify, when applicable, the Port IC/ID program's ability to impact changes in urban runoff and discharge quality. Urban runoff monitoring programs including the Dry Weather Monitoring and MS4 Outfall Monitoring are integral to detecting IC/IDs and determining discharge quality throughout Port tidelands. One possible mechanism for determining Level 5 impacts associated with the IC/ID program is by tracking the number of monitoring sites visited compared to the number of sites where dry, ponded/flowing water is witnessed. Sites where ponded/flowing water is found may indicate an IC/ID. A comparison of the number of sites where there are no discharges to sites with ponded/flowing water will determine if there are more or less illegal discharges occurring annually.

In addition, sites where there is ponded/flowing water, samples will be taken and field screening and lab analysis will be conducted to determine the quality of the discharge. The number of sites where ponded/flowing water is observed will be tracked and discharge water quality recorded. These analyses will be used to evaluate changes in discharge water quality from year to year. Through these programs, the Port will be able to assess how effective the IC/ID program is in reducing the number of IC/IDs as well as assessing the types of discharges occurring. Information pertaining to Level 5 effectiveness will be tracked annually and documented in either a graphical or tabular format in the Port's JURMP Annual Report when applicable.

### **9.7.6 Level 6: Changes in Receiving Water Quality**

A Level 6 assessment involves the measurement of overall water quality in receiving waters and evaluates changes in water quality with respect to established regulatory benchmarks, biological integrity, beneficial use, and protection. There may be occasions when a specific IC/ID, such as an illegally connected sewer line has been identified as the source of a receiving water problem. In those instances receiving water sampling and monitoring may be used to ensure that problem was resolved and water quality data indicates improvements. When applicable, this information will be documented in the Port's JURMP Annual Report.

The purpose of this hierarchal evaluation is to recognize successes of the IC/ID program and identify programmatic elements that need improvement. During each Annual Report, compiled information regarding IC/IDs will be evaluated based on initial targets presented in Table H-5 and a determination will be made on whether the specific activities were effective. The Levels 1—6 effectiveness assessment aims to correlate permit requirements, activities implemented to prevent IC/IDs, and improvements to water quality. Evaluation of Level 1 targets which indicate noncompliance with the permit will necessitate immediate steps to institute necessary requirements. Levels 2—6 assessments will require an evaluation of whether activities are effective at meeting targets and whether targets/measures are appropriate for the specific activity. If it is determined that revisions are required, modifications will be made to activities and/or targets as necessary. Once the analysis is completed, best professional judgment will be utilized to determine if the overall IC/ID Program was effective.

## Chapter 10

## Education Component

### 10.1 Introduction

Education is the foundation of every effective Jurisdictional Urban Runoff Management Program and the basis for changes in behavior at a societal level. The Permit requires that each Copermitttee implement an education program using all media as appropriate to measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience, and measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The Port's education program has been in place for over a decade, and is based on the following mission: to provide memorable experiences that will promote environmental stewardship and sustainable behavior changes which support the health of San Diego Bay. The program is primarily based on community partnerships with local environmental organizations that conduct outreach focused on pollution reduction and water quality. Additionally, a Port staff stormwater training program provides training sessions tailored to municipal departments to ensure that Port personnel understand their specific roles and responsibilities for Permit compliance. This chapter identifies how the education program is tailored towards specific target audiences and how these programs will be evaluated.

In order to facilitate the evaluation process, the education activities listed throughout this chapter have been categorized into specific Activity Types. An evaluation method has been determined for each and is further described in Section 10.4. Table 10-1 provides a list and definition of each Activity Type that will be referenced throughout this chapter.

**Table 10-1.** Education Activity Types.

<b>ACTIVITY TYPE</b>	<b>DEFINITION</b>
Presentation	Training geared towards a target audience which focuses on a specific topic.
Public Seminar	Training offered to the general public which may consist of several topics. This type of training may include a field-based tour.
Curriculum	Teaching materials designed for incorporation into local school districts.
Brochure	A visual training, teaching or informational tool to provide guidance to the reader.
Website / Recorded Message	Information provided via the World Wide Web or on the Port's on-hold phone system.
Cleanup	A coordinated event where volunteers remove trash from an environmentally sensitive area.
Public Service Announcement	Advertising that takes place through billboards, radio or television.
Inspection Training	On-site training conducted by a Port Inspector during regular stormwater compliance inspections.
External Training	Training conducted by outside agencies that Port staff or outside professionals within a specific industry attend.
Facility Training	Training conducted by a Port tenant to their staff as part of their compliance with stormwater regulations.
Port Information Transfer	Training that Port employees conduct as part of their compliance with stormwater regulations. This may include meetings or written standard operating procedures.

Permit section D.5.a describes the general topics that, where applicable, each activity should cover. The Port's education program has been designed to integrate each of these topics into individual training programs for the target communities where appropriate. Table 10-2 provides information on the topics that will be incorporated into education activities and geared towards the target communities.

**Table 10-2. Education Topics For Target Communities.**

		REQUIRED TARGET COMMUNITIES								
		Staff Training								
		Municipal Development Planning	Municipal Construction Activities	Municipal Industrial/Commercial Activities	Municipal Other Activities	Construction Site Owners & Developers	Industrial & Commercial Owners & Operators	Residential Community & General Public	School Children	Underserved Audiences
REQUIRED EDUCATION TOPICS (PERMIT SECTION D.5.a)										
Laws, Regulations, Permits & Requirements	Federal, state and local water quality laws and regulations	X	X	X	X	X	X	X		X
	Statewide General NPDES Permit for Stormwater Discharges Associated with Industrial Activities			X			X			
	Statewide General NPDES Permit for Stormwater Discharges Associated with Construction Activities		X			X				
	Regional Board's General NPDES Permit for Ground Water Dewatering	This topic is not applicable.								
	Regional Board's 401 Water Quality Certification Program		X			X				
	Statewide General NPDES Utility Vault Permit	This topic is not applicable.								
	Requirements of local municipal permits and ordinances	X	X	X	X	X	X	X		X
Best Management Practices	Pollution prevention and safe alternatives	X	X	X	X	X	X	X	X	X
	Good housekeeping	X	X	X	X	X	X	X	X	X
	Proper waste disposal	X	X	X	X	X	X	X	X	X
	Non-stormwater disposal alternatives		X	X	X	X	X	X		X
	Methods to minimize the impact of land development	X	X			X				
	Erosion prevention		X			X				
	Methods to reduce the impact of residential and charity car-washing							X		X
	Preventative maintenance		X	X	X	X	X	X		X
	Equipment/vehicle maintenance and repair		X	X	X	X	X	X		X
	Spill response, containment and recovery		X	X	X	X	X	X		X
	Recycling	X	X	X	X	X	X	X	X	X
BMP maintenance		X	X	X	X	X	X		X	
General Urban Runoff Concepts	Impacts of urban runoff on receiving waters	X	X	X	X	X	X	X	X	X
	Distinction between MS4s and sanitary sewers	X	X	X	X	X	X	X	X	X
	BMP types	X	X	X	X	X	X	X	X	X
	Short and long-term water quality impacts associated with urbanization	X	X	X	X	X	X	X		X
	Non-stormwater discharge prohibitions	X	X	X	X	X	X	X		X
	How to conduct a stormwater inspection				X					
Other Topics	Public reporting mechanism	X	X	X	X	X	X	X		X
	Water quality awareness for Emergency/1 <sup>st</sup> Responders				X					
	ICID observations and follow-up				X					
	Potable water discharges to the MS4		X	X	X	X	X	X		
	Dechlorination techniques	This topic is not applicable.								
	Hydrostatic testing	This topic is not applicable.								
	Integrated Pest Management			X	X		X			
	Benefits of native vegetation	X		X	X		X			
	Water conservation	X		X	X		X			
	Alternative materials to maintain peak runoff values		X	X	X	X	X			
Traffic reduction, alternative fuel use	X	X	X	X	X	X	X		X	

## 10.2 Staff Training

Training Port staff about stormwater and pollution prevention is fundamental in the protection and improvement of stormwater quality in and around Port tidelands. Some Port employees will receive basic training to increase their general awareness of storm water issues on an annual basis. Other Port employees will receive more intensive training geared to their specific responsibilities on a frequent basis, depending on their responsibilities. Employees with job responsibilities related to the high priority municipal areas and activities (e.g., wharfingers, maintenance crews, etc.) and development will receive more frequent training. All municipal staff will be notified of the educational events via inter-departmental announcements at staff meeting.

### 10.2.1 Municipal Development Planning

This target audience includes Port staff within the Land Use Planning Department. The Port will conduct education efforts focusing on new development and redevelopment projects and their relationship to urban runoff impacts on water quality. These programs will occur at least once during the Permit cycle and will include information on LID, the Port SUSMP and the incorporation of stormwater language into approvals. The objective of the education efforts is to increase the knowledge of Port decision-makers and Port staff regarding the potential water quality impacts associated with development projects and the means of preventing or minimizing those impacts. Table 10-3 identifies the activity types most applicable for educating the Port's Municipal Development Planning staff.

**Table 10-3.** Proposed Education For The Port's Municipal Development Planning Staff.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
Land Use Planning LID Training	Presentation	Once during Permit Cycle	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Federal, state, and local regulations applicable to development projects;</li> <li>How to integrate LID BMP requirements into the local regulatory program(s) and requirements.</li> </ul>
Land Use Planning Stormwater Training	Presentation	Once during Permit Cycle	<ul style="list-style-type: none"> <li>Required topics (Table 10-2); federal, state, and local regulations applicable to development projects;</li> <li>The connection between land use decisions and short and long-term water quality impacts;</li> <li>How to integrate LID BMP requirements into the local regulatory program(s) and requirements;</li> <li>Methods of minimizing impacts to receiving water quality resulting from development, including: (a) stormwater management plan development and review, (b) methods to control downstream erosion impacts, (c) identification of pollutants of concern, (d) LID BMP techniques, (e) source control BMPs, and (f) selection of the most effective treatment control BMPs for the pollutants of concern.</li> </ul>
Stormwater Fact Sheet	Brochure	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>LID requirements.</li> </ul>

### 10.2.2 *Municipal Construction Activities*

This target audience includes construction and building staff, inspectors and other responsible construction staff within the Port’s Construction Support and Engineering Departments. At a minimum, the Port will conduct education efforts annually, prior to the rainy season, focused on construction activities and their relationship to urban runoff impacts on water quality. The education programs will create an awareness of pollutants originating from construction sites and solutions necessary to minimize pollutants. Table 10-4 identifies the activity types most applicable for educating the Port’s Municipal Construction staff.

**Table 10-4.** Proposed Education For The Port’s Municipal Construction Staff.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
Construction and Engineering Refresher Training	Presentation	Annually, prior to each rainy season.	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Federal, state and local laws and regulations applicable to construction and grading activities;</li> <li>• The connection between construction activities and water quality impacts;</li> <li>• Proper implementation of erosion and sediment control and other BMPs to minimize the impacts to receiving water quality resulting from construction activities;</li> <li>• The Copermittee's inspection, plan review, and enforcement policies and procedures to verify consistent application;</li> <li>• Current advancements in BMP technologies;</li> <li>• SUSMP requirements including treatment options, LID BMPs, source control, and applicable tracking mechanisms.</li> </ul>
Meeting with Engineering Staff	Port Information Transfer	Quarterly	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Coordination to identify projects and ensure compliance with stormwater regulations.</li> </ul>

### 10.2.3 *Municipal Industrial/Commercial Activities*

#### Environmental Services Department

This target audience includes employees within the Port’s Environmental Services Department who are responsible for conducting stormwater compliance inspections and enforcement. These employees manage the Port’s Industrial/Commercial Stormwater Program, attend regional Copermittee meetings focused on these topics, and remain informed of all current and upcoming regulations concerning these topics as part of their daily job duties. Training for this target audience will take place at least once a year. Table 10-5 identifies the activity types most applicable for educating the Port stormwater inspection staff.



**Table 10-5.** Proposed Education for Port Stormwater Inspection Staff.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
Building Industry Association of San Diego County training seminars	External Training	Annually	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>SWPPP preparation, monitoring, implementation and compliance;</li> <li>Sampling requirements.</li> </ul>
HAZWOPER Refresher Course	External Training	Annually	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>BMP selection and implementation for hazardous materials storage.</li> </ul>
Standard Operating Procedures	Port Information Transfer	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2).</li> <li>Inspection and enforcement procedures;</li> <li>Reviewing monitoring data.</li> </ul>

### Marine Operations Department

This target audience includes staff responsible for the Port's compliance with the Wet Weather Monitoring Program requirements. Training for this target audience will take place at least once a year. Table 10-6 identifies the activity types most applicable for educating the Port's Municipal Construction staff.

**Table 10-6.** Proposed Education For The Port's Municipal Construction Staff.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
Stormwater Management for Marine Operators	Presentation	Annually, prior to the rainy season.	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Water quality laws and regulations applicable to the Wet Weather Monitoring Program;</li> <li>Wet Weather Program observation forms;</li> <li>Non-stormwater discharge observations and procedures.</li> </ul>

## **10.2.4 Municipal Other Activities**

### General Port Staff

This target audience includes all Port departments not directly related to environmental issues. Table 10-7 identifies the activity types most applicable for educating the General Port staff.

**Table 10-7.** Proposed Education For General Port Staff.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
Port Staff Environmental Training Program	Presentation	As Needed	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Local natural resources;</li> <li>• Wildlife;</li> <li>• Activity specific BMPs.</li> </ul>
Port Staff New Employee Orientation	Presentation	Ongoing with new employees	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Local natural resources;</li> <li>• Wildlife;</li> <li>• Activity specific BMPs.</li> </ul>
Meeting with Real Estate Staff	Port Information Transfer	Quarterly	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Activity specific BMPs;</li> <li>• Coordination to identify projects and ensure compliance with stormwater regulations.</li> </ul>

General Services Staff

This target audience includes Port staff responsible for the maintenance and upkeep of the Port’s parks, facilities, special events, and infrastructure. Training for this target audience will take place at least once a year. Table 10-8 identifies the activity types most applicable for educating the General Services staff.

**Table 10-8.** Proposed Education For General Services Staff.

Potential Activity	Activity Type	Frequency	Topics Covered
Integrated Pest Management for Landscape Professionals	Public Seminar	Annually	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Activity specific BMPs;</li> <li>• Laws and regulations applicable to pesticide use;</li> <li>• The connection between water quality impacts and pesticide use.</li> </ul>
Pesticide Handler’s License Annual Trainings	External Training	Annually	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Activity specific BMPs.</li> </ul>
Staff Meeting with General Services Department	Port Information Transfer	Quarterly	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Activity specific BMPs;</li> <li>• Coordination to identify projects and ensure compliance with stormwater regulations.</li> </ul>

## 10.3 Educational Outreach

The Port will conduct educational outreach focused on pollution prevention in urban runoff. The objective of these education efforts is to increase the knowledge of construction site owners and developers, industrial and commercial owners and operators, the residential community and school children. The program is designed to provide useful guidance in developing outreach and training programs that will support the successful implementation of the Port's JURMP and to maximize consistency in information and evaluation.

### ***10.3.1 Construction Site Owners and Developers***

One of the most important aspects to minimizing watershed pollution is proper environmental training and implementation of appropriate construction site BMPs. Construction and development activities can alter natural drainage patterns and contribute pollutants to stormwater. Improperly managed stormwater runoff from construction sites can be a significant source of water pollution causing habitat disturbance and destruction, decline in wildlife, and restrictions on water use and enjoyment of these resources. Pollutants of concern typically associated with construction activities include soil, sediment, debris, hazardous materials, concrete and slurry, wood products, and recyclable materials.

The Port's construction education will specifically address the need for training in urban runoff management for construction personnel by providing or supporting training efforts directed at the construction industry. Training for this target audience will take place at least once a year. Education efforts will take place throughout the permitting and construction process, and will focus on activities during the construction phase and post-construction activities over the life of the project. This target audience includes Port Tenants and project applicants, developers, contractors, property owners, community planning groups, and other responsible parties. Table 10-9 identifies the activity types most applicable for educating construction site owners and developers.

**Table 10-9.** Proposed Education For Construction Site Owners And Developers.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
Instruction during inspections by Port staff	Inspection Training	Annually	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• Federal, state, and local laws and regulations applicable to development and construction projects;</li> <li>• The connection between land use decisions and construction activities and water quality impacts;</li> <li>• How to integrate LID BMP requirements into the local regulatory program(s) and requirements;</li> <li>• The Copermittee’s inspection, plan review, and enforcement policies and procedures to verify consistent application;</li> <li>• Current advancements in BMP technologies;</li> <li>• SUSMP requirements including treatment options, LID BMPs, source control, and applicable tracking mechanisms;</li> <li>• The importance of educating all construction workers in the field about stormwater issues and BMPs;</li> <li>• Methods of minimizing impacts to receiving water quality resulting from construction and development, including: (1) stormwater management plan development and review, (2) methods to control downstream erosion impacts (3) proper implementation of sediment control, (4) identification of pollutants of concern, (5) LID BMP techniques, (6) source control BMPs, and (7) selection of the most effective treatment control BMPs for the pollutants of concern.</li> </ul>
Building Industry Association of San Diego County training seminars	Public Seminar	Annually	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• SWPPP preparation, monitoring, implementation and compliance;</li> <li>• Permit requirements and sampling.</li> </ul>
Port’s SWPPP Template	Port Information Transfer	As Needed	<ul style="list-style-type: none"> <li>• Required topics (Table 10-2);</li> <li>• SWPPP preparation and compliance.</li> </ul>

### 10.3.2 Industrial and Commercial Owners and Operators

Industrial and commercial facilities cover a diverse arena of activities and practices, but the educational approaches for both are similar. A key to industrial/commercial education is to disseminate information through as many avenues as possible and educate smaller trade and merchant associations, as well as individual facilities and mobile businesses about industry or business-specific BMPs. Table 10-10 identifies the activity types most applicable for educating industrial and commercial owners and operators.

**Table 10-10.** Proposed Education For Industrial And Commercial Owners And Operators.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
Educational materials and instruction during inspections by Port staff	Inspection Training	Annually	<ul style="list-style-type: none"> <li>Required topics (Table 10-2)</li> </ul>
Industrial and Commercial Facility Training Programs	Facility Training	Annually	<ul style="list-style-type: none"> <li>Required topics (Table 10-2)</li> </ul>
Marina Inspection Program	Inspection Training	At least twice a year	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Safe boating practices.</li> </ul>
<i>Preventing Stormwater Pollution: A Guide For Businesses</i>	Brochure	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Industry-specific BMPs;</li> <li>Local contact and disposal information.</li> </ul>
Integrated Pest Management for Landscape Professionals	Public Seminar	Annually	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Proper storage, handling and use of pesticides;</li> <li>Laws and regulations applicable to pesticide use;</li> <li>The connection between water quality impacts and pesticide use.</li> </ul>
Stormwater Training (provided by Port staff)	Presentation	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Local natural resources;</li> <li>Wildlife.</li> </ul>
<i>Negocio Verde</i> Green Business Program	Presentation	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> </ul>
County of San Diego Online BMP Guide	Website / Recorded Message	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2).</li> </ul>

### 10.3.3 Residential Community and General Public

The goal of the Port’s education program for the residential community and the general public is to minimize and reduce the impact of pollution on San Diego Bay. Outreach to this target audience is intended to reach the entire San Diego Bay Watershed since the Port does not have a residential population. This portion of the Port’s education program is focused on spreading awareness of the many environmental issues affecting both the Port and San Diego Bay. The program was created with the following objectives in mind: 1) Stimulate an interest in San Diego Bay’s environment throughout the local community by providing interactive venues for adults to learn about local environmental issues; and 2) Expose the vulnerability of the bay’s natural resources and reveal how they can be protected by pollution prevention. It is hoped that by supporting these programs, participants will continue to extend these messages by not only adopting the behaviors, but also sharing what they have learned with others. Table 10-11 identifies the activity types most applicable for educating the residential community and general public.

**Table 10-11.** Proposed Education For The Residential Community And General Public.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
Cleanup Events	Cleanup	Three times per year	<ul style="list-style-type: none"> <li>Required topics (Table 10-2).</li> </ul>
Public Seminars	Public Seminar	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Wildlife;</li> <li>Watershed issues.</li> </ul>
Tours of San Diego Bay	Public Seminar	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Environmental history;</li> <li>Wildlife;</li> <li>Watershed issues.</li> </ul>
<i>Preventing Stormwater Pollution: A Residential Guide</i>	Brochure	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Watershed issues.</li> </ul>
<i>Preventing Stormwater Pollution: A Guide to Integrated Pest Management</i>	Brochure	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Proper storage, handling and use of pesticides;</li> <li>Non-toxic or less-toxic pesticide alternatives;</li> <li>Strategies to reduce the need for pesticides;</li> <li>The connection between water quality impacts and pesticide use.</li> </ul>
<i>San Diego Bay Boater’s Guide</i>	Brochure	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Safe boating practices.</li> </ul>
Speaker’s Bureau	Presentation	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>History of water quality impacts on San Diego Bay;</li> <li>Watershed issues.</li> </ul>
On-Hold Phone Messages	Website / Recorded Message	As Needed	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Watershed issues;</li> </ul>
City of San Diego’s Think Blue Campaign	Public Service Announcement	Ongoing	<ul style="list-style-type: none"> <li>Required topics (Table 10-2);</li> <li>Watershed issues.</li> </ul>

### 10.3.4 School Children

Schools are a key segment of the broad-based general population in the tidelands and the San Diego Bay watershed. It is expected that children will share what they have learned about environmental issues in San Diego Bay with their families, thereby increasing the number of people affected by the Port’s education program. Although there are no schools in the Port’s jurisdiction, the Port recognizes the unique opportunity schools provide for reaching children with environmental education. For this reason, the Port funds outreach programs in schools throughout the San Diego Bay WMA. Table 10-12 identifies the activity types most applicable for educating school children.

**Table 10-12.** Proposed Education For School Children.

POTENTIAL ACTIVITY	ACTIVITY TYPE	FREQUENCY	TOPICS COVERED
School Partnership Program	Presentation	Ongoing	Required topics (Table 10-2); Wildlife; Watershed issues.
Project SWELL	Curriculum	Ongoing	Required topics (Table 10-2); Wildlife; Watershed issues.
High School Partnerships	Curriculum	Ongoing	Required topics (Table 10-2); Wildlife; Watershed issues.
Take Your Child To Work Day	Public Seminar	Ongoing	Required topics (Table 10-2); Wildlife; Watershed issues.

The Port’s School Partnership Program primarily addresses elementary students within seven partner elementary schools in close proximity to the Bay, however, efforts have been made to extend this program to other schools throughout the San Diego Bay WMA. The following seven schools are located within the five Port member cities and take part in this program: Bayside Elementary (Imperial Beach), Harborside Elementary (Chula Vista), Kimball Elementary (National City), Logan Elementary (San Diego), Perkins Elementary (San Diego), Silver Gate Elementary (San Diego), and Silver Strand Elementary (Coronado). Several of the participating environmental organizations also receive enough funding from the Port to enable them to extend their programs to additional schools within the San Diego Bay WMA. The program consists of partnerships with organizations that provide environmental education based on San Diego Bay to specific grades within each elementary school. Table 10-13 provides a brief description of this program.

**Table 10-13.** The Port’s School Partnership Program.

PARTNER ORGANIZATION	PROGRAM DESCRIPTION	TARGET GRADE
WILD COAST	Students visit Bayside Park to learn about the protection of endangered Green sea turtles and dig in the sand for sea turtle “eggs” (ping pong balls).	K
The Green Machine	Students visit Tidelands Park to learn about Integrated Pest Management, the water cycle and soil science.	1
Resource Conservation District	Students visit Tidelands Park to conduct experiments with The Enviroscape, an urban runoff model.	2
Chula Vista Nature Center	Students visit the Nature Center to learn about San Diego Bay wildlife and its protection.	3
Aquatic Adventures	Students visit a South Bay wetlands area to conduct field experiments regarding wetlands wildlife and remove invasive plants.	4
Maritime Museum of San Diego	Students tour San Diego Bay aboard the <i>Pilot</i> Boat to learn about environmental history and water quality.	5
ProPeninsula	Students visit the sea turtle research site to observe scientists conduct their studies and learn how to protect sea turtle habitat.	6

### 10.3.5 Underserved Audiences

The Permit requires the Port’s education program to include underserved target audiences, including various ethnic and socioeconomic groups and mobile sources. Due to the unique nature of the Port and the lack of a residential population on Port tidelands, a variety of ethnic and socioeconomic groups do not exist within the Port’s jurisdiction. However, these target audiences will be included within the Port’s outreach efforts geared to the Residential Community, General Public and School Children within the San Diego Bay Watershed. Table 10-14 identifies the activity types that the Port may use to provide outreach to underserved audiences.

**Table 10-14.** Training Opportunities For Underserved Audiences.

OPPORTUNITY TO REACH UNDERSERVED AUDIENCES	DESCRIPTION OF HOW THE OPPORTUNITY CAN BE INTEGRATED INTO PORT OUTREACH PROGRAMS.
Title I Schools	Six of the seven schools within the Port’s School Partnership Program are classified as Title I Schools, meaning that the schools receive additional funding because their demographics are comprised of major ethnic/racial groups, economically disadvantaged students, limited English proficient students, and students with disabilities. Additionally, the Port’s partnership with the Maritime Museum of San Diego extends their environmental education program to Title I schools beyond those within the Port’s School Partnership Program.
Spanish Language Outreach	The Port participates in San Diego County’s regional Outreach Workgroup, which is developing a joint outreach strategy which will focus on Spanish language outreach to San Diego County’s Latino community. This strategy may include events, printed material and business and community partnerships.
<i>Negocio Verde</i> Green Business Program	The Port participates in San Diego County’s <i>Negocio Verde</i> Green Business Program, which provides Spanish-language training opportunities and translations to San Diego County’s Latino community. This program may include events, printed material and business and community partnerships.
Mobile Businesses	The Port will cooperate with the Copermitees in developing and implementing education programs for mobile businesses by participating in the County of San Diego’s Mobile Business Strategy. This outreach will be conducted on a regional scale.



## 10.4 Education Component Effectiveness

An effective assessment is an integral part of a successful Education program because it evaluates the outcomes of management decisions and tracks the progress of program activities. The Port's education program is assessed annually and modified as needed to meet the requirements of the Permit and to achieve the ultimate goals of increasing knowledge and improving behavior. As discussed in Chapter 13 of this JURMP Document, the Regional Copermittees are developing a process to standardize the reporting and tracking of some of the Copermittee assessment information. Currently the standards are in progress, but are not completed. The Port intends to incorporate these standard assessment mechanisms once they are finalized. In the interim, the Port will use the assessment approach discussed in Section 13.2 to develop the Education Component assessment and annual assessment targets.

The following section presents the current mechanisms that will be used by the Port to annually assess the effectiveness of activities within the education program, and the education component as a whole. Sections 10.4.1 through 10.4.4 below provide a description of how the activities will be assessed, and Section 10.4.5 explains the process of the overall education program assessment. Table H-6 (Appendix H) identifies the Port's assessment methods and target metrics for determining effectiveness of activities within the education component. The assessments will be conducted through the comparison of actual results with targets listed in this table. Results that are equal to or higher than the targets will be reported as effective activities and results that are below the targets will be reassessed and modified as needed. The annual assessments will be reported on in Annual Reports in a format similar to Table H-6.

### **10.4.1 Level 1: Compliance with Activity-Based Permit Requirements**

A Level 1 assessment requires the Port to verify that the Education Program meets the applicable Permit requirements. The Port's Education Program will incorporate documentation of Level 1 assessment by presenting the applicable Permit requirements and the methods used to maintain and comply with the Permit requirements in Table H-6. Table H-6 also presents anticipated Level 1 targets for achieving the Permit requirements, thereby providing a means to report effectiveness of the activities.

### **10.4.2 Level 2: Changes in Knowledge/Awareness**

The most immediate and basic outcome of many stormwater education programs is a change in the knowledge, awareness, or attitudes of target audiences. Once obtained, these changes form the basis of behavioral change and therefore of BMP implementation. One method to assess Level 2 is the implementation of pre- and post-tests as part of specific education

programs, and this method is integrated into education programs when applicable. Other methods that are useful in the assessment of Level 2 include facility training and surveys. The Port may draw upon data from a variety of surveys, including county-wide surveys, City of San Diego Think Blue surveys, or the Port’s Public Opinion surveys. However, these surveys are not conducted on a project by project basis, and are not guaranteed to be conducted annually. Therefore, those programs requiring this type of assessment will be evaluated when survey information is available. Table 10-16 presents anticipated targets for achieving Level 2 and provides a means to report effectiveness of the activities in achieving these targets in Annual Reports. An annual strategy for Level 2 assessment is presented in Table H-6.

**Table 10-16. Standardized Targets For Education Activities.**

ACTIVITY TYPE	ASSESSMENT METHOD	LEVEL 2 TARGETS	LEVEL 3 TARGETS
Presentation	Pre- and Post-tests	Knowledge is increased by 20%.	N/A
Public Seminar	Survey	Survey indicates that 50% of participants learned useful information.	N/A
Curriculum	Pre- and Post-tests	Knowledge is increased by 20%.	N/A
Brochure	Survey*	Survey indicates that 50% of participants believe protecting water quality is important.	N/A
Website / Recorded Message	Survey*	Survey indicates that 50% of participants believe protecting water quality is important.	N/A
Cleanup	Sign-in Sheet	N/A	The number of participants is increased annually by 10%.
Public Service Announcement	Survey*	Survey indicates that 50% of participants believe protecting water quality is important.	N/A
Inspection Training	Permit Compliance	100% of high priority sites receive an inspection.	100% of sites are in compliance.
External Training	Permit Compliance	N/A	100% of sites (including municipal) are in compliance.
Facility Training	Permit Compliance	100% of high priority sites conduct staff training.	100% of sites are in compliance.
Port Information Transer	Permit Compliance	100% of required meetings and/or standard operating procedures occurred.	N/A

\* Surveys may include Port-sponsored surveys or those conducted on a regional scale, and may not be conducted on a project by project basis or annually. Surveys will only be used as an assessment tool when feasible.

### **10.4.3 Level 3: Behavioral Change/BMP Implementation**

A Level 3 assessment is designed to evaluate changes in behavior that lead to the implementation of effective BMPs. The use of proper BMPs are considered effective techniques to reduce discharges of pollutants and improve water quality. Assessment of actual changes in behavior are difficult and may not be applicable to all types of outreach programs. For example, collecting data on behavior changes in members of the general public who attend a Port-sponsored seminar is not statistically valid because these participants’ behaviors cannot be observed once they leave the event. Therefore, Level 3 will only be assessed for particular program types that facilitate this level of assessment. Table H-6 presents anticipated targets for the activities where the achievement of Level 3 is possible, thereby providing a means to report effectiveness of the activities in achieving these targets in Annual Reports. Table 10-16 is

referenced in Table H-6, and provides a description of the activity types utilized throughout this chapter and their corresponding assessment method and targeted outcome at each level.

#### **10.4.4 Level 4–6**

Levels 4-6 are not feasible to assess as part of the Education Component, but opportunities to integrate an educational component into other activities that may reach Levels 4-6 will be explored and reported on in Annual Reports when applicable.

#### **10.4.5 Overall Education Component Assessment**

The purpose of this hierarchal evaluation is to recognize successes of the JURMP education component and identify areas that need improvement. The overall evaluation of the education program's effectiveness will be determined by assessing the activities that take place throughout each reporting period. The results of these activities will be compared to the targets provided in Table H-6, and a determination will be made on whether the activity was effective. The assessment will consider the amount of activities determined to be effective, the number of activities conducted overall, how well the activities covered the required topics, and whether the required target audiences were reached. Taking the entire aforementioned item into consideration, best professional judgment will be utilized to determine if the overall Education Component was effective.

## 11.1 Introduction

Public participation involves evaluating input from the public as part of the decision-making process. It includes all aspects of identifying problems and opportunities, developing alternatives and making decisions. In this definition, the public is any individual or group of individuals, organization or political entity with an interest in a decision's outcome. They are often referred to collectively as stakeholders. Utilizing an effective stakeholder public participation process enhances the effectiveness of the Port's Stormwater program for the following reasons:

- It encourages appropriate modification of policies and procedures before problems develop;
- It contributes to sustainable decision making;
- It provides an early warning system for public concerns and needs;
- It presents an opportunity for communication between decision makers and the public;
- It promotes understanding and acceptance of potentially controversial issues by the public; and
- It helps increase public understanding and support for the Port's environmental goals.

## 11.2 Public Participation Levels

Effective public participation is driven by ensuring that the stakeholders are engaged at the appropriate level of decision-making. Public input into any decision-making process can be as simple as providing public notification that an initiative will occur or a complex process that requires them to be intrinsically involved and responsible for the final decision-based outcome, or any level in between. The proper identification of the role of the public is crucial to ensuring the success of any initiative for which public input is sought.

Prior to designing and implementing a public participation plan, each project or initiative must be analyzed. The benefits of proactive engagement of the public versus the risks of having no involvement or inappropriate participation must be considered. The following components are analyzed to facilitate the determination of the appropriate public participation level:

1. Identification of stakeholders. Examples of stakeholders within the community include non-profit organizations, residents, governmental agencies, utility companies, and businesses.
2. Identification of values represented by stakeholders. Examples of values that may be held by the community include aesthetic quality, environmental quality, sustainability, economic vitality, or public health and safety.
3. Selection of the public's role in the decision-making. Contributing factors that define the role of the public include regulations and processes, internal and external expectations, timing and organization. Table 11-1 provides the spectrum of increasing levels of public participation that can be used for any individual public participation opportunities.
4. Identification of techniques that support the public participation objectives. Examples of techniques include news releases, fact sheets, websites, open houses, and public meetings.

**Table 11-1.** Levels Of Public Participation.

<b>INCREASING LEVELS OF PUBLIC PARTICIPATION OBJECTIVES</b>				
<b>INFORM</b>	<b>CONSULT</b>	<b>INVOLVE</b>	<b>COLLABORATE</b>	<b>EMPOWER</b>
To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution	To place final decision-making in the hands of the public.

### 11.3 Public Participation Opportunities

US EPA guidelines recommend that the public be included in developing, implementing, and reviewing stormwater management programs, and that the public participation process should make efforts to reach out and engage various socioeconomic groups. The Port JURMP Public Participation Component is intended to identify the appropriate level at which to involve stakeholders in decision-making for the various environmental and stormwater initiatives, activities, and policies that are developed and implemented during the life of the Municipal Permit. The process described in Section 11.2 will be used to the maximum extent practicable.

This section identifies the current opportunities for members of the public to participate in decisions associated with the Port JURMP. Each opportunity is described below, along with a table summarizing the process and assessment the Port used to determine the appropriate stakeholders to address and the decision-making level needed. Other opportunities for public

participation will be identified and evaluated as the Port JURMP program continues. The levels of public participation identified in Table 11-1 will be referenced throughout this section to properly define and effectively assess the Port’s Public Participation efforts.

A) Environmental Policy and Committee

Public Participation Objective: Collaborate

In 2006, the Board of Port Commissioners (BPC) approved an Environmental Policy to provide funding and decision-making direction necessary to select and execute projects aimed at improving the condition of the Bay and Port tidelands. The Policy identified the development of an Environmental Committee (decision-making) and an Environmental Fund (funding mechanism) as the critical means to successful execution. The Port Environmental Committee (Committee) was formed in 2006 as a result of the Policy. This Committee is advisory in nature and includes a balance of resource and regulatory representatives from academia, environmental advocacy groups, government agencies, and Port Tenants. The purpose of the Environmental Committee is to identify and evaluate projects and recommend that the BPC allocate funding to complete the recommended projects. The goal of the Committee is to identify, rank and complete projects. Table 11-2 identifies the outcomes of the public participation analysis that was conducted during the establishment of the Environmental Committee.

**Table 11-2.** Environmental Policy And Committee Public Participation Evaluation.

<b>Component</b>	<b>Outcome</b>
Identification of stakeholders	A myriad of stakeholders are concerned about the environmental quality of the bay, including environmental non-profit organizations, regulatory agencies, and Port tenants.
Identification of values represented by stakeholders	The primary value represented by stakeholders is environmental protection.
Selection of the public’s role in decision making	Collaboration was selected as the public participation objective for this committee because the decisions made by this group affect a large, important and sensitive area of the San Diego region and affect many stakeholders. Although final decisions must be made by the BPC, the BPC is invested in incorporating opinions of the stakeholders into the process.
Identification of techniques	Regular committee meetings were determined to be the appropriate method of public participation, because all parties will have an opportunity to provide feedback directly to the BPC.

B) Customer Service Committee

Public Participation Objective: Collaborate

Surveys of how the public perceives stormwater management and environmental issues can foster better planning and management programs. They also provide constructive information on the values and goals of stakeholders. The Port conducts a Customer Satisfaction Survey at least once every three years. This survey gathers information on the public’s opinions on environmental conditions in San Diego Bay and the Port’s environmental management. The information is analyzed in order to identify gaps in public perception. The raw data is presented to a Customer Service Committee, consisting of Port employees selected from various departments throughout the Port. This Committee serves in an advisory capacity to Port managers to assist them in developing action items directed at improving public perceptions. Table 11-3 identifies the outcomes of the public participation analysis that was conducted during the establishment of the Customer Service Committee.

**Table 11-3.** Customer Service Committee Public Participation Evaluation.

Component	Outcome
Identification of stakeholders	Key stakeholders are primarily Port employees, who are responsible for influencing positive public perceptions.
Identification of values represented by stakeholders	The primary value of Port employees is public perception of the Port.
Selection of the public’s role in decision making	Collaboration was selected as the public participation objective for this committee because Port employees will be responsible for implementing the proposed action items. Port managers will look to this committee for advice and to improve public perceptions.
Identification of techniques	Regular committee meetings were determined to be the appropriate method of public participation, because all parties will have an open opportunity to provide feedback on a regular basis.

C) Board of Port Commissioner Meetings

Public Participation Objective: Consult

The BPC holds monthly board meetings. These meetings are open to the public and provide opportunities for stakeholders to voice opinions and concerns regarding any aspects of the Port’s business during the “open comment” period. Members of the environmental community and the public frequently participate and the BPC acknowledges their opinions, often incorporating them into the decision-making process. Table 11-4 identifies the outcomes of the public participation analysis that was conducted during the establishment of the BPC Meetings.

**Table 11-4.** BPC Meetings Public Participation Evaluation.

<b>Component</b>	<b>Outcome</b>
Identification of stakeholders	Key stakeholders include residents, Port tenants, non-profit organizations and advocacy groups, and businesses wishing to conduct business with the Port.
Identification of values represented by stakeholders	Many different values are represented by stakeholders, including environmental protection, economic vitality, urban development, aesthetic quality, and public health and safety.
Selection of the public's role in decision making	Consultation was selected as the public participation objective for these meetings because of regulatory constraints that prevent the public from being involved in a higher capacity.
Identification of techniques	Public comment at public meetings was determined to be the appropriate method of public participation, because it provides an opportunity for any member of the public to provide feedback. However, all decision-making authority is given to the BPC.

D) "Safer Alternatives to Copper Antifouling Paints" Project

Public Participation Objective: Involve

In 2005, the EPA approved the TMDL for copper in Shelter Island Yacht Basin. The TMDL called for a 76% reduction of copper in the water column. The primary source of copper has been identified as passive leaching from copper hull paint and underwater hull cleaning. The TMDL has identified the Port and Shelter Island Yacht Basin marinas and yacht clubs as responsible parties, and requires them to reduce copper loading. The Port has received a grant to identify viable alternatives to copper-based hull paints. A key element of the grant project is the development of a stakeholder workgroup that will provide input on the project's direction and outcomes. The workgroup will also lead to widespread support to promote behavior changes. Table 11-5 identifies the outcomes of the public participation analysis that was conducted during the development of the project's Stakeholder Workgroups.



**Table 11-5.** Copper TMDL Stakeholder Workgroups Public Participation Evaluation.

Component	Outcome
Identification of stakeholders	Key stakeholders are Port employees, marinas, boatyards, environmental groups and local and state regulatory agencies who are concerned about copper loading in San Diego Bay.
Identification of values represented by stakeholders	The primary values of this effort are environmental protection and restoration of water quality beneficial uses.
Selection of the public's role in decision making	Involvement was selected as the appropriate public participation method because the Port will work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.
Identification of techniques	Regular Workgroup meetings were determined to be the appropriate method of public participation, because all parties will have an open opportunity to provide feedback on a regular basis. Informational presentations at BPC meetings and during other public forums will also be used to provide updates of Workgroup decisions.

## 11.4 Public Participation Component Effectiveness Assessment

An effective program assessment is an integral part of a successful Public Participation Component because it evaluates the outcomes of management decisions and tracks the progress of program activities. The Port's Public Participation Component is assessed annually and modified as needed to meet the requirements of the Municipal Permit and to achieve the ultimate goal of involving the public in the decision-making process.

The process used to identify the appropriate level of public input (Section 11.2) provides an ideal method to evaluate the success of public participation projects. Prior to embarking on a public participation opportunity, the Port will establish a target defining the level at which the public is invited to be involved. A Level 2 target outcome will be addressed through the involvement of all levels of public input, because the simple action of participating in the decision-making process results in changes in knowledge and awareness. Annual assessments will evaluate how successful the Port was in achieving the target public participation level (Table 11-6). Assessment mechanisms could include the number of people present at meetings, number of comments received, or an observed shift in direction of policy/regulation based on public input.

**Table 11-6.** Public Participation Component Level 2 Effectiveness Assessment.

OPPORTUNITY	TARGET	STATUS
Title of opportunity available for public participation	The level of public participation that has been selected from Table 11-1	An update on the level of public participation occurring and how it results in a change in knowledge or behavior, where applicable. Description of how public input achieved the anticipated target.

## 12.1 Introduction

In accordance with the requirements in Section G of the Municipal Stormwater Permit, this section of the Port JURMP describes the manner by which the Port secures the resources necessary to meet the requirements of the Permit and also outlines the proposed strategy for conducting a fiscal analysis of the Urban Runoff Management Program in its entirety. The Port has established an Urban Runoff Management Program that provides environmental benefits and is cost-effective for the Port and its tenants. In order to demonstrate sufficient financial resources to implement the Program, the Port will conduct an annual fiscal analysis as part of its JURMP Annual Report.

## 12.2 Fiscal Analysis Methods

During the previous Permit, the Port developed an approach to conducting a fiscal assessment that met the Permit requirements. This approach was reviewed and determined to adequately fulfill the requirements of this new Permit until the standard format for conducting fiscal analysis as described in Section 12.3 below, is required (January 2010). After that date, the Port will utilize the required Copermitttee standard format. The details of the Port's current fiscal assessment approach, including funding sources, expenditures, and budget information is described within this section.

The current fiscal approach evaluates the requirements for implementing the Port's Urban Runoff Management Program and assesses the costs associated with the program elements. The approach prioritizes the program by assessing environmental, hydrological, infrastructure, and tenant management improvement needs, as well as their associated fiscal requirements. Once priorities are recognized, the various components and their financial implications become clear, and budgets and funding can be appropriately allocated.

### 12.2.1 Funding Sources

The Port is accounted for as an enterprise fund and generates revenue from three major revenue sources: 1) charges received by Marine Operations; 2) charges received by Real Estate Operations; and 3) reimbursement for services charged to the San Diego County Regional Airport Authority. The revenues currently generated by the Port are sufficient to implement the Port's Urban Runoff Management Program. Each of these revenue sources are more fully discussed below, including and legal restrictions on the uses of these funds.

Maritime operations revenue includes charges for wharfage, dockage, storage, passenger fees, and other marine services subject to Port tariffs filed with the Federal Maritime Commission. Wharfage revenue is the charge assessed to both inbound and outbound cargo when crossing over Port property. Dockage fees are the charges assessed against a vessel for the right to berth at a wharf or pier of the Port.

Real estate operations revenue is generally derived from flat-fee ground rentals and rental fees based on a fixed percentage of tenant revenues subject to certain minimum monthly fees for industrial, commercial, and recreational facilities. A substantial portion of the Port's land and some of its facilities including marine terminal facilities, and office and commercial space are leased to tenants. All leases prohibit transfer of land ownership to the lessee at the expiration of the agreement and are accounted for as operating leases. The majority of these lease agreements are not cancelable and permit the Port to periodically adjust rents. In addition, these leases are secured by letters of credit. Percentage rentals are received under certain leases on the basis of percentages of sales in excess of stipulated minimums. Other leases are based on flat rates.

The Port also generates revenue from the San Diego County Regional Airport Authority (Airport). Income from the Airport has been generated since the agencies were separated in 2003. The Port's Harbor Police Department is the primary law enforcement agency for the airport. As such, the Airport reimburses the Port for those services. Additionally, the Airport also leases land from the Port per typical real estate lease agreements, as described above. This income stream is anticipated to continue as long as the Airport wishes to retain Harbor Police services.

### ***12.2.2 Urban Runoff Related Expenditures***

The Port has generally committed funds to the following issues: 1) the Capital Outlay Program for major capital improvements within the tidelands; 2) operating expenses, including most of the Port JURMP activities; 3) municipal service contracts with the five member cities; and 4) various required collaborative efforts pertaining to urban runoff issues. Urban runoff related expenditures are included within each of these funding commitments as follows.

Capital Outlay Program – Beginning in fiscal year 1992, the Board of Port Commissioners approved a five-year Capital Improvement Plan (CIP) for the development of certain capital outlay projects located either on the San Diego Bay and Imperial Beach tidelands or on the uplands adjacent to these tidelands. During fiscal year 1994, the five-year CIP was changed to a ten-year period. Each project in the plan must be reviewed, analyzed, and authorized by the Board of Port Commissioners on a project-by-project basis. The CIP is to be updated as conditions and circumstances warrant. BMPs that are required as part of CIP projects are addressed and accounted for within this program.

Municipal Service Contracts – The Port enters into contracts with its five member cities for annual municipal services being provided by the cities for the benefit of the Port. These include park maintenance at various tideland locations, waste collection, landscaping, and other various as-needed services relating to clean-up and maintenance.

Urban Runoff Management Program Operating Expenses – The implementation of an adequate urban runoff program requires appropriate staffing relative to the managerial, administrative, and technical aspects of the program including field technicians for IC/ID, monitoring, and enforcement. Use of outside services, such as consultants for monitoring, inspections, development-review deliverables, BMP design, and other urban runoff tasks must be also be accounted for. Staffing needs are prioritized and the number of staff is contingent on the ultimate scope, complexity, and affordability of the final program as dictated by the results of the monitoring program and other discovery-related phases of the JURMP.

Regional Collaboration Efforts – The Port is contributing to ongoing programs such as the Regional Harbor Monitoring Program, Otay River Watershed Management Plan, THINK BLUE, Project Clean Water, grants focused on the San Diego Bay Watershed, and other regionally focused water quality improvement programs to address regional education and outreach efforts. Additionally, the Port is an active stakeholder in the various TMDLs that are in place throughout the bay. As such, funding for TMDL required monitoring and implementation activities overlap and become a part of the overall funding needed to address urban runoff related costs.

### **12.2.3 Budget**

On or before the 15th day of June of each year, the Board of Port Commissioners adopts a preliminary budget divided into the following main classes: ordinary annual expenses, capital outlay, and debt service. Public hearings are then conducted to obtain citizen comments on the proposed budget. After the budget hearings, but no later than the first day of August of each year, the Board of Port Commissioners files the final budget with the San Diego County Board of Supervisors.

As stated above, a budget has been established to adequately fund the implementation of the Port JURMP, including monitoring, investigation, outreach, education, inspection, and enforcement programs. Funding is also available for the maintenance of stormwater infrastructure and the additional structural BMPs that may potentially come on-line as a result of new development/redevelopment requirements and/or the results of the monitoring program.

Reviewing the JURMP fiscal assessment annually allows the Port to appropriately budget resources for upcoming years. Tables 12-1 and 12-2 show the levels of efforts, in terms of program costs, that were required to implement the JURMP program for the 2006-2007 reporting period. As indicated in the following tables, the Port spent approximately \$1,068,700

on staffing and implementing programs to comply with the Permit during the 2006-2007 year. The proposed budget for the Port Jurisdictional Urban Runoff Management Program for fiscal year 2007-2008 is presented in Table 12-3. Some costs are spread throughout other programs.

## 12.3 Update to Fiscal Analysis Methods

The Permit requires the Copermittees to collectively develop a standardized method and format for annually conducting and reporting fiscal analyses of their urban runoff management programs in their entirety. Standardization needs to include the identification of the various categories of expenditures attributable to urban runoff programs, programs that were in existence prior to urban runoff program implementation, and metrics used to report component and overall program expenditures. Beginning in January 2010, each Copermittees' fiscal assessment is to be consistent with the standard method.

There are many facets to initiating a standard fiscal evaluation. The Copermittees, as a whole, have developed a workgroup to develop a standardized method for annually conducting and reporting fiscal analyses of Copermittee Urban Runoff Management Programs. The Port will participate in this workgroup. Once the methodology is complete, the Port will conduct its fiscal analysis in a manner consistent with the regionally accepted Standard method.

**Table 12-1.** Internal Stormwater Program Staff Costs For 2006-2007.

<b>CATEGORY</b>	<b>CATEGORY DESCRIPTION</b>	<b>TOTAL SPENT</b>
General Stormwater	General Stormwater includes general administrative activities, meetings, general reporting, and staffing for the implementation of the Municipal Stormwater Permit.	\$151,000
Municipal activities	Municipal activities include stormdrain inspections, site inspections (parks, Port facilities, etc.), departmental meetings, stormdrain markers/GPS efforts, and BMP studies.	\$9,300
Construction activities	Construction activities include meetings with contractors, Port engineers and construction staff, site inspections, follow-ups, and written correspondence.	\$35,700
	Construction activities also include environmental project and proposal review, SUSMP applicability and the review of SWPPP and SUSMP documents.	\$6,500
Tenant compliance	Tenant compliance includes industrial and commercial inspections (including all follow-ups, written correspondence, meetings, etc.), and IC/ID tenant issues.	\$29,000
Education	Education includes Port staff training, adult education, children (school) education, regional education meetings, regional outreach efforts, internal and external outreach events, clean-up events, brochure development and website development.	\$23,200
Monitoring	Monitoring includes field work for dry weather monitoring and coastal monitoring, report preparation, IC/ID response to incoming calls and investigations resulting from complaints.	\$18,800
GIS & database management	GIS and database management includes database management, and GIS/Mapping/data utilization.	\$19,000
Watershed management	Watershed management includes staff time for meetings and report preparation, GIS/Mapping, watershed education, grants, watershed cleanup events, etc.	\$26,100
Regional Harbor Monitoring	Regional Harbor Monitoring includes staff time for meetings report preparation and review, coordination and planning.	\$2,500
SB 68	SB 68 includes staff time to prepare the SB 68 report to comply with legislation.	\$3,800
Toxic Hotspots/TMDLs	Includes staff time for meetings, document review and planning.	\$5,100
Industrial Compliance	Industrial compliance includes staff time for the implementation of the Industrial Permit for the TAMT, NCMT, and Cruise Ship Terminal,	\$22,200
Special Studies	Special studies include monitoring (non-permit required studies); TMDL bacteria sampling, and meetings.	\$4,600
Copper TMDL	In-water hull cleaning study, stakeholder TMDL meetings, BMP development	\$45,700
	<b>2006-2007 total staff costs</b>	<b>\$402,500</b>

**Table 12-2.** External JURMP Program Expenditures For 2006-2007.

<b>Component</b>	<b>Program Description</b>	<b>Total Spent</b>
<b>PERMIT FEES</b>		
Permits	Fees for municipal, industrial and construction permits	\$5,500
<b>MONITORING</b>		
Regional Monitoring	Wet Weather Copermitee Mass Loading Station Monitoring Program	\$9,100
Dry Weather Monitoring	Dry weather monitoring	\$9,400
Industrial Monitoring	Wet weather monitoring at Port Industrial Facilities	\$22,200
Coastal Monitoring	Coastal Monitoring	\$9,400
Copper TMDL	In-water hull cleaning study; Zinc Hull Paint Study	\$20,000
Regional Harbor Monitoring	Compliance with RWQCB directive issued in July 2003. Implementation and report for RHMP Pilot study, Year 1.	\$179,200
Toxic Hotspot/TMDL Programs	Provide funding for bacteria TMDL monitoring plan and sample analysis; Compile information for 303(d) List.	\$11,500
<b>EDUCATION</b>		
Aquatic Adventures	Fourth graders within the Port School Partnerships Program participate in "Wetland Avengers", a program that teaches students about wetlands in south San Diego Bay.	\$18,300
Aquatic Adventures	Contribution to Kids in Canyons program	\$10,000
Chula Vista Nature Center	Provides 40 classrooms teacher training and docent-lead tours of the Nature Center	\$30,000
Green Machine Outreach Van	Mobile agriculture education program featuring I.P.M. & water cycle demonstrations to 43 schools along Chollas Creek.	\$11,000
High Tech High	Contribution to printing of "San Diego Bay – A Story of Exploitation and Restoration."	\$6,000
<b>Component</b>	<b>Program Description</b>	<b>Total Spent</b>
I.P.M. Training Seminars	Coordinates and funds quarterly seminars for San Diego County pest controllers on Integrated Pest Management methods and pollution reduction.	\$16,700
Pilot Program with San Diego Maritime Museum	Recreates impacts on bay with map exercise followed by a boat trip with interactive water quality testing for 30 classes.	\$28,000
Project SWELL	Creation and implementation of watershed-based curriculum in San Diego City Schools.	\$20,000
Pro Peninsula	Sixth grade classes within 3 Port Partnership Program Schools are provided with a sea turtle research program in south San Diego Bay.	\$5,000
Resource Conservation District	Brings interactive watershed model to classrooms for watershed and storm water demonstrations.	\$50,900

Component	Program Description	Total Spent
Think Blue P.S.A.s	Contributes to airing of Public Service Announcements regarding storm water awareness. Also part of the Port's contribution to the Chollas Creek Enhancement Project grant	\$10,000
Transportation	Provides school buses for students from Port Partnership Program schools to attend field trips at various locations.	\$6,400
Birch Aquarium	Implementation of Discovery Lab Classes for schools.	\$1,200
WiLDCOAST	Provides sea turtle education to students in San Diego County.	\$12,000
<b>CONSULTANTS &amp; OTHER OUTSIDE CONTRACTS</b>		
Stormwater Services Contract	Review of SUSMP and SWPPP Documents/Develop Online Templates	\$50,100
Brown & Caldwell	Implementation and maintenance of EDIAMS, the Port's GIS stormwater program	\$2,200
Ninyo & Moore	GIS Investigation	\$2,500
RBF Consulting	Continued development and implementation of GIS database.	\$78,200
<b>WATERSHED &amp; OTHER COLLABORATIVE EFFORTS</b>		
Creek to Bay Cleanup	A watershed-based activity sponsored and conducted by the Port as one of the San Diego Bay Watershed Copermittees	\$1,000
Operation Clean Sweep	A bay-wide activity sponsored by the Port and San Diego Port Tenants Association.	\$10,000
<b>OPERATIONS &amp; MAINTENANCE</b>		
Coastal Cleanup Day	Organizes volunteers for cleanup and wetlands restoration around the Bay.	\$200
Recycling	Paper, glass, plastic, and aluminum recycling for Port facilities	\$19,200
Stormwater Monitoring Equipment & Supplies	Provides equipment for monitoring projects, special studies, and IC/ID investigations.	\$2,100
Port Storm Drain Cleaning	Provides services for installation, maintenance and cleaning of MS4 and Port owned BMPs.	\$8,900
<b>TOTAL</b>		<b>\$666,200</b>



**Table 12-3.** Proposed Budget For Fiscal Year 2007-2008.

<b>Component</b>	<b>Program Description</b>	<b>Total</b>
Port Staff	Staffing for the Implementation of the Industrial Permit for the TAMT, NCMT, and Cruise Ship Terminal	\$100,000
Port Staff	Staffing for the implementation of the Municipal Stormwater Permit	\$1,200,000
<b>PERMIT FEES</b>		
Permits	Fees for municipal, industrial and construction permits	\$50,000
<b>MONITORING PROGRAMS</b>		
Regional Monitoring	Port contribution to Copermittee regional monitoring program.	\$21,555
Coastal Monitoring	Coastal Monitoring	\$15,000
Dry Weather	Dry weather monitoring	\$15,000
Industrial Monitoring	Wet weather monitoring at Port Industrial Facilities	\$25,000
Regional Harbor Monitoring	Sampling, analysis, and reporting for the RHMP Program, Pilot year 3.	\$235,000
Copper Hull Paint Reduction	Development and implementation of strategies to reduce copper loads into the bay.	\$20,000
<b>EDUCATION</b>		
Aquatic Adventures	Fourth graders within the Port School Partnerships Program participate in a program on Paradise Marsh's habitats, including a marsh clean-up.	\$18,300
Chula Vista Nature Center	Provides 40 classrooms teacher training and docent-lead tours of the Nature Center.	\$15,000
General Public/Brochures	Develop, publish, and reprint brochures focused on storm water awareness and environmentally friendly boating practices.	\$15,000
Green Machine Outreach Van	Mobile agriculture education program featuring I.P.M. & water cycle demonstrations to 43 schools along Chollas Creek Watershed.	\$11,000
I.P.M. Training Seminars	Coordinates and funds quarterly seminars for San Diego County pest controllers on I.P.M. methods and pollution reduction.	\$20,000
Pilot Program with San Diego Maritime Museum	Recreates impacts on bay with map exercise followed by a boat trip with interactive water quality testing for 30 classes.	\$28,000
Wildcoast	Sea Turtle Education	\$12,000
Birch Aquarium	Provides funding for students from Silver Strand Elementary to visit the Birch Aquarium as part of Ocean Week.	\$2,000
Project SWELL	Creation and implementation of watershed-based curriculum in San Diego City Schools.	\$25,000
Pro Peninsula	Provides field trip to observe sea turtle researchers for sixth graders within the School Partnership Program.	\$5,000
Resource Conservation District	Brings interactive watershed model to classrooms for watershed and storm water demonstrations.	\$30,000
Think Blue P.S.A.s	Contributes to airing of Public Service Announcements regarding storm water awareness.	\$10,000
Transportation	Provides bus transportation for the School Partnership Program field trips.	\$10,000
Watershed Education	Provides grant opportunities for watershed education.	\$20,000

**Table 12-3.** Proposed Budget For Fiscal Year 2007-2008 (continued).

<b>Component</b>	<b>Program Description</b>	<b>Total</b>
<b>PROFESSIONAL CONSULTANTS</b>		
Laboratory Contract	As needed sample collection and analysis	\$80,000
GIS / Data Management Contract	GIS system management. Improvements to stormwater database.	\$100,000
Stormwater Services Contract	BMP evaluation, design, and implementation; SWPPP for construction activities; Database management development and/or implementation; Assistance with implementation of the WURMP and JURMP.	\$150,000
<b>OPERATIONS &amp; MAINTENANCE</b>		
Coastal Cleanup Day	Organizes volunteers for cleanup and wetlands restoration around the Bay.	\$2,000
Port Recycling Program	Provides paper, glass, plastic, and aluminum recycling for Port facilities.	\$20,000
Port Storm Drain Cleaning	Provides services for maintenance and cleaning of MS4 and Port owned BMPs.	\$50,000
Stormwater Training	Development and implementation of stormwater training programs for Port staff, tenants, and contractors.	\$15,000
<b>TOTAL</b>		<b>\$2,319,855</b>

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## 13.1 Introduction

A successful urban runoff management program requires proper planning, design, and implementation, followed by proper operation and maintenance. In addition, the program requires regular assessments to ensure that management measures are successful in reducing pollution loads and improving water quality. The Permit requires the Port to develop a mechanism to annually assess the JURMP program and provide a process for modifications to programs or activities that are proven to be ineffective. The Port JURMP is a dynamic program that will incorporate methodologies for assessing long-term effectiveness and provide mechanisms for continual refinement to meet the program's objectives. This JURMP is based on achieving the following objectives:

- Improve water quality
- Improve overall stormwater program management efforts

The assessment of JURMP effectiveness will occur at various levels. The JURMP Annual Report will provide documentation of the JURMP elements and data needed to make decisions regarding refinement of the overall JURMP. As a result, the elements of the JURMP (e.g., BMPs, monitoring, public education) will have performance standards that relate to the overall program objectives. The assessment will document specific actions implemented each year, the status of the actions, comparison to the performance standards and effectiveness, need for further action or modification, and recommendations.

## 13.2 Effectiveness Assessment Approach

The requirements of the Municipal Permit specify that the Port shall annually assess the effectiveness of each significant jurisdictional activity/BMP or type of jurisdictional activity/BMP, each JURMP component, and the JURMP as a whole. This section outlines the approach that the Port will use to assess the effectiveness of their efforts at minimizing impacts from urban runoff and improving surface water quality. It focuses on general principles of assessment, including:

1. A description of how the Port will incorporate Implementation Assessment, Water Quality Assessment, and Integrated Assessment.
2. Identification of measurable targeted outcomes, assessment measures, and assessment methods.

3. How to determine whether/when Target Outcome Levels 1-6 are applicable to specific JURMP programs/activities.
4. How monitoring data will be evaluated to determine the effectiveness of JURMP programs/activities.

Assessment methods need to be dynamic, and in order to be useful, they need to provide insight into how well a program or a specific BMP is working. The common thread throughout the various stages of the required effectiveness assessment are the Target Outcome Levels 1-6 identified in the Framework Document. The Framework Document provides a complete description of the effectiveness assessment process and the target outcome concept. Table 13-1 below, identifies each outcome level and expected methods to measure effectiveness.

**Table 13-1.** Target Outcome Levels And Potential Assessment Measures And Methods.

OUTCOME LEVEL	POTENTIAL ASSESSMENT MEASURES AND METHODS
Level 1: Compliance with Activity-based Permit Requirements	Verification that required activities were implemented.
Level 2: Changes in Knowledge / Awareness	Measure of changes in targeted audiences knowledge and awareness potentially through the use of pre- and post-surveys and observations.
Level 3: Behavioral Change / BMP Implementation	Measure of changes in behavior or BMP implementation through the use of observations or inspections.
Level 4: Load Reductions	Measured or calculated load reductions as a result of changes in behavior or BMP Implementation. Measurements may be supported by water quality data or may be supported by information and data related to the pollutant generating activities.
Level 5: Changes in Discharge Quality	Historical and statistically supportive trends in the levels of pollutants in the discharges from the MS4. This will be assessed periodically using the results of regional, WMA and jurisdictional water quality monitoring data.
Level 6: Changes in Receiving Water Quality	Historical and statistically supportive trends in the levels of pollutants in the receiving waters. This will be assessed periodically using the results of regional, WMA and jurisdictional water quality monitoring data

### **13.2.1 Regional Standardization of Assessment and Reporting**

While the Permit does not require that Copermittees assess the effectiveness at various levels through a standardized process, the Regional Copermittees recognize there are inherent benefits to developing a regionally accepted process for conducting effectiveness assessments. The use of regional standards for reporting, tracking and when applicable, for establishing targets, will provide overall consistency which will help long-term assessments, watershed coordination, and hasten the process to integrate several levels of reporting over

time. The Port has been an active participant in the regional efforts to standardize assessment and reporting approaches.

### **13.2.2 Interim Assessment Approach**

As stated, the Port recognizes the benefits of developing a regional approach toward assessment and reporting standards and will continue to collaborate on those regional efforts. Until the regional concepts and/or standards are better defined, the Port intends to utilize the interim assessment approach detailed below to meet the Permit required assessment objectives. At the time that regional standards are finalized, the Port may modify its approach, as necessary, to maintain consistency with the regional efforts.

The Port will use a combination of implementation, integrated, and water quality assessments to address the Permit requirements and determine significant activity, JURMP component, and overall JURMP effectiveness. These three assessment mechanisms are interrelated in that each builds upon the other, and to achieve success at the higher target outcome levels (Levels 4-6), all are necessary. The general process for using all of the assessment elements above is described below. Further details are provided in the subsections that follow.

During the development of significant activities/BMPs and JURMP components, each is reviewed to determine which target outcomes are appropriate and what methods and measures should be considered. It is understood that each activity or program action is unique, and their impacts on water quality are equally distinctive. As a result, their measurable outcomes should not be expected to follow a linear path (assessing effectiveness at every level) through the Levels 1-6. Instead, programs and/or activities and their impacts may have only one or two of the targeted outcome levels apply to their assessment.

For example, a capital project activity's impact may only be related to a direct load reduction (Level 4) and does not have a change in awareness or change in behavior impact. Thus, the activity would only be assessed for Level 4 targeted outcomes. Contrarily, most education activities can be related to changes in knowledge or awareness (Level 2), but are more difficult to directly link to water quality improvements (Levels 5 & 6). It is important to note that as a part of activity/program implementation, data are collected and assessed to determine the measurable outcome. This JURMP document attempts to identify targets and establish appropriate measures with which to determine if those targets were met.

Data tracking will be incorporated into the implementation assessment process. Appropriate tracking of relevant information is essential to understand and report on a component, program and/or activity's effectiveness. The establishment of specific tracking mechanisms can establish a meaningful baseline from which program and/or activities can be measured. Then annual assessments can be compared to the corresponding targets. Such information could include, but is not limited to:

- Completed capital or tenant improvement projects;
- Number of inspections;
- Number/types of BMPs implemented;
- Enforcement actions;
- Citizens complaints and drainage problems;
- Number of individuals receiving training;
- Results from Pre and Post-tests, survey, etc;
- Cleaning records (MS4, street sweeping, debris removal, etc);
- Level of participation in source control programs (e.g., tenant hazardous waste collection and used oil recycling); and
- General Recordkeeping/program tracking (purchasing, contracts, stored materials, etc)

The Port intends to use water quality monitoring data, where applicable, to provide water quality assessment information. Reviewing existing monitoring programs and monitoring site locations may enable Port staff to determine if or when a monitoring site and its data can be associated with a specific JURMP component and/or activity. In these instances, the monitoring data will be evaluated to see if any pollutants are exceeding water quality objectives and the data tracked over time to determine whether programs and/or activities are leading to water quality improvements.

In most instances, the Port's assessments will not address changes in receiving waters (Level 6). This is due to the fact that San Diego Bay, the primary receiving water into which Port tidelands drain, receives runoff from the entire San Diego Bay WMA and has several inputs that bypass the tidelands (via MS4 easements having no laterals discharging Port tidelands). Additionally, several hot spots in the bay are related to legacy pollutants with sources that have long since stopped or been removed. As such, changes in receiving water are difficult if not impossible to connect back to Port activities.

In general, Annual Reporting will use relevant information compiled over the reporting period to evaluate whether the component, significant activity, or overall program was effective. Information, such as the tracking items identified above, will be compared to the previously identified (within the individual JURMP components) target outcomes and measures to see if targets were achieved. Significant activity/BMP and programmatic assessments will primarily use the integrated approach to identify whether large-scale targets are appropriate and

programs are protecting and/or improving the high priority water quality problems. For some of the higher levels (4-6) monitoring data may also be assessed, or a broader scope of information evaluated, to see if there is a link. Where applicable, attempts will be made to present this information in tabular formats.

### **13.2.3 JURMP Component Assessment**

This section describes the general process the Port will use to assess each JURMP component. Each JURMP component will identify the actions or activities that will be assessed, the assessment measures and methods, the target outcomes (Levels 1-6) expected for each item, and a target metric for determining effectiveness. Rationale for the specific targets, methods, and measures proposed will also be explained in each JURMP component and as such, will not be discussed further here. The JURMP component assessment shall consider all the activities implemented that lead to the ability to determine whether the component has met the anticipated outcomes and, per Permit requirements, is effective.

It is important to note that much of the JURMP component information is currently being tracked in a comprehensive stormwater database. This database was developed during the previous Permit and, over the five years, has been modified so that it can capture component specific information (inventories, inspections, etc) and also assess BMP implementation across all programs or for a specific BMP. The database is dynamic and continually being updated to provide the most efficient and effective means to capture data from the various stormwater programs being implemented.

If Dry Weather, MS4, Source ID monitoring, or other special studies contain data that can be related to a specific JURMP component (for example monitoring sites in parks, marine terminals, commercial parking lots, restaurants, etc), these data may provide information on BMP and/or activity effectiveness. Visual assessments of tidelands or receiving waters may also provide some indication of how well the JURMP component is working. In this manner, data may provide some insight into whether an individual JURMP component's activities and/or BMPs are having positive impacts on water quality.

During each annual report, compiled information will be evaluated based on the initial targets presented in this JURMP Document (Appendix H) and a determination will be made on whether the component (or individual items within the component) was effective. The annual report will compare the initial targets established in this JURMP document with the data collected from applicable tracking measures, such as those identified in subsection 13.2.2. This information will be generated from the Port database or other sources and will be presented in the tabular format identified in each component of this JURMP Document. The endpoint of the annual assessment will be the determination of whether the JURMP component is effective at meeting targets and whether the targets/measures are appropriate for



the specific component (or component activity). Where monitoring information is available and can indicate changes to water quality, this information will also be presented and included in the individual JURMP component annual assessment table.

#### **13.2.4 Significant Activity Assessment**

The Permit requires a separate assessment of significant activities/BMPs or types of activities/BMPs. Not all activities or actions carried out in support of component objectives or for Permit compliance are, or should be, considered “significant”. Some could support the component objectives or assist in Permit compliance but should not, by themselves, be assessed to determine their value. The Port believes, to warrant a separate assessment process as the Permit does, that significant activities and/or BMPs should stand out. As such, the Port has identified the following criteria that will be used in determining when activities and/or BMPs are “significant”.

- Is the activity or BMP used throughout multiple JURMP components?
- Does the activity or BMP influence multiple target outcome levels?
- Does the activity or BMP improve a site’s design (by reducing perviousness, incorporating structural or treatment control BMPs, etc)?
- Is the activity or BMP able to (directly) achieve notable watershed benefits (by specifically addressing likely sources or high priority water quality problems)?
- Was the activity or BMP developed to specifically address a high priority water quality problem?

Using these criteria, the Port has identified the following items as significant activities and/or BMPs that will warrant a separate assessment process as required by the Permit. It is important to note that in most cases, one or more of the significant activities/BMPs listed below will be a part of each JURMP component.

- Education efforts
- Inspections
- Construction Projects/SUSMP Applicability
- SUSMP improvements (Treatment Control and/or LID BMPs)
- Enforcement Actions
- BMP implementation

- Waste removal activities (Street sweeping/MS4 cleaning/cleanup event/waste debris collection)
- Monitoring

A Significant Activity/BMP assessment differs slightly from what is identified in the JURMP Component assessment, primarily in the manner in which the information will be assessed. As stated above, each Significant Activity/BMP will be addressed within the JURMP component where it applies and will be included as part of the JURMP component assessment. The component information will show the Significant Activity/BMP's direct relation to the specific JURMP component outcomes (i.e. how it met permit compliance, addressed BMP implementation, achieved component-specific load reductions, etc ).

The Significant Activity assessment will indicate how well the activity is working overall. For example, the significant activity assessment will evaluate BMP implementation for specific BMPs (recycling, for instance) to evaluate how many facilities overall are adequately implementing this BMP. Other examples include assessing the overall loads of waste collected from all waste removal activities, overall assessments of the amount of land area that is being treated with treatment control and/or SUSMP BMPs, and the number of enforcement actions occurring and/or resolved on Port tidelands. Target metrics for significant activities will assess how well each Significant Activity (implemented as a whole) is able to meet the target outcome levels.

### **13.2.5 Programmatic Assessment**

This section describes how the Port will assess the effectiveness of JURMP implementation as a whole. Overarching management questions are the cornerstone of the programmatic assessment as it allows for exploring, in detail, the effectiveness of programs and activities while also being able to compile results for a better “big picture” evaluation of how the Port is addressing the programmatic objectives of improving water quality and program management efforts. The questions below are designed to assist in evaluating and compiling the JURMP component and significant activity/BMP assessments into a comprehensive programmatic assessment.

- Is the Port making progress towards achieving their program goals and objectives in a way that maximizes resources, is cost effective, and achieves the maximum water quality benefit possible?
- How well has the Port maximized the effectiveness of individual activities and/or JURMP components?
- Is the Port effectively targeting identified pollutant sources of the high priority water quality problems for the San Diego Bay WMA?

- Are improvements in the water quality, both of urban runoff/discharge and (where applicable) receiving waters, observed?

The programmatic assessment will consider the collective impact of all JURMP programs/activities on the Port's impacts to the San Diego Bay WMA high priority water quality problems<sup>1</sup>. The Port will utilize the questions presented above, the information from the JURMP component assessments, the significant activity assessments, and available water quality monitoring data to analyze the overall program. Information will be generated from the Port's database using its functionality to take multiple component, program, and activity/BMP details and depict overall achievements for the JURMP program.

Annual programmatic assessments will focus on 1) associating overall program results with some of the higher Target Outcomes (Levels 4-6), and 2) evaluating how well the Port JURMP is able to address the high priority watershed water quality problems. As such, programmatic target metrics may focus on pollutants and/or sources rather than the expectation to meet a certain Target Outcome level. Monitoring data (both dry and wet weather) will be evaluated, where applicable, to determine if, collectively, JURMP components and significant activities/BMPs can be linked to improvements in discharges and/or receiving water quality. Similar to the watershed assessment approach, determinations on JURMP programmatic effectiveness will place emphasis on assessing whether JURMP programs/activities overall are focused on the appropriate high priority water quality problems and sources or whether additional data and/or program/activity refinements are needed to reach such conclusions.

### 13.3 Program Review and Modification

The Port is required to identify their process for reviewing and updating the Effectiveness Assessment component. The assessment approach presented above explains how the Port will set targets and will annually compare compiled information to those targets on multiple levels (JURMP Component, Significant Activities, and overall JURMP Program). Using this information, the Port can tell which elements did not achieve their anticipated targets.

Activities comprising individual JURMP Components and all Significant Activities will be continued, modified, or discontinued at the Port's discretion based on their ability to meet targets, their overall importance to the higher assessment levels, and the expected contribution to the overall objective stated in 13.1. The assessment process is explained in Section 13.2 above. In most cases, the modifications of significant activities will occur within an individual JURMP component based on its integration with the overall JURMP component effectiveness. When and where modifications require extended time periods for revisions, a timeline will be proposed.

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<sup>1</sup> High Priority water quality problems are identified in the 2008 San Diego Bay WURMP Document.

## 14.1 Modifications to the JURMP

The Port JURMP Document is designed to be a living document. It is anticipated that the program objectives, activities, BMPs, management actions, and effectiveness measures stated earlier in this document may need to be revised as the JURMP evolves and matures. The objectives outlined in Chapter 13 of this JURMP Document represent the continuing effort to establish a feedback-loop program that addresses both Municipal Permit compliance and evaluation of management actions relating to water quality issues.

As required, the Port will evaluate all activities, programs, and components in the manner described in Chapter 13. A thorough review of the program will occur annually to ensure that all urban runoff related efforts identified are up to date and consistent with current operating practices. In the instance(s) where activity and/or JURMP components require modifications, the updates will occur as discussed in Section 13.3. Modifications to components, activities, or the overall program will be discussed in the appropriate sections of each JURMP Annual Report.

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## Chapter 15

## Conclusions and Recommendations

The Port JURMP Document describes the activities that the Port has undertaken, is undertaking, or will undertake, to reduce discharges of pollutants and urban runoff flow to the stormwater conveyance system to the maximum extent practicable. The program addresses three phases of urban development: namely, the planning, the construction, and the existing development or existing use phases. The JURMP Document provides an overall account of the program to be conducted by the Port during the five-year life of this Municipal Permit.

This JURMP Document signifies the continuation of a long-term effort to protect and enhance the water quality of the Bay. Many of the JURMP efforts are a continuation of the efforts initiated and refined during the last five years as part of the previous Permit (Order 2001-01). Over the past year, Port staff in several departments committed significant time and resources toward evaluating the newly adopted Municipal Permit and reviewing existing stormwater programs/practices. Where needed, implementation efforts were refined, information tracking was improved, and programs and related documents were updated to reflect the changes in Permit requirements. This JURMP Document represents the culmination of those efforts and describes all of the actions and activities the Port will undertake minimize pollution and improve water quality within the tidelands.

The Port JURMP Document discusses the program components required by the Municipal Permit: namely, existing development, land-use planning for new development and redevelopment, construction activities, illicit discharge detection and elimination activities, education activities, public participation activities, and enforcement activities. It also outlines the methods to be used in analyzing the effectiveness and the budget and funding JURMP requirements. Article 10, facility inventories, the dry weather monitoring program to be implemented by the Port, and the accompanying maps of the Port-owned and –maintained stormwater conveyance system, are all included as appendices to the JURMP Document.

During the next five years, the Port is committed to establishing a better understanding of how to relate and/or coordinate jurisdictional efforts with watershed high priority water quality problems and how to improve data tracking in a manner that provides coordinated and efficient information. To accomplish those tasks, linkages between programs/activities, pollutants, and watershed hydrologic areas will be established whenever possible. Additionally, the Port will continue to expand efforts to develop information tracking systems that store, retrieve and report information within and across program components. It is anticipated that both of these efforts will significantly improve the Port's ability to document Permit compliance and, more importantly, relate urban runoff efforts to water quality improvements.

The Port Urban Runoff Management Program is a dynamic program that will evolve with time. As characteristics, policies, and procedures continue to change in the Port's tidelands

jurisdiction, so must the program and this JURMP Document. Thus, this Document is considered a living document that will be periodically modified to ensure that it adequately describes the Port's program. Where regional efforts have been initiated or will be initiated to standardize JURMP programs, the Port will work collectively with the Regional Copermittees to ensure that Port JURMP efforts and actions remain consistent with the final regional standards. Any proposed revisions to the Port JURMP Document will be made part of the Annual Report required by Permit Sections I and K.

Implementation of the Port JURMP should help to meet the Port's overall objectives to reduce and/or eliminate the impacts of polluted urban runoff on San Diego Bay, improve receiving water quality, and improve stormwater program management efforts.

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# **APPENDIX A**

# **LEGAL CERTIFICATION**

## Statement of Legal Certification

March 18, 2008

### **RE: San Diego Unified Port District Certification of Adequate Legal Authority to Implement and Enforce the Requirements of 40 CFR 122.26(d)(2)(i)(A-F) and RWQCB Order No. R9-2007-0001**

In compliance with Section J1 of the National Pollutant Discharge Elimination System Permit No. CAS0108758, the San Diego Unified Port District submits this certification in its capacity as a Copermitee under RWQCB Order No. R9-2007-0001.

#### **Certification**

The undersigned chief legal counsel of the San Diego Unified Port District (Port District) does hereby certify that the Port District has adequate legal authority to implement and enforce the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and RWQCB Order No. R9-2007-0001. The Port District has adopted provisions in the San Diego Unified Port District Code, Articles 0 and 10, which contain the necessary language to implement its Stormwater Management and Discharge Control Program in accordance with Order No. R9-2007-0001.

#### **Department Roles and Responsibilities**

Personnel from a number of Port District departments are involved in the implementation of the Port District's Stormwater Management and Discharge Control Program. The following is a list of departments within the Port District that conduct activities directly related to urban runoff. Only those departmental responsibilities and activities directly related to compliance with the Municipal Permit are mentioned below. Administrative functions related to any activity (e.g. database management, filing, report preparation) are performed within the department responsible for the activity. Because the Port District's Stormwater Program is designed to maximize efficient use of Port District resources, staff from any department may participate in additional stormwater activities or assist other divisions as necessary.

##### **Environmental Services Department**

The Environmental Services Department dedicates several staff to various components of Municipal Permit compliance. One Senior Environmental Specialist oversees the coordination and enforcement of the JURMP and WURM Pre-requirements and manages the Stormwater Program as a whole. Within the Stormwater Program, Environmental Specialists are assigned to manage each of the following programs: (1) public participation and education compliance; (2) land use planning and construction projects compliance; (3) industrial, commercial and

municipal compliance; (4) watershed management; (5) monitoring requirements; and (6) database and GIS management. Additionally, three to four interns provide support with Illicit Discharge/Illicit Connection response, Dry and Wet Weather monitoring, tenant inspections, and other projects as needed. Responsibilities regarding enforcement are distributed throughout the entire staff.

The Environmental Services Department also consists of staff responsible for other elements of environmental protection. Two Senior Environmental Specialists are dedicated to the management of the Site Assessment/Remediation Program and the Green Port Program. Both of these programs relate to the Stormwater Program in various ways, and the staff interacts with each other when dealing with Stormwater Program elements. A Director leads the Department and provides oversight to the entire department and acts as a liaison between the department and upper management. The Assistant Director is responsible for natural resources management. Additionally, three administrative assistants support the main staff of 11.

#### General Services Department

The General Services Department is responsible for many aspects of the Port District's stormwater management, including the Integrated Pest Management Program, building maintenance, landscaping, parks and recreational facilities, the stormwater conveyance system, streets and parking lots, and vehicle maintenance. Their secondary responsibilities include education, program assessment, fiscal analysis, household hazardous waste, and municipal facilities.

The General Services Department is managed by a Director, who oversees an Administration Manager and an Assistant Director. The Administration Manager oversees the Work Coordination Center, the Fleet Maintenance Technicians, and the Equipment Operators. The Assistant Director oversees the Electricians, the Gardeners, the Maintenance Mechanics, the Maintenance Workers, the Building Maintenance Coordinator, the Custodians, the Carpenters, the Plumbers, and the Painters.

#### Harbor Police Department

The San Diego Harbor Police Department is in charge of fighting non-emergency fires and issuing stormwater-related judicial enforcement authorities. The Harbor Police report spills and other environmental incidents to the Environmental Services Department. The Harbor Police's secondary responsibilities include education, program assessment and fiscal analysis.

### Land Use Planning Department

The Land Use Planning Department is primarily responsible for land use planning and conducting environmental review of development projects. Their secondary responsibilities include education, program assessment, and fiscal analysis.

### Real Estate Department

The Real Estate Department primarily oversees municipal, industrial and commercial facilities and plays an integral role in coordinating tenant development projects. They are also responsible for referring various tenant environmental issues to the Environmental Services Department. Their secondary responsibilities include education, enforcement, inventories, program assessment, fiscal analysis, and management of buildings, parking facilities, engineering and construction.

### Maritime Department

The Maritime Department is primarily responsible for maritime industrial and commercial land use. They also report spills and other environmental incidents to the Environmental Services Department. Additionally, Maritime staff ensure compliance with the Port District's Wet Weather Monitoring requirements. Secondary responsibilities include education, program assessment, fiscal analysis, municipal facilities and buildings.

### Engineering and Construction Department

The Engineering and Construction Department primarily develops and designs capital development and construction projects. They incorporate stormwater requirements within the design process. Secondary responsibilities include education, program assessment, fiscal analysis, municipal facilities, landscaping, recreational facilities, building management, parking facility management, streets management, and abiding by the stormwater conveyance system.

### Port Attorney's Office

The Port Attorney's Office drafts and enforces ordinances and resolutions, and reviews forms and other documents developed by the Port District to ensure that they are in compliance with current laws and regulations. The Port Attorney's Office also assists in the enforcement of the San Diego Unified Port District Code.

Organizational charts are attached showing these Port District Departments.

## **Port Ordinances**

Ordinances related to urban runoff include the Stormwater Management and Discharge Control (San Diego Unified Port District Code, Article 10) and Administration and Government (San Diego Unified Port District Code, Article 0). These ordinances are enforceable because the Port District has the authority under the San Diego Unified Port District Act and statutes of the State of California to enact and enforce such ordinances, and because these ordinances were duly enacted by the Board of Port Commissioners. The ordinances contain specific enforcement provisions or are enforceable under generally applicable enforcement provisions.

## **How Ordinances are Implemented and Appealed**

The Stormwater Management and Discharge Control Ordinance is the principal Port District ordinance addressing urban runoff. This ordinance is regulatory, and applies to all development projects and to all new and existing facilities in the Port District, whether or not a Port District permit or approval is required. The Stormwater Management and Discharge Control Ordinance contains discharge prohibitions, Best Management Practice (BMP) requirements, monitoring and reporting requirements, inspection authority, enforcement authority and penalties. This ordinance also authorizes the Port District to require the submission of stormwater pollution prevention plans.

Some portions of this ordinance are implemented through permit programs and some are implemented as regulatory programs. Under numerous provisions of the Port District Code and regulations, the Executive Director or his designee is authorized and directed to take the actions contemplated by the Stormwater Management and Discharge Control Ordinance, such as to consider evidence and make findings, to issue or deny permits, to impose conditions on projects, to inspect, to take enforcement action, or to perform other actions.

Other Port District ordinances require compliance with the Stormwater Management and Discharge Control Ordinance as a condition for issuance of a Port District permit. Port District departments may also impose specific conditions of approval consistent with the Stormwater Management and Discharge Control Ordinance.

All Port District environmental ordinances are implemented in part through the application of the CEQA process to proposed projects.

Proposed Port District ordinances are subject to a public notice and comment process prior to enactment. Enacted Port District ordinances can be challenged by timely filing writs of mandate in the San Diego Superior Court. The referendum process can also be used to challenge enacted ordinances. The imposition of administrative civil penalties under the Stormwater Management and Discharge Control Ordinance may be appealed to an impartial hearing officer in accordance with Port District Code section 0.11(i), and ultimately, to the courts. Trial court decisions to impose criminal or civil penalties, or to grant injunctive or other relief, can also be appealed through the court system.

## **Administrative and Legal Procedures**

The Port has the following legal and administrative procedures in place to mandate compliance with urban runoff-related ordinances:

### **Administrative Authorities**

- Cease and Desist Order.
- Notice and Order to Abate Violation.
- Administrative Citation.
- Stop Work Orders.
- Nuisance Abatement.
- Permit Suspension and Revocation.

### **Judicial Authorities**

- Injunctive or Declaratory Relief.
- Civil Penalties and Remedies.
- Criminal Arrest or Field Citation.

### **Administrative Penalties**

Administrative penalties may be imposed pursuant to Section 0.11 (Penalties) of the Port District Code.

### **Criminal Penalties**

Criminal Penalties may be imposed pursuant to Section 0.11 (Penalties) of the Port District Code.

- Misdemeanor.
- Infractions.

### Civil Penalties

The following may be awarded without monetary limitations in any civil action, except where a maximum monetary amount is specified.

- Injunctive Relief
- Costs to investigate, inspect, monitor, survey or litigate.
- Costs to place or remove soils or erosion control materials, costs to correct any violation, and costs to repair environmental damage or to end any other adverse effects of the violation.
- Compensatory damages for losses to Port District or any other plaintiff caused by violations; and/or restitution to third parties for losses caused by violations.
- Civil penalties in accordance with Port District Code Section 0.11(i).
- Attorney fees and court costs as permitted by law.

### Cost Recovery

The Executive Director may impose a monetary penalty without limitation to recover the costs, including staff time and materials, to investigate or monitor any violation of Article 10 of the Port District Code.

### Attorney Fees

In any action, administrative proceeding or special proceeding to enforce Article 10 of the Port District Code and abate a nuisance, the prevailing party may recover attorney fees.

### Penalties and Remedies Not Exclusive

Penalties and remedies under Article 10 of the Port District Code may be cumulative and in addition to other administrative, civil or criminal remedies.

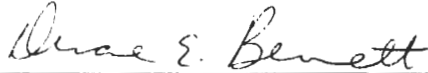
The Port District can issue administrative orders without going through the court system. The Port District cannot issue injunctions, but can seek injunctions through judicial actions.



**Closing**

The San Diego Unified Port District remains committed to protecting water quality. The Port District will continue to implement its Stormwater Program in compliance with the NPDES Permit No. CAS0108758.

Signed,

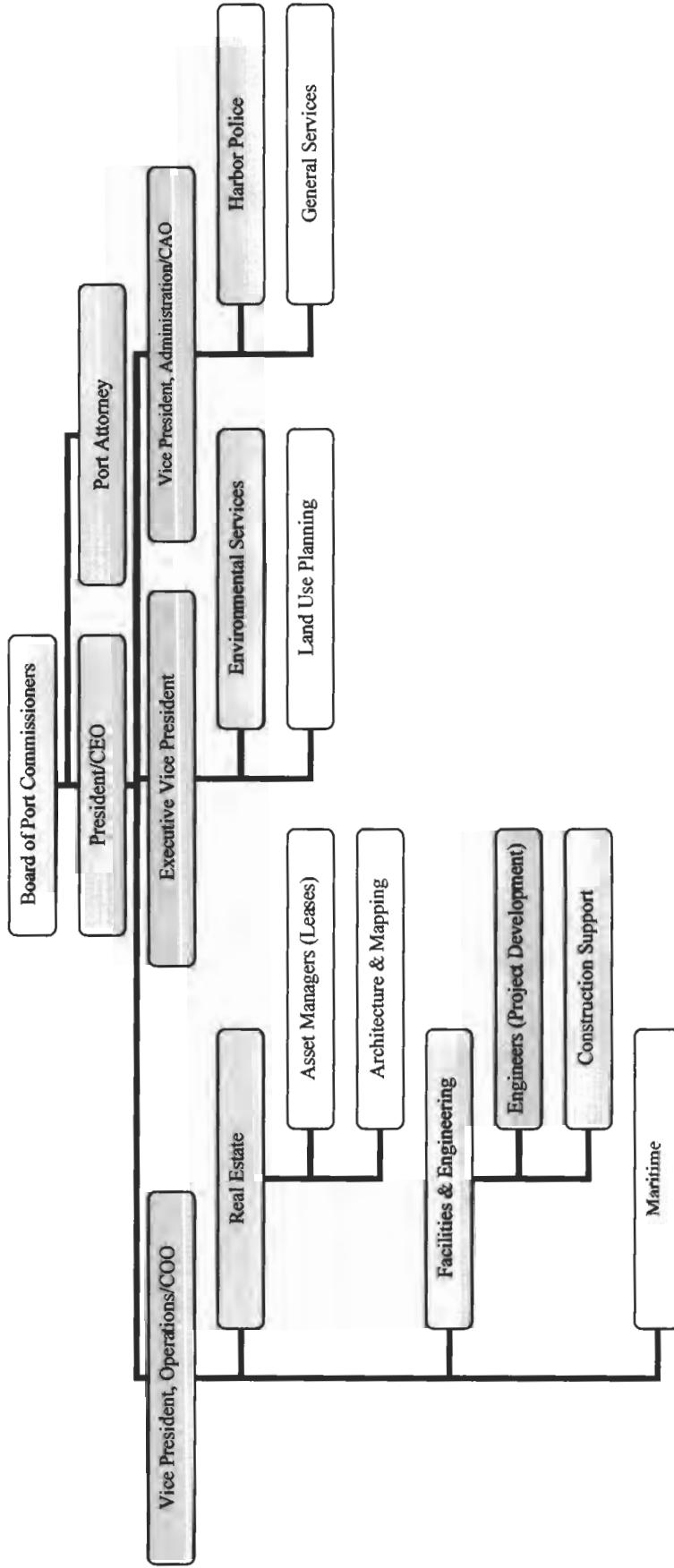


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Duane E. Bennett  
Port Attorney

attachments

**Figure 1-1 Organizational Chart of Port Departments Related to Stormwater Management**



**Figure 1-2 Environmental Services Department Organization Chart**

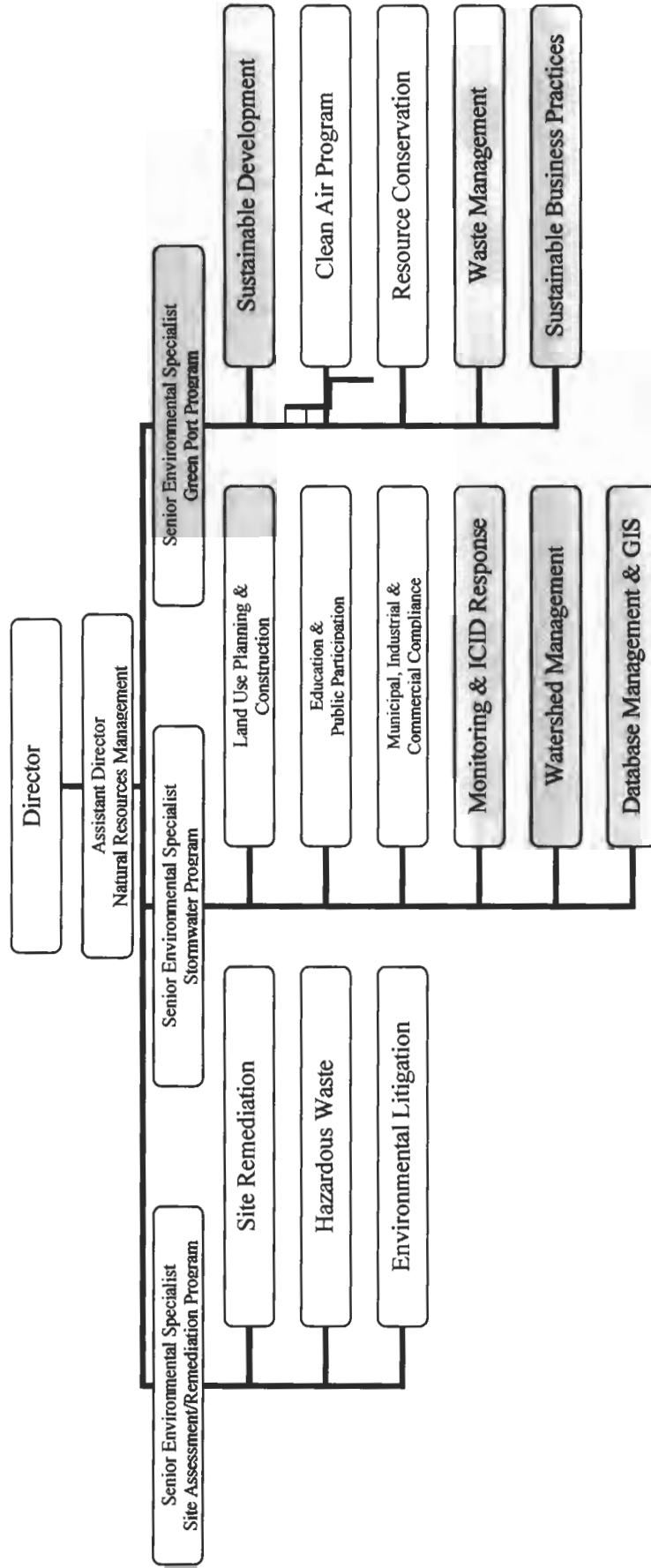
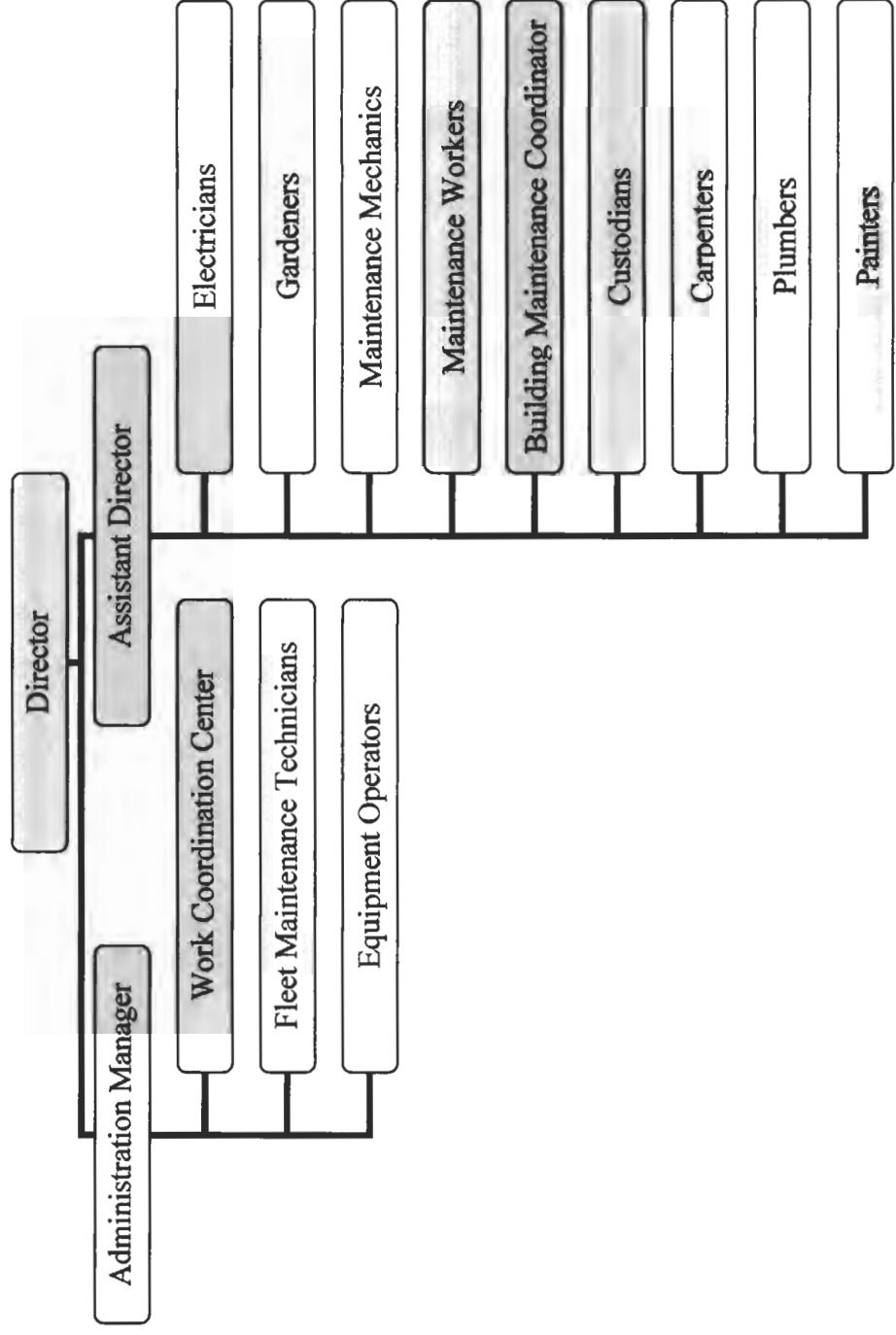


Figure 1-3 General Services Department Organizational Chart



## **APPENDIX B**

# **Article 10: Stormwater Management and Discharge Control Ordinance**

**ARTICLE 10**

**SAN DIEGO UNIFIED PORT DISTRICT**

**STORMWATER MANAGEMENT AND DISCHARGE CONTROL**

**SEC. 10.01 - TITLE, PURPOSE AND INTENT**

(a) **Title.** This Article shall be known as “San Diego Unified Port District Stormwater Management and Discharge Control” and may be so cited.

(b) **Purpose.** The purpose of this Article is to establish a defined set of requirements, protocols and procedures by which the District and users of District tideland resources may operate in compliance with State stormwater regulations. Further, it is the intent of this Article to protect the health, safety and general welfare of the public, tenants, and visitors within District jurisdiction; to protect water resources and to improve water quality; to cause the use of management practices by the District and its tenants and/or subtenants that will reduce the adverse effects of polluted runoff discharges on waters of the State; and to ensure that the District complies with the San Diego County Municipal Storm Water Permit Order No. R9-2007-0001 (NPDES No. CAS0108758), including any amendments, and applicable State and Federal law. This Article seeks to promote these goals by:

1. Prohibiting polluted non-stormwater discharges to the stormwater conveyance system;
2. Establishing minimum requirements for stormwater management, including source control requirements, to prevent and reduce pollution;

SEC. 10.01 (cont.)

3. Establishing site design requirements for development projects, to reduce stormwater pollution and erosion and enhance existing water-dependent habitats;

4. Establishing standards for the use of off-site facilities for stormwater management to supplement on-site practices at new development sites;

5. Establishing notice procedures and standards for adjusting stormwater and non-stormwater management requirements where necessary;

6. Conforming with the Clean Water Act, the Porter-Cologne Water Quality Control Act, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board, the Water Quality Control Plan for the San Diego Basin adopted by the Regional Water Quality Control Board, and all other applicable State and Federal regulations; and

7. Establishing and identifying enforcement procedures.

(c) Intent. The San Diego Unified Port District intends that this Article shall be the primary enforcement document for the management and discharge control of stormwater and urban runoff within District jurisdiction.

(Enacted July 25, 2000 - Ordinance 2105)  
(Amended December 11, 2007 - Ordinance 2475)

## SEC. 10.02 - DEFINITIONS

(a) For purposes of this Article:

**Beneficial Uses:** means the uses of water necessary for the survival or well being of humans, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. “Beneficial Uses” of the waters of the State that may be protected include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. “Beneficial Uses” are equivalent to “Designated Uses” under federal law.

**Best Management Practices:** means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or the stormwater conveyance system. BMPs also include, but are not limited to, treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage. BMPs may include any type of pollution prevention and pollution control measure that can help to achieve compliance with this Article.

**BMPs:** means Best Management Practices.



SEC. 10.02 (cont.)

Commercial Activity: means any public or private activity or facility involved in the production, storage, transportation, distribution, exchange or sale of goods and/or commodities, or providing professional and/or non-professional services. These commercial activities do not include industrial activities, nor do they include any Federal, State, Municipal, or other government agency activities.

Construction Activity: means any activity involving the clearing, grading, disturbances to the ground such as stockpiling, or excavation that results in land disturbance.

CWA: means the Federal Water Pollution Control Act, commonly known as the Clean Water Act.

Development Projects: means new development or redevelopment with land disturbing activities, structural development, including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, and land supervision.

Discharge: means any release, spill, leak, pump, flow, escape, dumping, or disposal of any liquid, semi-solid or solid substance.

Discharger: means any person or entity engaged in activities or operations which have resulted or may potentially result in pollutants entering stormwater, the stormwater conveyance system, or receiving waters, or any person or entity leasing or owning property on which such activities, operations or facilities are located.

Dry Season: means the time period from May 1 through September 30.

SEC. 10.02 (cont.)

Environmentally Sensitive Areas: means areas that include, but are not limited to, all CWA 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance; water bodies designated with the RARE beneficial use by the State Water Resources Control Board; areas designated as preserves or their equivalent under the Multiple Species Conservation Program within the Cities and County of San Diego.

Erosion: means when land is diminished or worn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting.

ESA: means Environmentally Sensitive Areas.

Facility: means something designed, built or installed to serve a specific function affording a convenience or service.

General Construction Stormwater Permit: means NPDES Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any modifications or amendments thereto, or as re-issued.

General Industrial Stormwater Permit: means NPDES Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, and any modifications or amendments thereto, or as re-issued.

Grading: means the cutting and/or filling of the land surface to a desired slope or elevation.

SEC. 10.02 (cont.)

Illicit Connection: means a pipe, facility, or other device connected to the stormwater conveyance system or receiving waters, which has not been reviewed and authorized by the District; or a permitted/authorized pipe, facility, or other device, which conveys illegal discharges.

Illegal Discharge: means any discharge or release into stormwater, the stormwater conveyance system, receiving waters, or land that is prohibited by this Article. This includes, but is not limited to, discharges of non-stormwater that are not exempt discharges, any discharge from an illicit connection, and any discharge that contains additional pollutants due to the absence of a required BMP or the failure of a BMP. All discharges by any person or entity without an appropriate NPDES permit are illegal discharges, regardless of whether the person or entity had knowledge that a permit was required. Discharges regulated under an applicable RWQCB permit, District permit or SWPPP are illegal discharges for purposes of this Article unless compliance with all applicable permit and SWPPP conditions is maintained.

Impervious Surface: means any man-made, constructed or modified surface(s) that prevents or significantly reduces infiltration of water or precipitation into the underlying soil, resulting in runoff from the surface in greater volumes and/or at an increased rate, when compared to natural conditions prior to development. The term includes, but is not limited to, parking lots, driveways, streets, roadways, storage areas, rooftops, pavement, sidewalks, compacted gravel, compacted earth and oiled earth.

SEC. 10.02 (cont.)

**Industrial Activity:** means any public or private activity which is associated with any of the eleven (11) categories of activities defined in 40 CFR 122.26(b)(14) and required to obtain an NPDES permit, or other activities required to obtain an NPDES permit or Waste Discharge Permit for stormwater runoff control, and any facility used for conducting industrial activities.

**Industrial Discharger:** means a discharger who conducts industrial activities.

**Infiltration:** means the process of percolating stormwater or non-stormwater into the subsoil.

**Jurisdictional Urban Runoff Management Plan:** means a written description of the specific jurisdictional urban runoff management measures and programs that each Copermittee will implement to comply with San Diego County Municipal Storm Water Permit Order No. R9-2007-0001 (NPDES No. CAS0108758), and ensure that pollutant discharges in urban runoff are reduced to the MEP and do not cause or contribute to a violation of water quality objectives.

**JURMP:** means Jurisdictional Urban Runoff Management Plan.

**LID:** means Low Impact Development.

**Low Impact Development:** means storm management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

SEC. 10.02 (cont.)

Maintenance [of a BMP]: means regularly scheduled activities taken to maintain the as-designed performance of a BMP, and includes, but is not limited to, repairing and cleaning of the BMP as necessary, and replacement of the BMP by an equally effective or more effective BMP at the end of its useful life.

Maximum Extent Practicable: means the technology-based standard established by Congress in CWA Section 402(p)(3)(B)(iii) that operators of MS4s must meet. Technology-based standards establish the level of pollutant reduction that dischargers must achieve, typically by treatment or by a combination of source control and treatment control of BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily in combination with treatment methods serving as a backup. MEP considers economics and is generally, but not necessarily, less stringent than the Best Available Techniques. A definition for MEP is not provided either in the statute or in the regulations. Instead, the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their urban runoff management programs. Their total collective and individual activities conducted pursuant to the urban runoff management programs becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g. MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the RWQCB, the RWQCB defines MEP.

MEP: means Maximum Extent Practicable.

SEC. 10.02 (cont.)

**Mobile Business:** means businesses that provide services or conduct their primary activities at offsite locations, including but not limited to, car washing or detailing, power washing, pest control, and landscaping services.

**MS4:** means Municipal Separate Storm Sewer System.

**Municipal Separate Storm Sewer System:** means a conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains, by which urban runoff and stormwater may be conveyed to the receiving waters. The terms “MS4” and “Stormwater Conveyance System” may be used interchangeably.

**Municipal Stormwater Permit:** means the San Diego County Municipal Storm Water Permit Order No. R9-2007-0001, “Waste Discharge Requirements for Discharges of Urban Runoff From the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority” as modified, amended or re-issued.

**Non-Stormwater:** means all discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges from a MS4 other than stormwater). Non-stormwater includes illegal discharges, non-prohibited discharges, and NPDES permitted discharges.

SEC. 10.02 (cont.)

National Pollutant Discharge Elimination System: means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA.

NPDES: means National Pollutant Discharge Elimination System.

Person: means in this Article, an individual, association, partnership, corporation, limited liability company, trustee, municipality, State or Federal agency, or any other legal entity, or agent or employee thereof.

Point Source: means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant: means any agent that may cause or contribute to the degradation of water quality such that a condition of pollution is created or aggravated.

Pollution: means the alteration of the quality of the waters of the State by waste, to a degree that unreasonably affects either the waters for beneficial use or facilities that serve these beneficial uses.

Post-Construction BMPs: means a subset of BMPs including structural and non-structural controls which detail, retain, filter, or educate to prevent the release of pollutants to surface waters during the final functional life of developments.

SEC. 10.02 (cont.)

**Priority Development Projects**: means new development and redevelopment project categories listed in Section D.1.d(2) of the Municipal Stormwater Permit, including:

1. Housing subdivisions of 10 or more dwelling units, including single-family homes, multi-family homes, condominiums and apartments;
2. Restaurants;
3. Parking lots greater than 5,000 square feet or with Fifteen (15) or more parking spaces and potentially exposed to urban runoff;
4. Automotive repair shops;
5. Streets, roads, highways and freeways creating a new paved surface that is 5,000 square feet or greater used for transportation;
6. Commercial development greater than One (1) acre. Any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than One (1) acre. This category includes, but is not limited to, hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities;
7. Developments of heavy industry greater than One (1) acre including, but not limited to, manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas;
8. All hillside development greater than 5,000 square feet;



SEC. 10.02 (cont.)

9. All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site and not commingled with flows from adjacent lands;

10. Retail gasoline outlets that are 5,000 square feet or more or are a projected average daily traffic of One Hundred (100) or more vehicles per day; and

11. All other pollutant generating development projects that result in the disturbance of one acre or more of land.

Receiving Waters: means Waters of the United States.

Redevelopment: means the creation, addition, and/or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of the routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment

SEC. 10.02 (cont.)

does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lanes on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Responsible Party: means any person(s) in charge of the premises or location, or responsible for the event or incident or who leases, rents or uses the property, or contractor(s) or subcontractor(s) using or in charge of the premises when the event or incident occurs. If any of those persons are minors, the parent or guardians of such minor(s) shall be the responsible party. If the person(s) is a business entity, the manager or on-site supervisor where the event or incident occurs shall be a responsible party.

RWQCB: means the California Regional Water Quality Control Board for the San Diego Region.

Sediment: means soil, sand, and minerals washed from land into water from anthropogenic sources.

Standard Urban Stormwater Mitigation Plan: means the development project requirements that ensure that pollutant discharges and runoff flows from development are reduced to the MEP and that receiving water quality objectives are not violated throughout the life of the project. SUSMP requirements shall apply to all new development and redevelopment projects falling under the priority project categories or locations listed in the Municipal Stormwater Permit. A SUSMP document is required for both tenant projects and District capital development projects, which clearly conveys the process used to identify pollutants of concern, conditions of concern, and BMPs selected

SEC. 10.02 (cont.)

for the project, as well as identifying BMP maintenance requirements that protect stormwater quality.

Stormwater: means stormwater runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Conveyance System: this term is used interchangeably with Municipal Separate Storm Sewer System (MS4).

Stormwater Pollution Prevention Plan: means a document which meets the requirements set out in the General Construction Stormwater Permit or General Industrial Stormwater Permit or this Article. A SWPPP describes the BMPs to be implemented and other steps to be taken by the discharger to meet the applicable requirements of the General Construction Stormwater Permit or General Industrial Stormwater Permit or this Article.

SUSMP: means Standard Urban Stormwater Mitigation Plan.

SWPPP: means Stormwater Pollution Prevention Plan.

Tenant: means any person who enters into a lease agreement or a use permit agreement (including Tideland Use and Occupancy Permits, rental agreements, easements, licenses, and other similar types of real estate agreements) with the District directly or indirectly as a subtenant to the primary leaseholder, and pays rent or other consideration, including but not limited to money or services, in exchange for occupancy or other uses.

Treatment Control BMP: means any engineered system including BMPs that rely on either a physical condition (other than an entirely natural and undisturbed

SEC. 10.02 (cont.)

condition) or a constructed or installed device designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Urban Runoff: means all flows in a stormwater conveyance system and consists of the following components: stormwater (wet weather flows) and non-stormwater illegal discharge (dry weather flows).

Waste: includes sewage and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within the containers of whatever nature prior to, and for purposes of, disposal.

Water Quality Objective: means numerical or narrative limits on constituents or characteristics of water to protect designated beneficial uses of the water. California's water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans.

Water(s) of the State: means any water, surface or underground, including fresh and saline waters within the boundaries of the State. Examples of waters of the State include, but are not limited to, creeks, lagoons, lakes, ponds, bays, harbors, aquifers, wetlands and the ocean. The definition of the waters of the State is broader than that for the waters of the United States in that all water in the State is considered to be a water of the State regardless of circumstances or condition. Under this definition, a MS4 is always considered to be a water of the State.

SEC. 10.02 (cont.)

Water(s) of the United States: means water subject to the regulatory jurisdiction of the United States under the CWA and applicable case law.

Watershed: means that geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

Wet Season: means the time period from October 1 through April 30, also known as the rainy season.

(Enacted July 25, 2000 - Ordinance 2105)

(Amended December 11, 2007 - Ordinance 2475)

## SEC. 10.03 - GENERAL PROVISIONS

(a) Construction and Application. Interpretation of the meanings of parts of this Article shall assure consistency with the purpose and intent of this Article. This Article is not intended to interfere with, abrogate or annul any other Article, rule or regulation, statute, or other provision of law. The requirements of this Article should be considered minimum requirements, and where any provision of this Article imposes restrictions different from those imposed by any other Article, rule or regulation, statute or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall take precedence.

(b) Compliance Disclaimer. Full compliance by any person with the provisions of this Article shall not preclude the need to comply with other local, State or Federal statutory or regulatory requirements, which may be required for the control of the discharge of pollutants into stormwater and/or the protection of stormwater quality.

(c) Recycled Water. This Article is not intended to prohibit or prevent the use of recycled water provided such use complies with this Article.

(d) Collection and Use of Stormwater. The Executive Director may modify any requirement imposed by this Article to allow the on-site collection and use of stormwater, or the collection of stormwater for delivery to and use at District-designated sites, provided the modified requirements are enforceable and provide equivalent environmental protection.

(e) District Permits and Approvals.

1. An application for any permits or approvals shall be accompanied by plans or documentation demonstrating how the applicable

SEC. 10.03 (cont.)

requirements of this Article will be met. No permit or approval shall be granted unless the decision maker determines that the application will comply with this Article.

2. An application for any special event permit or approval shall be accompanied by a deposit to cover any costs or expenses to abate an illicit discharge or to repair any obstruction, damage or other impairment to the stormwater conveyance system.

(f) Procedures, Forms and Guidance Documents. The Executive Director shall prepare, disseminate and maintain procedures, forms and guidance documents addressing the use of pollution prevention practices and BMPs for specific activities or facilities. Guidance documents, including the District JURMP, SUSMP and SWPPP templates, are available at the District and on the District's website, [www.portofsandiego.org](http://www.portofsandiego.org).

1. These procedures, forms and guidance documents may set out additional compliance alternatives that, in specified circumstances, can provide the same environmental protection that is afforded by the BMPs required by this Article. These procedures, forms and guidance documents may also identify practices that have been determined by the Executive Director to be additional BMPs that may be implemented to prevent or control pollution to the MEP.

2. The Executive Director may also take these procedures, forms and guidance documents into account when determining whether any practices used by a discharger, an enforcement settlement offer, or any other

**SEC. 10.03 (cont.)**

submittal to the District, are BMPs that will prevent or control pollution to the MEP. These case-specific discretionary decisions may involve circumstances that were not anticipated when these procedures, forms and guidance documents were prepared. Therefore, these procedures, forms and guidance documents do not confer rights on dischargers in these circumstances and do not constrain the discretion of the Executive Director. Where appropriate, and provided the same protection is provided to the environment, the Executive Director may depart from these procedures, forms and guidance documents when making case-specific decisions authorized by this Article.

(Enacted July 25, 2000 - Ordinance 2105)

(Amended December 11, 2007 - Ordinance 2475)



## SEC. 10.04 - EXEMPTIONS

(a) Exempt Discharges. The following categories of non-stormwater discharges are not prohibited by this Article unless and until said category is identified by the Executive Director as a significant source of pollutants to waters of the United States.

1. Air conditioning condensation;
2. Springs;
3. Foundation drains (not including active groundwater dewatering systems);
4. Diverted stream flows (provided required permits are obtained);
5. Flows from riparian habitats and wetlands;
6. Rising ground water/tidal influence;
7. Uncontaminated ground water infiltration to MS4s;
8. Uncontaminated pumped ground water (provided required permits are obtained);
9. Discharges from potable water sources not subject to NPDES Permit No. CAG679001, other than water main breaks; and
10. Dechlorinated swimming pool discharges.

(b) Conditionally Exempt Discharges. The following categories of non-stormwater discharges are not prohibited by this Article subject to conditions established by the Executive Director. Such conditions may take into account the nature and severity of any effects caused by the discharge and the time required to design, engineer, fund, procure, construct, and make appropriate BMPs operational. Dischargers must install,

SEC. 10.04 (cont.)

implement, and maintain the specifically applicable minimum BMPs, if any, as described in guidance documents prepared by the District and must comply with any order issued pursuant to this Article.

1. Irrigation water, including recycled water used for irrigation, landscape irrigation, and lawn watering;
2. Water line flushing;
3. Water from crawl space pumps; and
4. Water from footing drains (not including active groundwater dewatering systems).

(c) Emergency Circumstances. Discharges of trauma scene post-cleanup residues and other discharges determined by the Executive Director to be necessary to protect public health and safety are not prohibited by this Article, provided any conditions on such discharges imposed by the Executive Director are satisfied.

(Enacted July 25, 2000 - Ordinance 2105)  
(Amended December 11, 2007 - Ordinance 2475)

## SEC. 10.05 - PROHIBITIONS

(a) The following prohibitions apply to all persons and activities on land or waters within District jurisdiction.

1. Illegal Discharges. It is unlawful to discharge pollutants in non-stormwater directly or indirectly into the stormwater conveyance system or receiving waters, except as exempted in this Article. It is unlawful to discharge pollutants in stormwater directly or indirectly into the stormwater conveyance system or receiving waters, unless the applicable requirements of this Article have been met.

2. Illicit Connection. It is unlawful to establish, use or maintain an illicit connection to the stormwater conveyance system. This prohibition applies retroactively to connections made in the past, even if the connection was established pursuant to a valid permit and was legal at the time of the connection.

3. Waste: Disposed on Land and in Water. It is unlawful to release, discharge, place or deposit any substances or waste on land or in the stormwater conveyance system or elsewhere in the receiving waters except in such receptacles as may be provided by the District. It is unlawful to dispose of, or attempt to dispose of, waste by burying it in or under the earth or water.

SEC. 10.05 (cont.)

4. Flammable Materials. It is unlawful to throw, deposit, leave, abandon, pump, or discharge oil, spirits, or any flammable liquid or material on District lands, in the stormwater conveyance system, or in receiving waters.

5. Discharge of Excreta and Sewage. It is unlawful to discharge, or allow any other person on a vessel under his control or command to discharge excreta or sewage, except in designated pump-out stations or restroom facilities. It is unlawful to fail to properly connect any inhabited improvements to a sewage disposal system or sanitary sewer or to permit sewage seepage.

6. Washing of Impervious Surfaces. It is unlawful to discharge, cause or permit the discharge of untreated wash water and water from the washing of impervious surfaces.

7. Wash Waters. It is unlawful to discharge, cause or permit the discharge of untreated wash water or the washing of any floor coverings such as grates, mats or rugs from any commercial or industrial sites or activities, including but not limited to, restaurants, commercial fishing landings, gas stations, auto repair garages, or from other types of automotive or repair facilities, into the stormwater conveyance system or receiving waters.

SEC. 10.05 (cont.)

8. Repair, Construction and Demolition Debris. It is unlawful to deposit or abandon waste or building material of any description that has been generated during the repair, construction, or demolition of any structure or vessel. Upon the completion of any repair, construction or demolition, all dischargers shall gather up and haul away all waste of every nature, and return the land to a condition equal to or better than its original condition, at their sole cost and expense.

(Enacted July 25, 2000 - Ordinance 2105)

(Amended December 11, 2007 - Ordinance 2475)

**SEC. 10.06 - BEST MANAGEMENT PRACTICE REQUIREMENTS APPLICABLE TO ALL DISCHARGERS.**

(a) **Applicability.** All dischargers shall comply with this Section.

(b) **Best Management Practices.** Every person undertaking any activity or use of a premise which may cause or contribute to stormwater pollution, illegal discharges, or non-stormwater discharges, shall comply with the BMP guidelines or pollution control requirements as may be established by this Article and the JURMP.

1. **Minimum BMPs for All Persons.** All persons must install, implement and maintain the following minimum BMPs:

a. **Pollution Prevention.** Stormwater pollution prevention practices that are generally recognized in the applicable industry or business as being effective and economically sound.

b. **Use of Materials.** All materials with the potential to pollute urban runoff (including but not limited to cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides) shall be used in accordance with label directions or material safety data sheets. No such product may be disposed of or rinsed onto land or into the stormwater conveyance system or receiving waters.

c. **Storage of Materials and Waste.** All materials and wastes with the potential to pollute shall be stored in a

SEC. 10.06 (cont.)

manner that either prevents contact with stormwater or contains contaminated runoff for treatment and disposal.

2. Additional Minimum BMPs for Facilities and Activities. All facilities and/or activities identified in this Subsection 10.06(b)(2) must implement and maintain the BMP requirements identified below and the minimum BMPs applicable to that facility or activity as identified in the JURMP, or for priority redevelopment projects, the SUSMP.

a. Industrial and Commercial Activities. Industrial and commercial activities must meet the applicable requirements of this Article. This includes, but is not limited to, compliance with all prohibition requirements and minimum BMPs specified in the JURMP for industrial and commercial activities. Those facilities and activities also subject to the General Industrial Stormwater Permit must install, implement and maintain any additional BMPs required by that Permit.

b. Mobile Businesses. Mobile businesses and/or mobile business activities must meet the applicable requirements of this Article. This includes, but is not limited to, compliance with all prohibition requirements and

SEC. 10.06 (cont.)

minimum BMPs. These facilities and activities must implement any BMPs specified in the JURMP for mobile business activities.

c. Construction Activities. Construction activities must meet the applicable requirements of this Article. This includes, but is not limited to, compliance with all prohibition requirements and minimum BMPs specified in the JURMP for construction activities. Those facilities and activities also subject to the General Construction Stormwater Permit must install, implement and maintain any additional BMPs required by that permit.

d. Inspection and Maintenance of Sewer Laterals and On-site Wastewater Systems. Sewer laterals shall be cleaned, maintained and replaced when necessary to prevent seepage and spills. On-site wastewater systems shall be pumped, maintained, and modified or replaced when necessary to prevent spills.

(1) Spills. Any spill or release from the failure of a sewer lateral or on-site wastewater system shall be contained and cleaned-up in a



SEC. 10.06 (cont.)

manner that minimizes any release of pollutants to the stormwater conveyance system or receiving waters.

(2) Damaged or Failed Systems.

Damaged or failed sewer laterals or on-site wastewater systems shall be repaired or replaced, after obtaining all required permits and approvals.

(c) Maintenance of BMPs. Every person undertaking any municipal, commercial or industrial activity, development, or use of a premise shall maintain the BMPs necessary to achieve and maintain compliance with this Article. The tenant(s) of lands on which treatment control BMPs, including but not limited to temporary and post-construction BMPs, have been installed to meet the requirements of this Article shall ensure the maintenance of those BMPs. The tenant(s) shall maintain the BMPs if other persons or dischargers who are obliged to maintain those BMPs (by contract or covenant pursuant to this Article) fail to do so. No contract or other agreement imposing an obligation to maintain a BMP can relieve a person or discharger of any obligation to maintain a BMP imposed by this Article.

1. The District or another public entity may accept responsibility for maintenance of any BMP, under such conditions as the District or other

SEC. 10.06 (cont.)

public entity determines are appropriate. Where a maintenance obligation is proposed by a public entity other than the District, the District shall be involved in the negotiations with that agency, and in negotiations with the other agencies responsible for issuing permits for the construction and/or maintenance of the BMP. The District must be identified as a third party beneficiary empowered to enforce any such maintenance agreement.

2. Any discharger who transfers ownership of a BMP or responsibility for the maintenance of a BMP to another discharger shall provide written notice of the maintenance obligations associated with that BMP to the District and any new or additional responsible party prior to that transfer.

(d) Inspection, Repair and Upgrading of Treatment Control BMPs. The discharger must regularly inspect any treatment control BMPs at manned and unmanned facilities to verify that they are functioning as designed. Inspections must be performed at least once a year. The discharger must repair any treatment control BMPs that fail as soon as it is safe to do so. If the failure of such a BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the discharger must modify or upgrade the BMPs to prevent any further failure in the same or similar circumstances.

SEC. 10.06 (cont.)

(e) BMP Operation and Maintenance Verification. Annual written verification of effective operation and maintenance of each approved treatment control BMP by the discharger is required to be submitted to the District prior to each wet season.

(f) Stormwater Pollution Prevention Plan Compliance. Whenever a SWPPP is required pursuant to this Subsection 10.06(f), the Executive Director may require the discharger to consider the District guidance documents when determining which BMPs to include in the proposed SWPPP that will prevent or control pollution to the required level of MEP. Any discharger required to prepare a SWPPP shall install, implement and maintain the BMPs identified in the SWPPP. A SWPPP may be required for:

1. NPDES Permits. Any discharger that owns or operates industrial facilities or activities subject to the General Industrial Stormwater Permit shall prepare and maintain on site an up-to-date SWPPP as required by the applicable NPDES Permit. Any discharger that owns or operates construction activities subject to the General Construction Stormwater Permit shall prepare and maintain on site an up-to-date SWPPP as required by the applicable NPDES Permit.

2. District Requirements. The Executive Director may require any discharger to prepare and submit a SWPPP for review if:

**SEC. 10.06 (cont.)**

a. A person proposes to undertake any construction activities, whether or not such activity is subject to the General Construction Stormwater Permit;

b. A discharger does not come into compliance with this Article after one or more warnings or other enforcement actions in response to inadequate implementation or maintenance of BMPs; or

c. The facility or activity at issue is a significant source of contaminants to receiving waters despite compliance with this Article.

(Enacted July 25, 2000 - Ordinance 2105)  
(Amended December 11, 2007 - Ordinance 2475)

## SEC. 10.07 - MONITORING AND REPORTING REQUIREMENTS

(a) Applicability. All dischargers shall comply with this Section.

(b) Reporting of Spills, Releases and Illegal Discharges. The discharger shall report spills, releases, and illegal discharges of pollutants to the stormwater conveyance system or to receiving waters as required by all applicable State and Federal laws, rules or regulations. In addition, the discharger shall report any such spills, releases and illegal discharges with the potential to endanger health, safety or the environment to the District within 24 hours after discovery. If safe to do so, the discharger shall take necessary actions to contain and minimize the spill, release or illegal discharge.

(c) Monitoring. Any discharger required to sample, test, monitor, and report shall make the results of such activities available to the District upon request. Sampling, testing, monitoring, and reporting may be required for:

1. NPDES Permits. Industrial dischargers and those dischargers subject to the General Construction Stormwater Permit shall perform the sampling, testing, monitoring and reporting required by the applicable NPDES Permit.

2. District Requirements. Whenever a SWPPP is required, the Executive Director may require the discharger to perform sampling, testing, monitoring and reporting.

3. District Orders. The Executive Director may order a discharger to conduct testing or monitoring and to report the results to the District if:

SEC. 10.07 (cont.)

a. The Executive Director determines that testing or monitoring is needed to determine whether BMPs are effectively preventing or reducing pollution in stormwater to the MEP, or to determine whether the facility is a significant source of contaminants to receiving waters;

b. The Executive Director determines that testing or monitoring is needed to assess the impacts of a spill or illegal discharge on health, safety or the environment;

c. A spill or illegal discharge has not been eliminated after written notice by the Executive Director;

d. Repeated violations have been documented by written notices from the Executive Director; or

e. The RWQCB requires the District to provide any information related to the discharger's activities.

(d) Testing. The Executive Director may determine the manner in which the results of any testing and monitoring are reported, and may determine when required sampling, testing or monitoring may be discontinued. Testing and monitoring ordered may include the following:

1. Visual monitoring of dry weather flows, wet weather erosion, and/or BMPs;
2. Visual monitoring of premises for spills or discharges;

**SEC. 10.07 (cont.)**

3. **Laboratory analyses performed by a California State Certified Laboratory of stormwater or non-stormwater discharges for pollutants;**
4. **Background or baseline monitoring or analysis; and**
5. **Monitoring of receiving waters or sediments that may be affected by pollutant discharges by the discharger (or by a group of dischargers including the discharger).**

**(Enacted July 25, 2000 - Ordinance 2105)**

**(Amended December 11, 2007 - Ordinance 2475)**

## **SEC. 10.08 - DEVELOPMENT AND REDEVELOPMENT PROJECTS**

(a) **Applicability.** The following requirements are applicable to all development and redevelopment activities. The District and any local government or public authority are not dischargers for activities conducted by others in public rights of way.

(b) **Post-Construction BMP Requirements.** Any development and redevelopment projects subject to the General Construction Stormwater Permit shall be designed to include and shall implement post-construction BMPs. Post-construction BMPs must ensure that pollutants and runoff from the development will be reduced to the MEP, will not significantly degrade receiving water quality, and will not cause or contribute to an exceedance of receiving water quality objectives.

(c) **Priority Development Projects.** All new development and redevelopment projects that fall into one of the priority development project categories are subject to SUSMP requirements. All priority development projects and redevelopment projects (including ministerial projects) shall be designed using the methods described in the SUSMP and shall include all applicable studies and reviews required by the SUSMP.

(d) **Priority Development Project BMP Requirements.** All priority development projects shall implement the following post-construction BMPs unless they have provided a written determination, to the satisfaction of the District, that said BMPs are not applicable or feasible.

1. **LID BMPs** shall be implemented at all priority development projects to minimize directly connected impervious areas and promote infiltration. LID BMPs shall be implemented as required in the JURMP and SUSMP. The amount of runoff from impervious areas that is to drain



SEC. 10.08 (cont.)

to pervious areas shall correspond with the total capacity of the project's pervious areas to infiltrate or treat runoff, taking into consideration the pervious areas' soil conditions, slope, and other pertinent factors. LID BMPs shall conserve natural areas, minimize the impervious footprint of the project, provided that public safety is not compromised, minimize soil compaction, and minimize disturbances to natural drainage.

2. Source Control BMPs. Source control BMPs shall be implemented at all priority development projects to minimize pollutants in stormwater, ensure all storage and trash areas are properly designed, install efficient irrigation systems, and meet any other requirements specified in the SUSMP and JURMP.

3. Treatment Control BMPs. Treatment control BMPs for all priority development projects shall mitigate (infiltrate, filter or treat) the required volume of flow or runoff. Minimum treatment control BMPs shall be sized correctly, address the significant pollutants of concern and meet any other requirements specified in the SUSMP and JURMP.

(e) Post-Construction Stormwater Management Plan. All applications for a permit or approval associated with a development or redevelopment project subject to SUSMP requirements must be accompanied by a post-construction operations and management plan on a form or in a format specified by the District. The plan shall specify the manner in which the applicant will implement the post-construction BMPs required by this Article.

SEC. 10.08 (cont.)

(f) Stormwater Management Plan Review Deposit. The District may require a monetary deposit to pay the estimated reasonable costs for the review of any development or redevelopment project proposal for compliance with this Section. Such a monetary deposit must be approved by the Board of Port Commissioners prior to implementation.

(g) Waivers. Principal permits or approvals sought for a project otherwise subject to this Section may be waived if the Executive Director determines that compliance would be infeasible.

(Enacted July 25, 2000 - Ordinance 2105)  
(Amended December 11, 2007 - Ordinance 2475)

## SEC. 10.09 - OTHER ACTS AND OMISSIONS THAT ARE VIOLATIONS

The following acts and omissions are violations of this Article, whether committed by a discharger or by another person:

(a) Causing, Permitting, Aiding or Abetting Non-Compliance. It is unlawful to cause, permit, aid or abet non-compliance with any part of this Article.

(b) False Statements, Misrepresentation and Concealment. It is unlawful to make any false statement or misrepresentation to the District or its agents concerning compliance with this Article. False statements or misrepresentations may include, but are not limited to, any misrepresentation in a voluntary disclosure, any submission of a report that omits required material facts without disclosing such omission, and any withholding of information required to be submitted by or pursuant to this Article. It is unlawful to conceal a violation of this Article.

(c) Failure to Promptly Correct Non-Compliance. Violations of this Article must be corrected within the time period specified by the Executive Director. Each day or part thereof that action necessary to correct a violation is not initiated and diligently pursued is a separate violation.

(d) Continued Non-Compliance. A separate violation may be considered to have taken place for each day non-compliance with this Article exists.

(e) Permits, Approvals and SWPPPs. It is unlawful to fail to conform with an applicable SWPPP or fail to comply with urban runoff-related provisions in any other District permit or approval.

(Enacted July 25, 2000 - Ordinance 2105)  
(Amended December 11, 2007 - Ordinance 2475)

## SEC. 10.10 - INSPECTIONS

(a) Authority to Inspect. The Executive Director is authorized to inspect activities and facilities, whether or not occupied, at reasonable times, in a reasonable manner, and with reasonable notice to carry out the purposes of this Article or any applicable statute, rule, code or regulation enforceable by the District.

(b) Inspection Warrant. If entry for any inspection is refused by the tenant, facility owner or operator, an inspection warrant shall be obtained prior to inspection.

(c) Scope of Inspections. Inspections may include all actions necessary to determine whether any illegal discharges or illicit connections exist, the source(s) of any discharge, whether the BMPs installed and implemented are adequate to comply with this Article, whether BMPs are being properly maintained, whether the facility or activity complies with the other requirements of this Article and how to abate, correct or prevent pollutants from entering the stormwater conveyance system and receiving waters. Inspections may include, but may not be limited to sampling, taking measurements, metering, and placing devices necessary to sample, monitor, meter, record, visually inspect and review records. When samples are collected, the owner or operator may request and receive split samples. Records, reports, analyses, or other information required under this Article may be inspected and copied, and photographs taken to document a condition and/or a violation of this Article.

(Enacted July 25, 2000 - Ordinance 2105)  
(Amended December 11, 2007 - Ordinance 2475)

## SEC. 10.11 - ENFORCEMENT

Violations of this Article are deemed a threat to public health, safety and welfare, and the environment and are identified as public nuisances. The Executive Director may enforce this Article and abate public nuisances in his or her discretion as follows:

(a) Administrative Authorities.

1. Cease and Desist Order. Written and/or verbal orders may be issued to stop any action in violation of this Article or any applicable statute, rule, code or regulation enforceable by the District, including but not limited to the elimination of illegal discharges or the removal of illicit connections.

2. Notice and Order to Abate Violation. Written and/or verbal orders may be issued to perform abatement, corrective, remedial, and/or mitigation activities, including but not limited to any of those listed in Section 10.06 (Specific BMPs) or any applicable statute, rule, code or regulation enforceable by the District. All required actions must be performed within a reasonable period of time as determined by the Executive Director.

3. Administrative Citation. Whenever the Executive Director determines that a violation of one or more provisions of the District Code or any applicable statute, rule, code or regulation enforceable by the District has occurred or continues to exist, a written Administrative Citation may be issued and civil penalties may be imposed pursuant to Section 0.11(i).

SEC. 10.11 (cont.)

4. Stop Work Orders. Whenever any work is being done contrary to the provisions of this Article, or any applicable statute, rule, code or regulation enforceable by the District, the Executive Director may order the work stopped by notice in writing, served on any person performing the work or causing such work to be done, and any such person shall immediately stop such work until authorized by the Executive Director to proceed.

5. Nuisance Abatement. The Executive Director may abate any public nuisance created by or resulting from a violation of this Article, including summary abatement. All costs to detect and abate any such public nuisance shall be borne by the violator and/or the tenant of the premises on which the public nuisance exists.

a. General Abatement. If the actions ordered pursuant to Subsections (a)(1), (a)(2) or (a)(4) are not performed, the Executive Director may abate any public nuisances using the hearing procedures in Section 0.11(i) or any other authority provided by law.

b. Summary Abatement. If the Executive Director determines that a public nuisance exists and immediate action is necessary to preserve or protect the public health or safety, the District may summarily abate the nuisance by any reasonable means without notice or hearing. Any challenge to

SEC. 10.11 (cont.)

the abatement costs or the necessity or manner of abatement shall be resolved through the hearing procedures in Section 0.11(i).

6. Permit Suspension and Revocation. Violations of this Article or any applicable statute, rule, code or regulation enforceable by the District may be grounds for suspension, revocation or modification of any permit, license or approval. Suspensions and revocations shall occur in accordance with the hearing procedures in Section 0.11(i).

(b) Judicial Authorities.

1. Injunctive or Declaratory Relief. Any violation of this Article or any applicable statute, rule, code or regulation enforceable by the District may be enforced by a judicial action for injunctive or declaratory relief.

2. Civil Penalties and Remedies. The District may file actions in Superior Court to enforce this Article or any applicable statute, rule, code or regulation enforceable by the District, seeking civil penalties and/or other remedies as provided in this Section and in Section 10.12. There is no requirement that administrative enforcement authorities be used before such actions are filed.

3. Criminal Arrest or Field Citation. The assistance of a peace officer may be enlisted to arrest violators as provided in California Penal Code, Ordinances 5, 5c, 5d of Title 3, Part 2 (or as amended) and/or a citation and notice to appear as prescribed in Ordinance 5c of Title 3, Part 2

**SEC. 10.11 (cont.)**

of the Penal Code, including Section 853.6 (or as amended) may be issued. There is no requirement that administrative enforcement authorities be used before such actions are filed. The immunities prescribed in Section 836.5 of the Penal Code are applicable to the Executive Director and his or her designees acting in the course and scope of their employment pursuant to this Article.

(Enacted July 25, 2000 - Ordinance 2105)  
(Amended December 11, 2007 - Ordinance 2475)



## SEC. 10.12 - PENALTIES

(a) Administrative Penalties. Administrative penalties may be imposed pursuant to District Code Section 0.11(i). Any later-enacted administrative penalty provision in the District Code shall also be applicable to this Article, unless otherwise provided therein.

(b) Criminal Penalties. Criminal penalties may be imposed pursuant to District Code Section 0.11.

1. Misdemeanor. Non-compliance with any part of this Article constitutes a misdemeanor and may be enforced and punished as prescribed in Section 0.11 and any other applicable statute, rule or regulation.

2. Infraction. The Executive Director may charge any violation of this Article as an infraction at his or her discretion. Infractions may be abated as a nuisance or enforced and punished as prescribed in Section 0.11 and any other applicable statute, rule or regulation.

(c) Civil Penalties. The following may be awarded without monetary limitation in any civil action, except where a maximum monetary amount is specified:

1. Injunctive relief;
2. Costs to investigate, inspect, monitor, survey or litigate;
3. Costs to place or remove soils or erosion control materials, to correct any violation, and to repair environmental damage or to end any other adverse effects of a violation;

SEC. 10.12 (cont.)

4. Compensatory damages for losses to the District or any other plaintiff caused by violations; and/or restitution to third parties for losses caused by violations;

5. Civil penalties in accordance with District Code Section 0.11(i);  
and

6. Attorney fees and court costs as permitted by law.

(d) Cost Recovery. The Executive Director may impose a monetary penalty without limitation to recover the costs, including staff time and materials, to investigate or monitor any violation of this Article.

(e) Attorney Fees. In any action, administrative proceeding or special proceeding to enforce this Article and abate a nuisance, the prevailing party may recover attorney fees if, at the initiation of the action or proceeding, the District elects to seek recovery of its own attorneys' fees. In no event shall the award of attorney fees to the prevailing party exceed the amount of reasonable attorney fees incurred by the District in the action or proceeding.

(f) Penalties and Remedies Not Exclusive. Penalties and remedies under this Article may be cumulative and in addition to other administrative, civil, or criminal remedies.

(Enacted July 25, 2000 - Ordinance 2105)  
(Amended December 11, 2007 - Ordinance 2475 )

## **APPENDIX C**

# **SUSMP and HMP DOCUMENTS**

PORT OF SAN DIEGO  
JURISDICTIONAL  
STANDARD URBAN STORMWATER MITIGATION PLANNING DOCUMENT

March 2008



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## 1.1 Background

The municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit (Order No. R9-2007-0001, NPDES No. CAS0108758, hereinafter referred to as “Municipal Permit”) issued to San Diego County, the Port of San Diego (Port), San Diego County Regional Airport Authority and 18 cities (Copermittees) by the San Diego Regional Water Quality Control Board (Regional Board) on January 24, 2007, requires the development and implementation of a program addressing urban runoff pollution issues in development planning for public and private projects.

The requirement to implement a program for development planning is based on federal and state statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (“CZARA”), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The Municipal Permit requires the implementation of a Jurisdictional Urban Runoff Management Program (URMP). The primary objectives of the Jurisdictional URMP requirements are to:

1. Ensure that discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards;
2. Effectively prohibit non-stormwater discharges in urban runoff; and
3. Reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

One component of the Port’s Jurisdictional URMP is to prepare and implement a Jurisdictional Standard Urban Stormwater Mitigation Plan (SUSMP). As required by the Municipal Permit, the Copermittees jointly developed a Model SUSMP as the basis for jurisdictional plans. The Port Jurisdictional SUSMP (Port SUSMP) is based on the Model SUSMP and tailored to Port specific conditions and requirements. The Model SUSMP is referenced throughout this document and can be found at [www.waterboards.ca.gov/sandiego/programs/sd\\_stormwater.html](http://www.waterboards.ca.gov/sandiego/programs/sd_stormwater.html).

## 1.2 Summary

The Port SUSMP has been developed by the Port to address post-construction urban runoff pollution from new development and redevelopment projects that fall under “priority project” categories. The goal of the Port SUSMP is to develop and implement practicable policies to



ensure to the maximum extent practicable that development does not increase pollutant loads from a project site and considers urban runoff flow rates, velocities and durations. This goal may be achieved through site-specific controls and/or drainage area-based or shared structural treatment controls. The Port SUSMP was developed to meet the requirements of the Model SUSMP, collectively developed by the Copermittees, approved by the Regional Board on June 12, 2002, and revised October 31, 2007.

Under the Port SUSMP, the Port will approve the SUSMP project plan(s) as part of the development plan approval process for discretionary projects, and prior to issuing permits for ministerial projects. To allow flexibility in meeting Port SUSMP design standards, structural treatment control BMPs may be located on- or off-site, used singly or in combination, or shared by multiple developments, provided certain conditions are met.

All new development and significant redevelopment projects that fall into one of the following “priority project” categories are subject to Port SUSMP requirements, subject to the lawful prior approval provisions of the Municipal Permit. In the instance where a project feature, such as a parking lot, falls into a priority project category, the entire project footprint is subject to Port SUSMP requirements. These categories are:

- Commercial development greater than 1 acre
- Heavy industry development greater than 1 acre
- Automotive repair shops
- Restaurants
- Projects located within or directly adjacent to or directly discharging to receiving waters within Environmentally Sensitive Areas that create 2,500 square feet or more of impervious surface or increase the area of imperviousness to 10% or more of its naturally occurring condition
- Parking Lots 5,000 square feet or more of impervious surface or with  $\geq 15$  parking spaces and potentially exposed to urban runoff
- Streets, roads, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater
- Retail gasoline outlets 5,000 square feet or more or with a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

Note that San Diego Bay is an Environmentally Sensitive Area. Further information is provided in Section 1.3 “Definitions” and Section 1.5 “Implementation Process.” It should also be noted that the following project priority categories identified in the Municipal Permit and Model SUSMP do not apply to Port projects: residential developments of 10 units or more and hillside development greater than 5,000 square feet. These categories have been eliminated from the implementation and BMP selection process in this document. Also note that for the purpose of implementing Port

SUSMP requirements, all projects within the Port are considered “commercial” projects, unless a project meets the definition of “auto repair shop,” “restaurants,” “parking lot,” or “streets or roads.”

**Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; maintenance of shoreline protection structures; and routine replacement of damaged pavement, such as pothole repair. Parking lots, buildings and other structures associated with utility projects are subject to SUSMP requirements if one or more of the criteria for the above categories are met. See the Definition for "Significant Redevelopment" for further clarification.**

## 1.3 Definitions

The definitions provided in this section are based on those provided in the Model SUSMP. Some definitions have been enhanced to clarify applicability to Port tidelands. Other definitions have been removed because they do not apply to projects within the Port’s jurisdiction.

“Automotive Repair Shop” means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. Information regarding these SIC codes is provided in Appendix C.

“Commercial Development” means any development that is not exclusively heavy industrial. The category includes, but is not limited to: mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, automotive dealerships, commercial airfields, and other light industrial complexes. In regards to SUSMP priority project categories, most development or redevelopment in the Port tidelands is considered “commercial,” unless the project is exclusively a “restaurant,” “auto repair shop,” “parking lot,” or “street or road.”

“Commercial Development greater than 1 acre” means any commercial development that results in the disturbance of one acre or more of land.

“Directly Connected Impervious Area (DCIA)” means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm drain without first flowing across permeable vegetated land area (e.g., lawns).

“Environmentally Sensitive Areas” means areas that include, but are not limited to, all Clean Water Act 303(d) impaired water bodies (“303[d] water bodies”); areas designated as an “Area of Special Biological Significance” (ASBS) by the State Water Resources Control Board (SWRCB) (*Water*

*Quality Control Plan for the San Diego Basin* (1994) and amendments); water bodies designated as having a RARE beneficial use by the SWRCB (*Water Quality Control Plan for the San Diego Basin* (1994) and amendments), or areas designated as preserves or their equivalent under the Multiple Species Conservation Program (MSCP) within the Cities and County of San Diego. The limits of ASBS are those defined in the *Water Quality Control Plan for the San Diego Basin* (1994 and amendments). Environmentally sensitive area is defined for the purposes of implementing SUSMP requirements, and does not replace or supplement other environmental resource-based terms. It should be noted that the SWRCB has designated San Diego Bay, in its entirety, as having a RARE beneficial use in the San Diego Basin Plan

“Hillside” means lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

“Hydromodification” means the change in the natural watershed hydrologic processes and runoff characteristics (i.e. interception, infiltration, overland flow, interflow and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and changes in sediment transport. In addition, alteration of stream and river channels, installation of dams and water impoundments, and excessive streambank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

“Infiltration” means the downward entry of water into the surface of the soil.

“Low Impact Development (LID)” means a stormwater management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

“Maximum Extent Practicable (MEP)” means the technology-based standard established by Congress in the Clean Water Act 402(p)(3)(B)(iii) that municipal dischargers of urban runoff must meet. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional lines of defense).

“Natural Drainage” means a natural swale or topographic depression which gathers and/or conveys runoff to a permanent or intermittent watercourse or waterbody.

“New Development” means land disturbing activities on a previously undeveloped parcel of land; surface grading for structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

“Parking Lot” means land area or facility for the temporary parking or storage of motor vehicles used personally, or for business or commerce.

“Projects Discharging to Receiving Waters within Environmentally Sensitive Areas” means all development and significant redevelopment that would create 2,500 square feet of impervious surfaces or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either discharge urban runoff to a receiving water within or directly adjacent (where any portion of the project footprint is located within 200 feet of the environmentally sensitive area) to an environmentally sensitive area, or discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the project footprint is located more than 200 feet from the environmentally sensitive area).

“Project Footprint” means the limits of all grading and ground disturbance, including landscaping, associated with a project.

“Receiving Waters” means surface bodies of water, which directly or indirectly receive discharges from urban runoff conveyance systems, including naturally occurring wetlands, streams (perennial, intermittent, and ephemeral (exhibiting bed, bank, and ordinary high water mark), creeks, rivers, reservoirs, lakes, lagoons, estuaries, harbors, bays and the Pacific Ocean. The Port shall determine the definition for wetlands and the limits thereof for the purposes of this definition, which shall be as protective as the Federal definition utilized by the United States Army Corps of Engineers and the United States Environmental Protection Agency. Constructed wetlands are not considered wetlands under this definition, unless the wetlands were constructed as mitigation for habitat loss or are BMPs originally constructed in receiving waters.

Construction of treatment control BMPs is prohibited in “Receiving Waters” may not be used to satisfy SUSMP requirements.

“Restaurant” means a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. See Appendix C for information on this SIC code. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirement and hydromodification requirement.

“Sediment” means soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a pollutant. This SUSMP regulates only the discharges of sediment from anthropogenic sources and does not regulate naturally occurring sources of sediment. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

“Significant Redevelopment” means development that would create, add or replace at least 5,000 square feet of impervious surfaces on an already developed site that falls under a priority

development project category. Where redevelopment results in an increase of less than 50% of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria identified in Section 2.3, Step 8 apply only to the addition, and not to the entire development. When redevelopment results in an increase of more than 50% of the impervious surfaces of a previously existing development, the numeric sizing criteria applies to the entire development. Significant redevelopment includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and replacement of damaged pavement.

“Site Design BMP”, a significant part of Low Impact Development (LID), means any project design feature that reduces the amount of impervious surfaces, disconnects impervious surfaces, reduces creation or severity of potential pollutant sources and/or reduces the alteration of the project site’s natural flow regime. Redevelopment projects that are undertaken to remove pollutant sources or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density new development) by incorporating higher densities and/or mixed land uses into the project design, are also considered site design BMPs.

“Source Control BMP (both structural and non-structural)” means land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. Examples include roof structures over trash or material storage areas, and berms around fuel dispensing areas.

“Stormwater BMP” means any schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, structural treatment BMPs, and other management practices to prevent or reduce to the maximum extent practicable the discharge of pollutants directly or indirectly to receiving waters. Stormwater BMPs also include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. This SUSMP groups stormwater BMPs into the following categories: site design, source control, and treatment control (pollutant removal) BMPs.

“Stormwater Conveyance System” also known as “municipal separate storm sewer system,” “MS4,” or “storm drain system” means private and public drainage facilities by which stormwater

may be conveyed to Receiving Waters, such as: natural drainages, ditches, roads, streets, constructed channels, aqueducts, storm drains, pipes, street gutters, or catch basins.

“Streets, Roads, Highways, and Freeways” means any project that is not part of a routine maintenance activity, and would create a new paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bikelane construction on existing roads; and replacement of damaged pavement.

“Treatment Control (Structural) BMP” means any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

## 1.4 Conflicts with Local Practices or Municipal Permit

The Model SUSMP contains provisions related to any conflicts between SUSMP requirements and established local codes. The Port knows of no apparent conflicts between Model SUSMP requirements and established Port codes or ordinances. If an apparent conflict is identified by a project proponent, it should be brought to the attention of the Port Project Architect for tenant projects or the Port Environmental Services Department for capital projects.

## 1.5 Implementation Process

As described in the Port Jurisdictional URMP Document, the Port is a special government entity, created in 1962 by the California legislation under the “San Diego Unified Port District Act.” The Act defines the Port as a public corporation with the responsibility of managing San Diego Harbor and administering approximately 5500 acres of public lands along San Diego Bay. The Port has the authority to protect, preserve, and enhance physical access, natural resources and quality of water in the bay. Approximately 176 tenants and 277 subtenants operate businesses on lands leased from the Port. In addition, the Port operates its own “municipal” facilities including the Tenth Avenue Marine Terminal, the National City Marine Terminal, the Cruise Ship Terminal, various parks and recreational facilities, and other municipal operations facilities.

Article 10 of the Port Code is entitled “Stormwater Management and Discharge Control Ordinance.” A copy of Article 10 of the Port Code is available at [www.portofsandiego.org/sandiego\\_environment/documents/CODE-STORMWATER-WEB.doc](http://www.portofsandiego.org/sandiego_environment/documents/CODE-STORMWATER-WEB.doc).

Section 10.08.(a) 3 address New Development and Redevelopment and states that “the Executive Director may establish controls on the volume and rate of stormwater runoff from new developments and redevelopments as may be reasonably necessary to minimize the discharge and transport of pollutants. The Port SUSMP Document represents one mechanism by which the Executive Director has established such controls in order to comply with the Municipal Permit.

New development and significant redevelopment projects are conducted by two major categories of project proponents, tenants of the Port (hereafter referred to as “tenant projects”) and the Port District itself (hereafter referred to as “capital projects”). The Port has different project approval processes for tenant and capital projects and accordingly has slightly different approval processes for Port SUSMP project review and approval. The Port SUSMP project approval process, including roles and responsibilities of Port departments, is described below for both tenant and capital projects.

#### A) TENANT PROJECTS

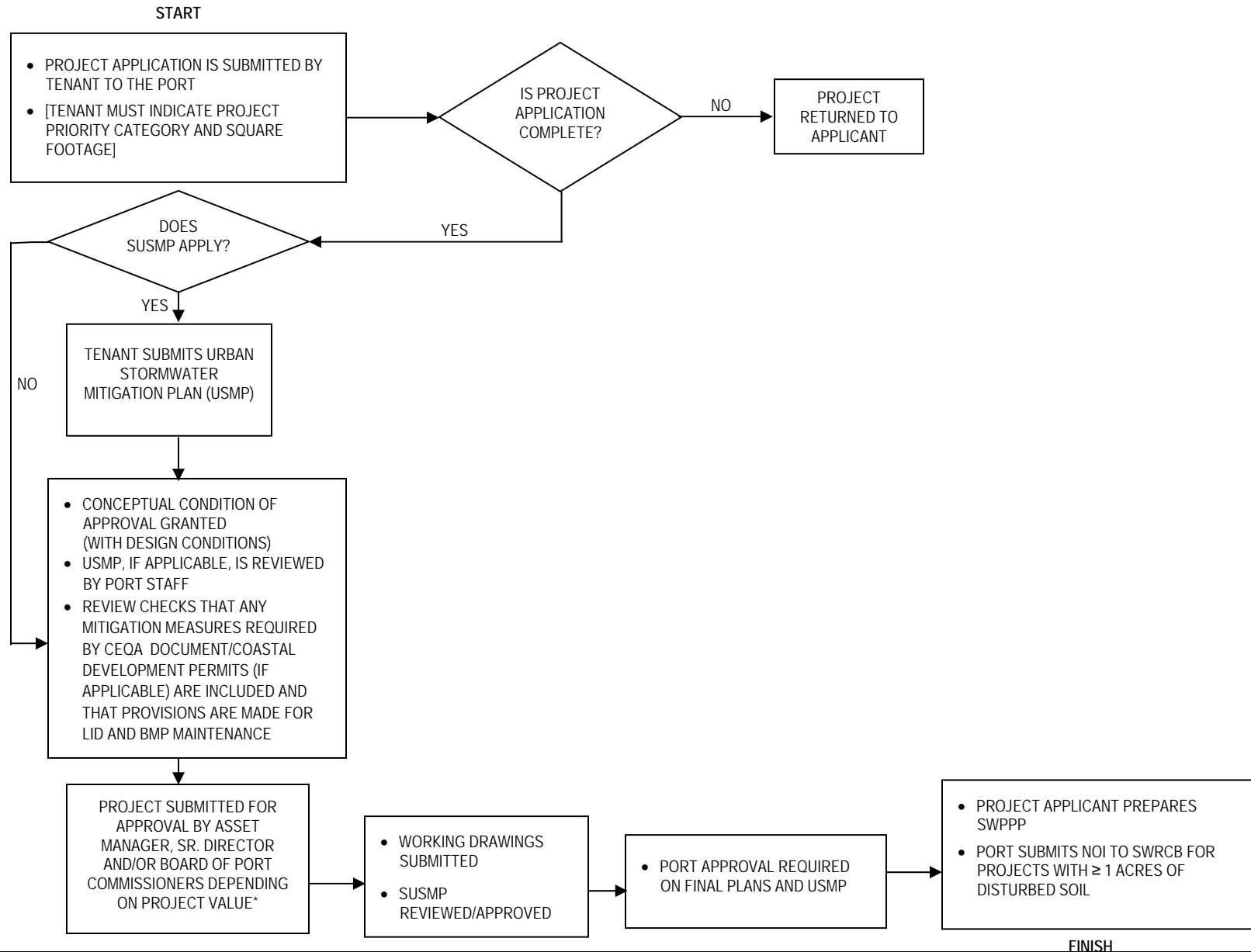
Port tenants desiring surface or subsurface improvements or to perform new construction, reconstruction, modification, or demolition, must submit a request for approval. Project approval typically involves several steps and review by several Port departments. The process is outlined in the flow chart in Figure 1-1 and is further described below.

Project approval starts with the project proponent submitting a project description to the Port, where a project completeness check is conducted. The first step in SUSMP compliance for tenant projects is that all projects must indicate the Project SUSMP Priority Category and the project square footage with the project request. Completed projects are then logged and assigned a project architect, while a Notification of Plan is submitted. The Port then determines whether SUSMP requirements apply to the project. Guidelines are provided in Table 1-1 to assist project proponents in determining whether SUSMP requirements apply to projects conducted within the Port jurisdiction. If SUSMP requirements apply, the project proponent must submit an Urban Stormwater Mitigation Plan (USMP) describing how the project will meet SUSMP requirements for the project application to be considered complete. The Port also determines if an Environmental Review is needed. The Port will perform a CEQA and Coastal Development Permit determination if necessary. The appropriate Port staff coordinates a technical review and approval of the project including obtaining review from other Port Departments. The Port reviews and approves all USMP documents and final design plans to ensure that SUSMP requirements are met. The tenant may be required to revise plans throughout the process if deemed necessary by the Port. Upon submittal of the final working drawings, an approval letter will be granted by the Port. The project is submitted for approval by asset manager, Senior Director and/or Board of Port Commissioners depending on project value. The project proponent then prepares a SWPPP. The Port submits an NOI to SWRCB for projects with greater or equal to 1 acres of disturbed soil.

The approval of a Port tenant project becomes part of the lease or part of a use permit. For discretionary projects, any mitigation measures required by the environmental review process, such as implementation and maintenance of stormwater BMPs, become part of the lease or use permit and are adopted by the Executive Officer or the Board of Port Commissioners as a Mitigation Monitoring and Reporting Program.



**Figure 1-1. Port Tenant Plan Processing and Project Approval**



**Table 1-1 Applicability of SUSMP Requirements by Project Type – Port of San Diego**

Project Type	Reference in Model SUSMP	Do SUSMP Requirements Apply? (Yes/No)
<b>Projects Considered Priority Projects and Required to Comply with SUSMP Requirements:</b>		
<b>1) Commercial Development:</b>		
a. Any project located within 200 feet of San Diego Bay and creates 2,500 square feet or more of impervious surfaces or increases the area of imperviousness of a project site to 10% or more of its naturally occurring condition.	1	Yes
b. Any project located greater than 200 feet from San Diego Bay that discharges urban runoff directly to San Diego Bay or directly adjacent (where any portion of the project footprint is located within 200 feet of the San Diego Bay) without mixing with flows from adjacent lands and creates 2,500 square feet or more of impervious surfaces or increases the area of imperviousness of a project site to 10% or more of its naturally occurring condition.	1	Yes
c. Other Redevelopment Projects that create, add or replace at least 5,000 square feet of impervious surfaces on an already developed site that fall under a priority development project categories, including, but not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity where impervious material(s) are removed, exposing underlying soils during construction.	2	Yes
d. Any commercial development project with a footprint greater than 1 acre.	3	Yes
e. Redevelopment projects that result in an increase of less than 50% of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria identified in Section 2.3, Step 8 apply only to the addition, and not to the entire development. When redevelopment results in an increase of more than 50% of the impervious surfaces of a previously existing development, the numeric sizing criteria applies to the entire development	2	Yes
<b>2) Automotive Repair Shop</b> of any size. See definition of “Automotive Repair Shop.”	3	Yes
<b>3) Restaurants</b> of any size. See definition of “Restaurant.”	3	Yes
<b>4) Parking Lots</b> more than 5,000 square feet or more with 15 or more parking spaces, and potentially exposed to urban runoff.	3	Yes
<b>5) Streets or Roads</b> with a project footprint of 5,000 square feet or greater.	3	Yes
<b>6) Heavy Industry</b> greater than one acre. This category includes, but is not limited to, manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, boat, etc.)	3	Yes
<b>7) Retail gasoline outlets (RGOs)</b> 5,000 square feet or more or with a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	3	Yes
<b>Project Types Not Considered Priority Projects and Exempted from SUSMP Requirements:</b>		
<ul style="list-style-type: none"> <li>▪ Any trenching and resurfacing associated with utility work</li> <li>▪ Any resurfacing and reconfiguring of surface parking lots</li> <li>▪ Application of asphalt overlay to existing pavement</li> <li>▪ New sidewalk or pedestrian ramp construction</li> <li>▪ Construction of bike-lanes on existing roads</li> </ul>	2, 3, 4	No
<ul style="list-style-type: none"> <li>▪ Replacement of damaged pavement or impervious surfaces as part of routine maintenance activities.</li> </ul>	2, 4	No

Project Type	Reference in Model SUSMP	Do SUSMP Requirements Apply? (Yes/No)
<ul style="list-style-type: none"> <li>▪ Projects (except mandatory categories above) that create less than 2,500 square feet of impervious surfaces or do not increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition.</li> </ul>	1	No
<p>Notes for References to Model SUSMP:</p> <ol style="list-style-type: none"> <li>1. Definition of “Projects Discharging to Receiving Waters within Environmentally Sensitive Areas”</li> <li>2. Definition of “Significant Redevelopment”</li> <li>3. Model SUSMP Part II Summary</li> <li>4. Definition of “Streets, Roads, Highways, and Freeways”</li> </ol>		

B) CAPITAL PROJECTS

Capital projects are evaluated, designed, and approved in accordance with the same environmental and coastal development permitting standards that are applied any development in the Port tidelands. The approval of development and improvement projects carried out by the Port itself includes the environmental mitigation measures that are self-imposed as a result of the environmental review process. Such mitigation measures become part of the project design and/or implementation and are formalized as an adopted Mitigation Monitoring and Reporting Program. The process for implementing SUSMP requirements for capital projects is outlined in the flow chart in Figure 1-2 and is further described below.

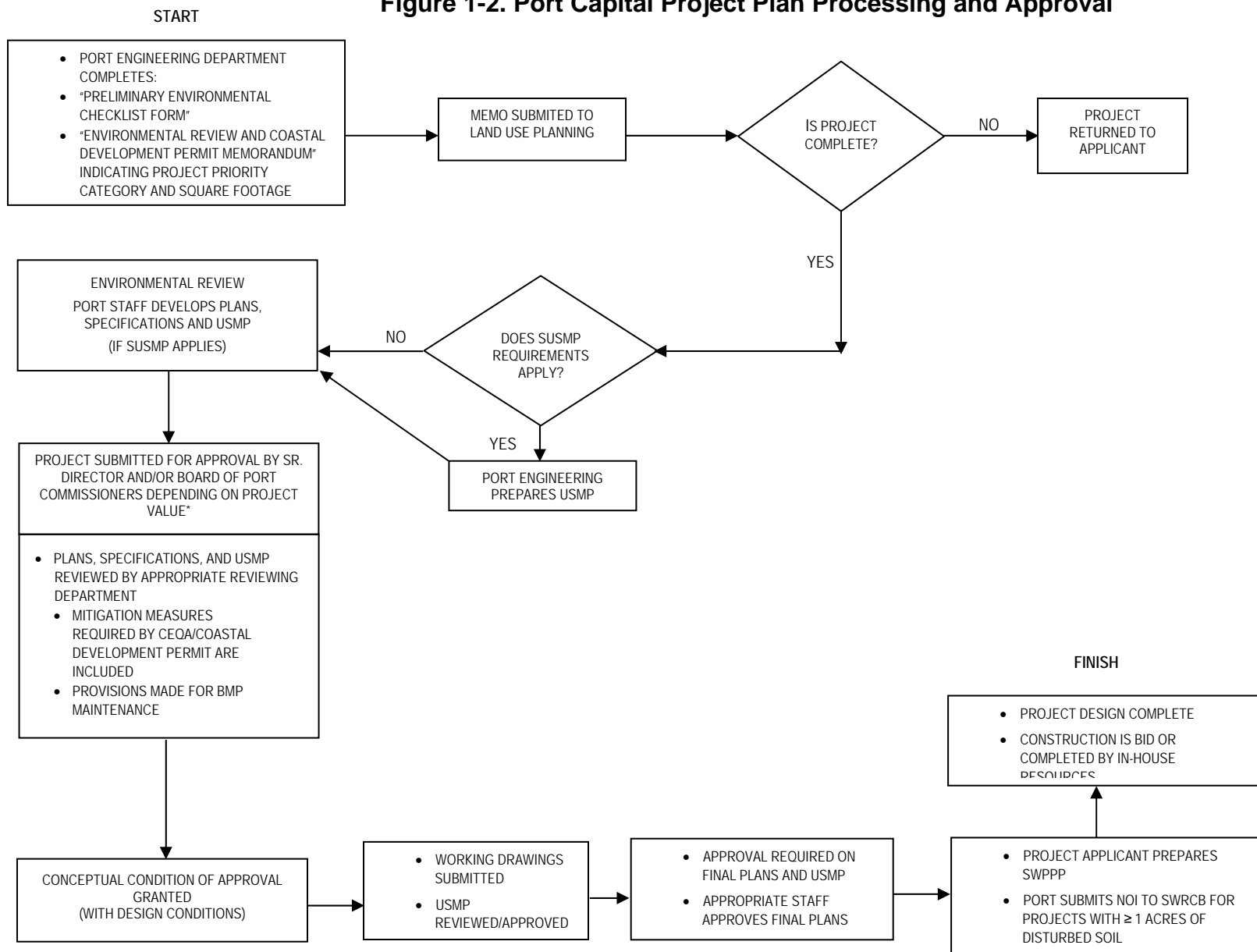
All development projects in the Port’s tidelands undergo an environmental review as part of the coastal development permit process. Port staff initiates the review process by completing a “Preliminary Environmental Checklist Form.” The checklist is then submitted under cover of an Environmental Review and Coastal Development Permit Memorandum for environmental review. The memorandum must include the designated SUSMP project priority category and square footage. Projects are evaluated for environmental impacts and the imposition of mitigation measures to eliminate or minimize any impacts. Port Staff determines if Coastal Development Permit or CEQA requirements apply.

The appropriate Port department evaluates whether SUSMP requirements apply during this stage, using general guidelines provided in Table 1-1.

If SUSMP requirements apply, the Port advises the project proponent that an USMP describing how the project will meet SUSMP requirements must be submitted prior to final construction plan approval. At this stage, project environmental mitigation measures are developed and the project is forwarded for coastal development permit approval. Once a coastal development permit is approved, the Port prepares plans, specifications, and the USMP document. The Port reviews and approves the USMP document and final design plans to ensure that SUSMP requirements are met. Any mitigation measures required by the environmental review process, such as

implementation and maintenance of stormwater BMPs, become part of the coastal development permit and are adopted by the Board of Port Commissioners as a Mitigation Monitoring and Reporting Program. This process ensures that SUSMP requirements are incorporated into the project design and shown on the plans prior to bidding for construction contracts or completion of construction work by Port staff.

**Figure 1-2. Port Capital Project Plan Processing and Approval**



## Departmental Responsibilities

The general responsibilities of those departments involved in the implementation of the Port SUSMP process are listed in Table 1-2. The responsibilities of the Port departments involved in the planning and/or review and/or approval of SUSMP requirements for tenant and capital projects is outlined in subsections A) and B) above. The inspectors of the Construction Support Department ensure that structural BMPs installed according to approved plans. General Services Department staff are involved with the operation and proper maintenance of BMPs installed for capital projects.

**Table 1-2 Departmental Responsibilities for SUSMP Implementation**

	Real Estate Division  (including Architecture and Mapping Services)	Land-Use Planning Department	Environmental Services Department	Facilities & Engineering Division	Construction Support	General Services
Education	X		X	X		
Tenant Project Review	X	X	X			
Tenant Project Approval	X	X	X			
Capital Project Planning		X	#	X		
Capital Project Review		X	X	X		
Capital Project Approval		X	X	X		
Construction Inspection			#	#	X	
Capital Project Operations and Maintenance			#			X
Enforcement	#		X		X	

X – Primary responsibility

# – Secondary responsibility



## Section 2

## Stormwater BMP Selection Procedure

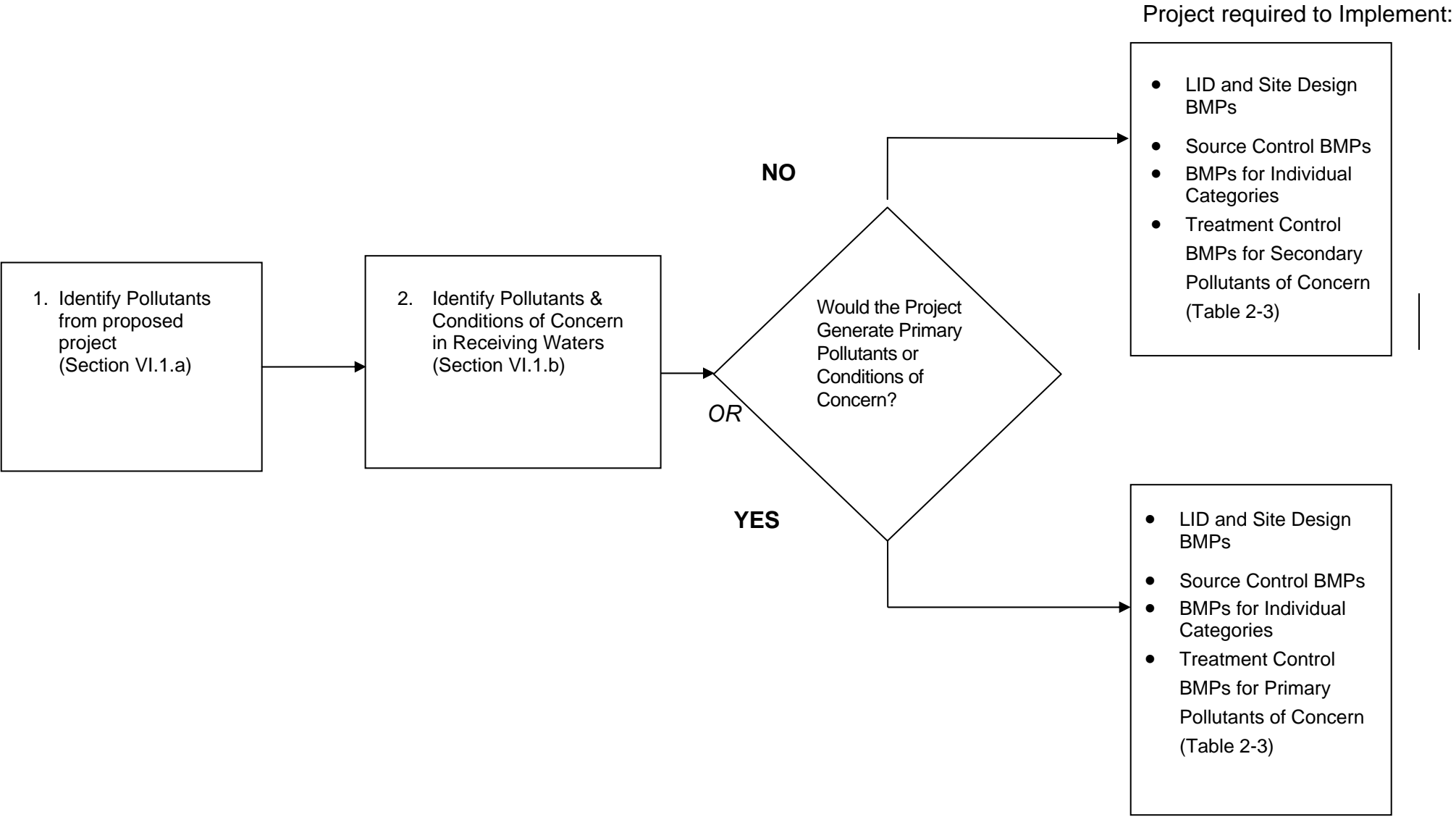
Section 2 provides a procedure for identifying a project's pollutants and conditions of concern, and addressing these through site design, source control, and treatment control stormwater BMPs. All priority projects shall implement one or a combination of stormwater BMPs, including, 1) LID and site design BMPs, 2) source control BMPs and, 3) structural treatment BMPs after the pollutants and conditions of concern have been identified. Stormwater BMPs, from those listed in Appendix A: "Approved Stormwater Best Management Practices", shall be considered and implemented where expressly required by the Permit and if not so required where determined applicable and feasible by the Port. Additional Information on BMPs is included in the notes to Table 2-8 and in Appendix B. It is recommended that the U.S. Environmental Protection Agency's "Preliminary Data Summary of Urban Runoff Best Management Practices" (August 1999, EPA-821-R-99-012) be used as a guide. The stormwater BMPs shall adhere to the requirements in Section 2 of this Jurisdictional SUSMP, and shall be correctly designed so as to remove pollutants to the maximum extent practicable. A flow chart summarizing the stormwater BMP selection procedure is provided in Figure 2-1.

### 2.1 Urban Stormwater Mitigation Plan

In order to ensure that SUSMP requirements are integrated into all applicable projects, project proponents are required to prepare an USMP for all Priority Projects. The Port requires that all USMPs be prepared by a licensed civil engineer, registered in California. USMPs are required for both tenant projects and capital projects and should be submitted to the Port. The required components of an USMP are identified in this Section and shown in Table 2-1. Further detail is provided in Section 2.2 - Identify Pollutants and Conditions of Concern; Section 2.3 - Establish Stormwater BMPs; and Section 2.4 – Proof of Ongoing Stormwater BMP Maintenance. It should be noted that the project proponent must comply with all applicable requirements in Sections 2.2, 2.3, and 2.4 and not rely solely on the outline of USMP requirements provided in this Section.

In general, the USMP must clearly convey the process used to identify pollutants of concern, conditions of concern and BMPs selected for the project as well as identifying BMP maintenance requirements. The requirements for a Port USMP are similar to "Water Quality Technical Report" requirements established by the City and County of San Diego. The fundamental steps in implementing SUSMP requirements and completing the USMP are as follows:

Figure 2-1 Stormwater BMP Selection Procedure Flow Chart





**Table 2-1 Required Components of an Urban Stormwater Mitigation Plan (USMP)  
 for Priority Projects**

Preparation	<ul style="list-style-type: none"> <li>▪ Prepared by CA Registered Civil Engineer</li> </ul>
Organization & Content	<ul style="list-style-type: none"> <li>▪ Table of Contents</li> <li>▪ Vicinity map</li> <li>▪ Project Description</li> <li>▪ Narrative of Project Activities</li> </ul>
Site Map	<ul style="list-style-type: none"> <li>▪ Entire property included on one map (use key map if multi-sheets)</li> <li>▪ Drainage areas and direction of flow</li> <li>▪ Private storm drain system(s)</li> <li>▪ Nearby water bodies and municipal storm drain inlets</li> <li>▪ Location of stormwater conveyance systems (ditches, inlets, storm drains, etc.)</li> <li>▪ Location of existing and proposed stormwater controls</li> <li>▪ location of "impervious" areas-paved areas, buildings, covered areas</li> <li>▪ Locations where materials would be directly exposed to stormwater</li> <li>▪ Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)</li> <li>▪ Areas of potential soil erosion (including areas downstream of project.</li> </ul>
Pollutants and Conditions of Concern	<ul style="list-style-type: none"> <li>▪ Pollutants based upon land use</li> <li>▪ Project located in which Watershed</li> <li>▪ Impaired water bodies downstream of the project and impairment</li> <li>▪ Drainage and Study</li> <li>▪ Impacts to hydrologic regime (hydromodification evaluation)</li> </ul>
Types of BMPS	<p><i>LID and Site Design BMPs</i></p> <ul style="list-style-type: none"> <li>▪ Reduce impervious surfaces</li> <li>▪ Conserve natural areas</li> <li>▪ Minimize directly connected areas</li> <li>▪ Protect slopes and channels</li> <li>▪ Minimize soil compaction (in natural or landscaped areas)</li> <li>▪ Minimize disturbances to natural drainages</li> <li>▪ Direct flows from impervious areas into pervious areas prior to discharging to the MS4</li> </ul> <p><i>Source Control BMPs</i></p> <ul style="list-style-type: none"> <li>▪ Inlet stenciling and signage</li> <li>▪ materials Storage</li> <li>▪ Trash Storage</li> <li>▪ Efficient irrigation</li> <li>▪ Other controls (as applicable)</li> </ul> <p><i>Structural Treatment BMPs</i></p> <ul style="list-style-type: none"> <li>▪ Basis for selection (include targeted pollutants, justification, and alternative analysis)</li> <li>▪ Design criteria (include calculations)</li> <li>▪ Pollutant removal information (other than vendor specifications)</li> <li>▪ Literature references</li> <li>▪ Maintenance Condition(s)</li> </ul>
BMP Maintenance	<ul style="list-style-type: none"> <li>▪ O&amp;M Plan</li> <li>▪ Access Agreement</li> </ul>

A) IDENTIFY ANTICIPATED PROJECT POLLUTANTS.

Refer to Table 2-2 to select pollutants of concern associated with the project type (i.e., Commercial Projects, Automotive Repair Shops, Restaurants, Parking Lots, Streets or Roads). Descriptions of general categories of water pollution are provided in Table 2-3. Identification of project pollutants must comply with Section 2.2 of this SUSMP.

B) IDENTIFY PRIMARY AND SECONDARY POLLUTANTS OF CONCERN

Step 1. Identify receiving water. Receiving waters for the Port are San Diego Bay or the Pacific Ocean. RWQCB Region 9 Basin Plan Hydrologic Units that apply to the Port jurisdiction are: Pueblo San Diego (908), Sweetwater (909), and Otay (910).

Step 2. Compare the specific location where the project discharges to the receiving water (Step 1) to the most recent Clean Water Act 303(d) list of impaired water bodies. The 303(d) list can be found at [http://www.swrcb.ca.gov/tmdl/303d\\_lists.html](http://www.swrcb.ca.gov/tmdl/303d_lists.html). Refer to listings for Region 9. The Port anticipates preparing a figure to illustrate jurisdictional boundaries and the areas of 303(d) list impairment that apply to Port receiving waters to assist in identifying primary pollutants of concern. When available, this document will be posted at [www.portofsandiego.org/sandiego\\_environment/storm\\_water.asp](http://www.portofsandiego.org/sandiego_environment/storm_water.asp).

Step 3. Compare “Anticipated Project Pollutants” from Section 2.1 A) above to pollutants for which the receiving water at or near the point of project discharge is impaired (Step 2). Any anticipated project pollutants that are also identified by the 303(d) list for the project discharge location are “Primary Pollutants of Concern.” All other anticipated project pollutants are “Secondary Pollutants of Concern.”

C) IDENTIFY CONDITIONS OF CONCERN

The project proponent must prepare a drainage study that evaluates impacts to the site hydrologic regime. Specific requirements of the drainage study are presented in Section 2.2. In general, the drainage study must identify conditions of concern by identifying overall watershed characteristics, include a field reconnaissance of downstream areas that are susceptible to erosion or habitat impacts from altered flow regimes, and include an analysis of rainfall runoff characteristics and propose BMPs to mitigate downstream impacts.

**Table 2-2 Pollutants of Concern for Priority Project Categories**

Priority Project Category	Anticipated Pollutants of Concern	Other Potential Pollutants of Concern (1)
Commercial Projects Meeting Criteria 1)a., 1)b., 1)c., or 1)d. in Table 1-1.	Trash & Debris Oil & Grease	Sediments Nutrients Organic Compounds Oxygen Demanding Substances Bacteria & Viruses Pesticides
Automotive Repair Shops	Heavy Metals Organic Compounds (including petroleum hydrocarbons and solvents) Trash & Debris Oil & Grease	
Heavy Industry/ Industrial Development	Sediments Heavy Metals Organic Compounds (including petroleum hydrocarbons) Trash & Debris Oxygen Demanding Substances Oil & Grease	
Restaurants	Trash & Debris Oxygen Demanding Substances Oil & Grease Bacteria & Viruses	
Parking Lots	Heavy Metals Trash & Debris Oil & Grease	Sediments Nutrients Oxygen Demanding Substances Pesticides
Retail Gasoline Outlets	Heavy Metals Organic Compounds (including petroleum hydrocarbons and solvents) Trash & Debris Oxygen Demanding Substances Oil & Grease	
Streets or Roads	Sediments Heavy Metals Organic Compounds (including petroleum hydrocarbons) Trash & Debris Oil & Grease.	Nutrients Oxygen Demanding Substances
1. Refer to Table 2-4 for more detail regarding which potential pollutants should be considered for specific projects. Evaluate all pollutants of concern on a project specific basis in the URMP.		

**Table 2-3 Pollutant Category Descriptions**

Sediments	Sediments are soils or other surficial materials eroded and then transported or deposited by the action of wind, water, ice, or gravity. Sediments can increase turbidity, clog fish gills, reduce spawning habitat, lower young aquatic organisms survival rates, smother bottom dwelling organisms, and suppress aquatic vegetation growth.
Nutrients	Nutrients are inorganic substances, such as nitrogen and phosphorus. They commonly exist in the form of mineral salts that are either dissolved or suspended in water. Primary sources of nutrients in urban runoff are fertilizers and eroded soils. Excessive discharge of nutrients to water bodies and streams can cause excessive aquatic algae and plant growth. Such excessive production, referred to as cultural eutrophication, may lead to excessive decay of organic matter in the water body, loss of oxygen in the water, release of toxins in sediment, and the eventual death of aquatic organisms.
Metals	Metals are raw material components in non metal products such as fuels, adhesives, paints, and other coatings. Primary source of metal pollution in stormwater are typically commercially available metals and metal products. Metals of concern include cadmium, chromium, copper, lead, mercury, and zinc. Lead and chromium have been used as corrosion inhibitors in primer coatings and cooling tower systems. At low concentrations naturally occurring in soil, metals are not toxic. However, at higher concentrations, certain metals can be toxic to aquatic life. Humans can be impacted from contaminated groundwater resources, and bioaccumulation of metals in fish and shellfish. Environmental concerns, regarding the potential for release of metals to the environment, have already led to restricted metal usage in certain applications.
Organic Compounds	Organic compounds are carbon based. Commercially available or naturally occurring organic compounds are found in pesticides, solvents, and hydrocarbons. Organic compounds can, at certain concentrations, indirectly or directly constitute a hazard to life or health. When rinsing off objects, toxic levels of solvents and cleaning compounds can be discharged to storm drains. Dirt, grease, and grime retained in the cleaning fluid or rinse water may also adsorb levels of organic compounds that are harmful or hazardous to aquatic life.
Trash & Debris	Trash (such as paper, plastic, polystyrene packing foam, and aluminum materials) and biodegradable organic matter (such as leaves, grass cuttings, and food waste) are general waste products on the landscape. The presence of trash & debris may have a significant impact on the recreational value of a water body and aquatic habitat. Excess organic matter can create a high biochemical oxygen demand in a stream and thereby lower its water quality. Also, in areas where stagnant water exists, the presence of excess organic matter can promote septic conditions resulting in the growth of undesirable organisms and the release of odorous and hazardous compounds such as hydrogen sulfide.
Oxygen Demanding Substances	This category includes biodegradable organic material as well as chemicals that react with dissolved oxygen in water to form other compounds. Proteins, carbohydrates, and fats are examples of biodegradable organic compounds. Compounds such as ammonia and hydrogen sulfide are examples of oxygen demanding compounds. The oxygen demand of a substance can lead to depletion of dissolved oxygen in a water body and possibly the development of septic conditions.
Oil and Grease	Oil and grease are characterized as high molecular weight organic compounds. Primary sources of oil and grease are petroleum hydrocarbon products, motor products from leaking vehicles, esters, oils, fats, waxes, and high molecular-weight fatty acids. Introduction of these pollutants to the water bodies are very possible due to the wide uses and applications of some of these products in municipal, residential, commercial, industrial, and construction areas. Elevated oil and grease content can decrease the aesthetic value of the water body, as well as the water quality.
Bacteria and Viruses	Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Their proliferation is typically caused by the transport of animal or human fecal wastes from the watershed. Water, containing excessive bacteria and viruses can alter the aquatic habitat and create a harmful environment for humans and aquatic life. Also, the decomposition of excess organic waste causes increased growth of undesirable organisms in the water.
Pesticides	Pesticides (including herbicides) are chemical compounds commonly used to control nuisance growth or prevalence of organisms. Excessive application of a pesticide may result in runoff containing toxic levels of its active component.

D) ESTABLISH STORMWATER BMPS

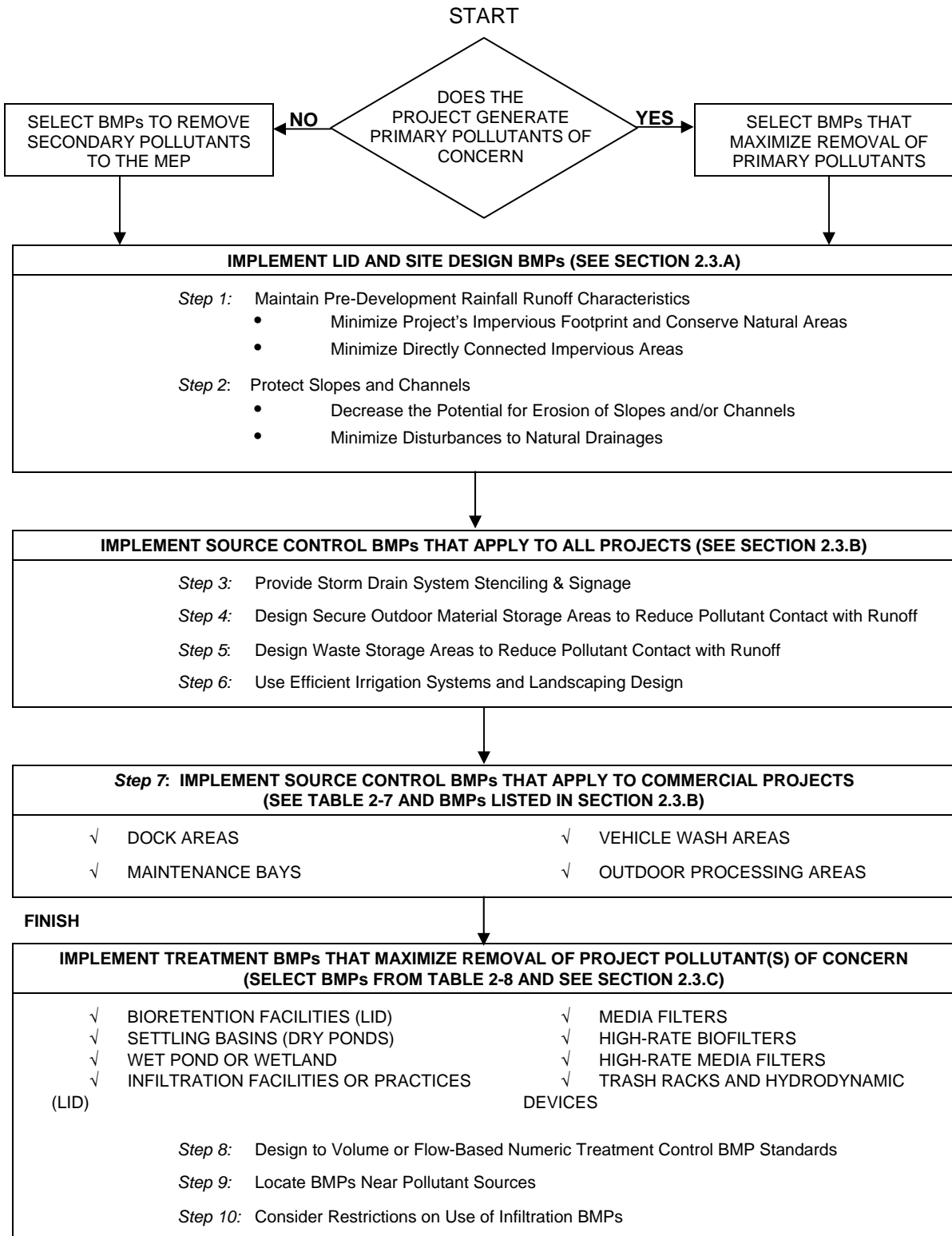
All priority projects must establish permanent stormwater BMPs to reduce pollutants and water quality impacts of the proposed project to the MEP. In preparing the USMP and selecting project BMPs, the preparer must go through the BMP selection process presented in Section 2.3 of this SUSMP to consider, incorporate, and implement Site Design, Source Control and Treatment BMPs. All projects must include applicable Source Control and Treatment BMPs. In addition, it should be emphasized that selection of Treatment BMPs must prioritize and maximize the removal of Primary Pollutants of Concern. If no Primary Pollutants of Concern are identified, Treatment BMPs shall be selected that remove Secondary Pollutants of Concern to the MEP. Treatment BMP design must also consider any impacts to treatment BMP performance due tidal influence of the subsurface storm drain system within the tidelands. This is particularly relevant to subsurface filtration systems, hydrodynamic separator systems, detention or infiltration basins, and wet ponds/wetlands.

Flow charts summarizing the BMP selection process for each priority pollutant category (i.e., commercial developments, automotive repair shops, restaurants, parking lots, streets or roads) are provided as Figures 2-2 through 2-8. Note that all SUSMP projects are considered commercial unless they specifically meet the definition of other priority pollutant categories. Projects that are not considered automotive repair shops, restaurants, parking lots, retail gasoline outlets, industrial or streets or roads should use Figure 2-2 and consider project specific conditions.

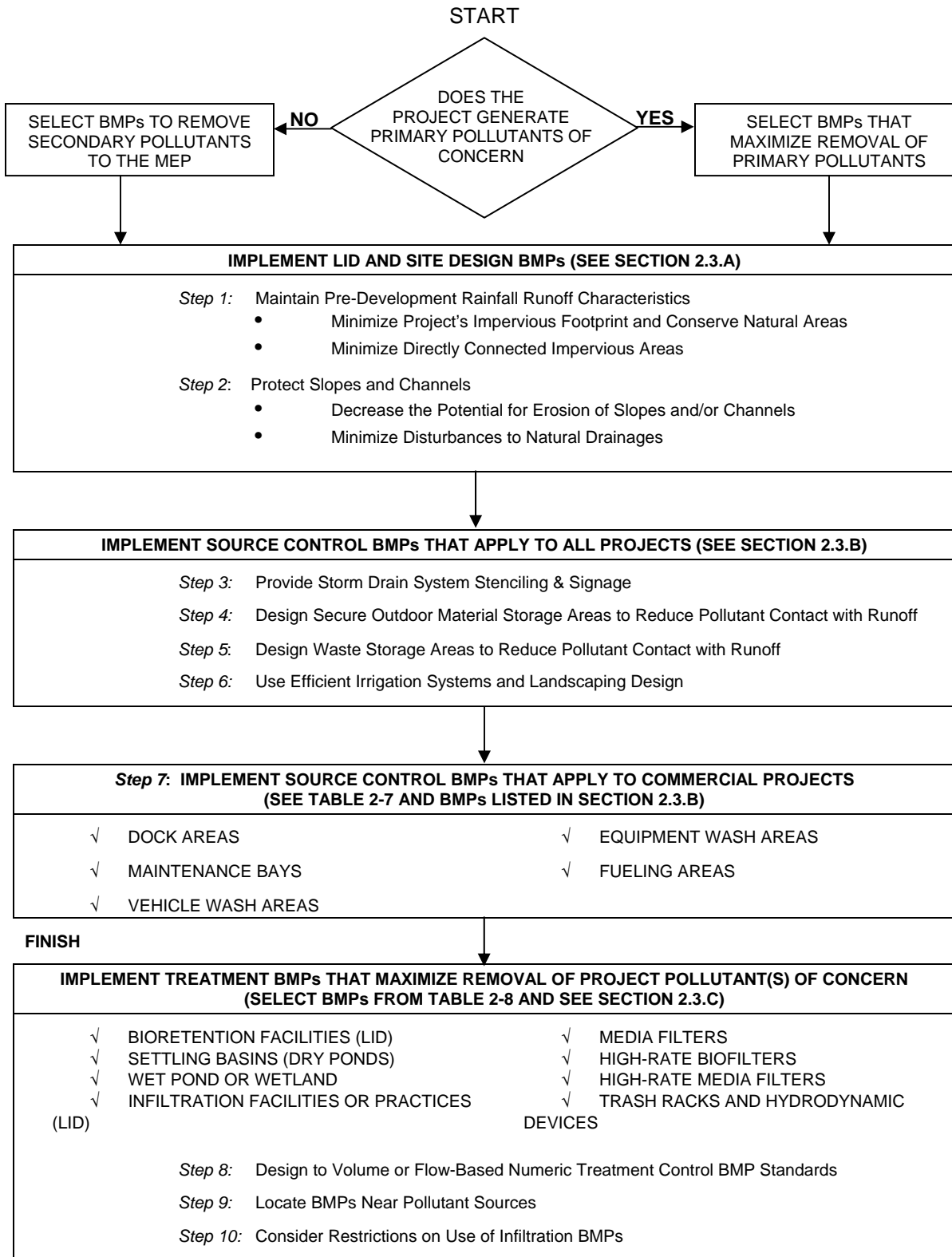
E) MAINTENANCE REQUIREMENTS

The USMP must include stormwater BMP maintenance provisions in an Operations and Maintenance Plan (O&M Plan) as outlined in Section 2.4 of this SUSMP.

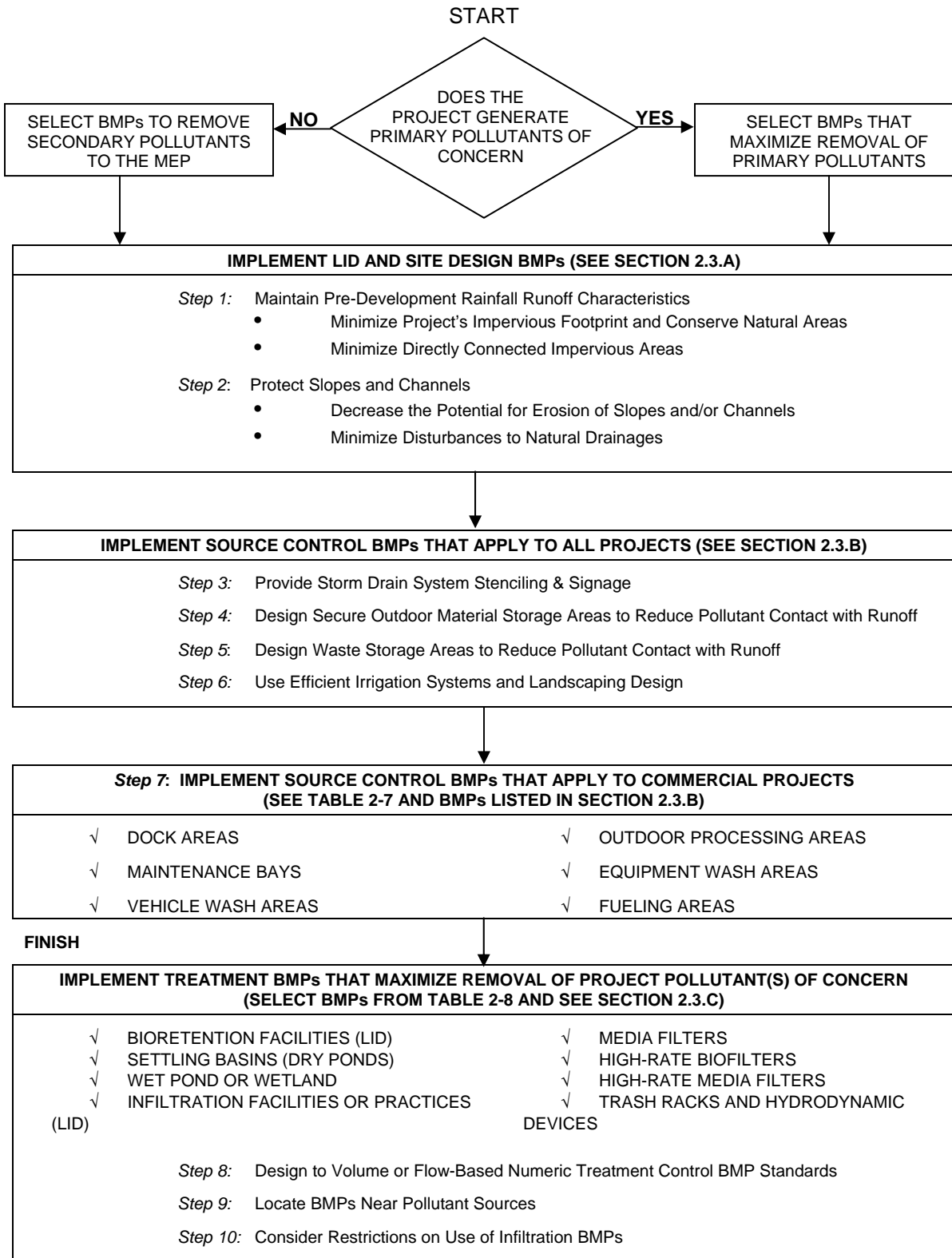
**Figure 2-2. Commercial Development BMP Selection Process**



**Figure 2-3. Automotive Repair Shop BMP Selection Process**



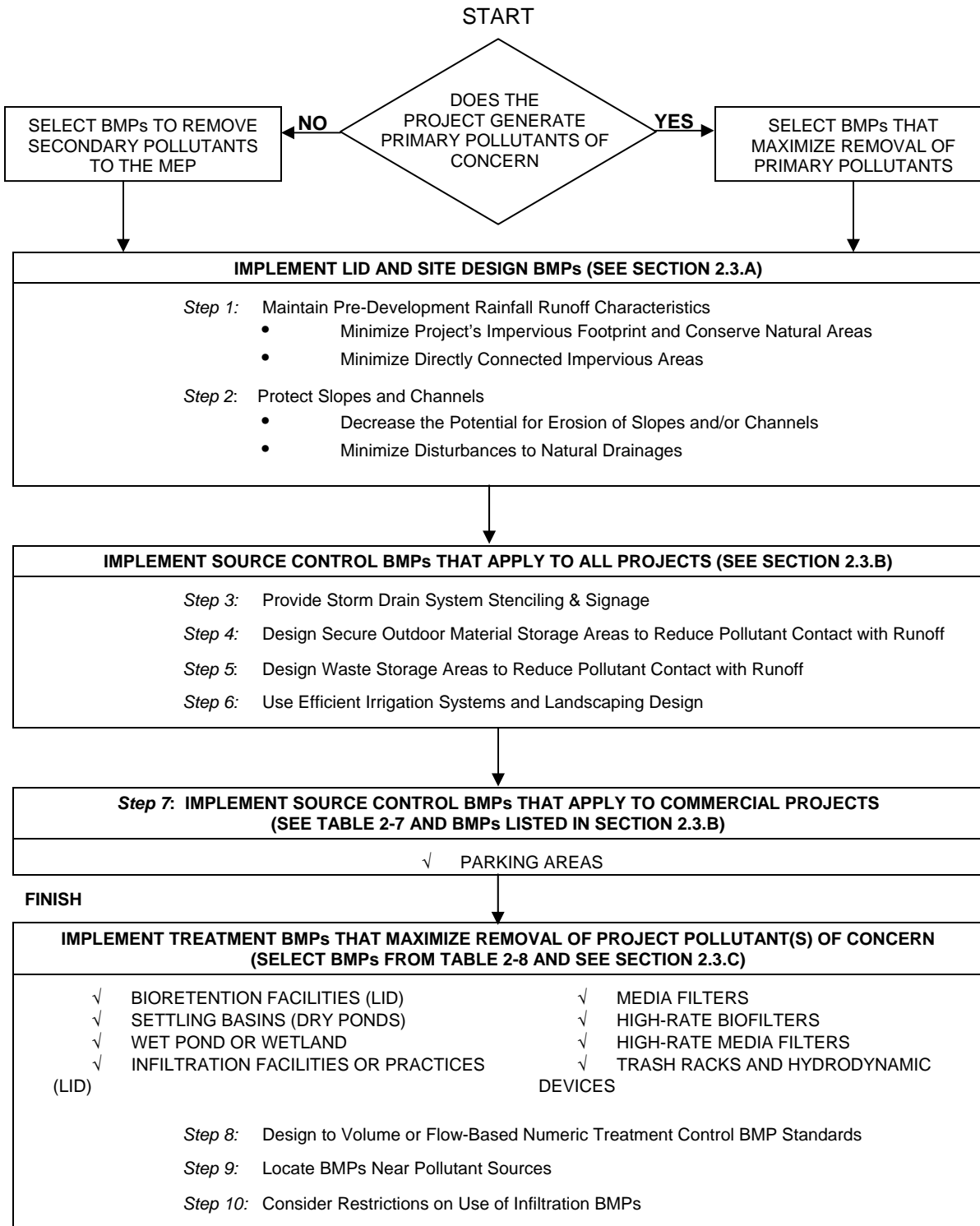
**Figure 2-4. Industrial Development BMP Selection Process**



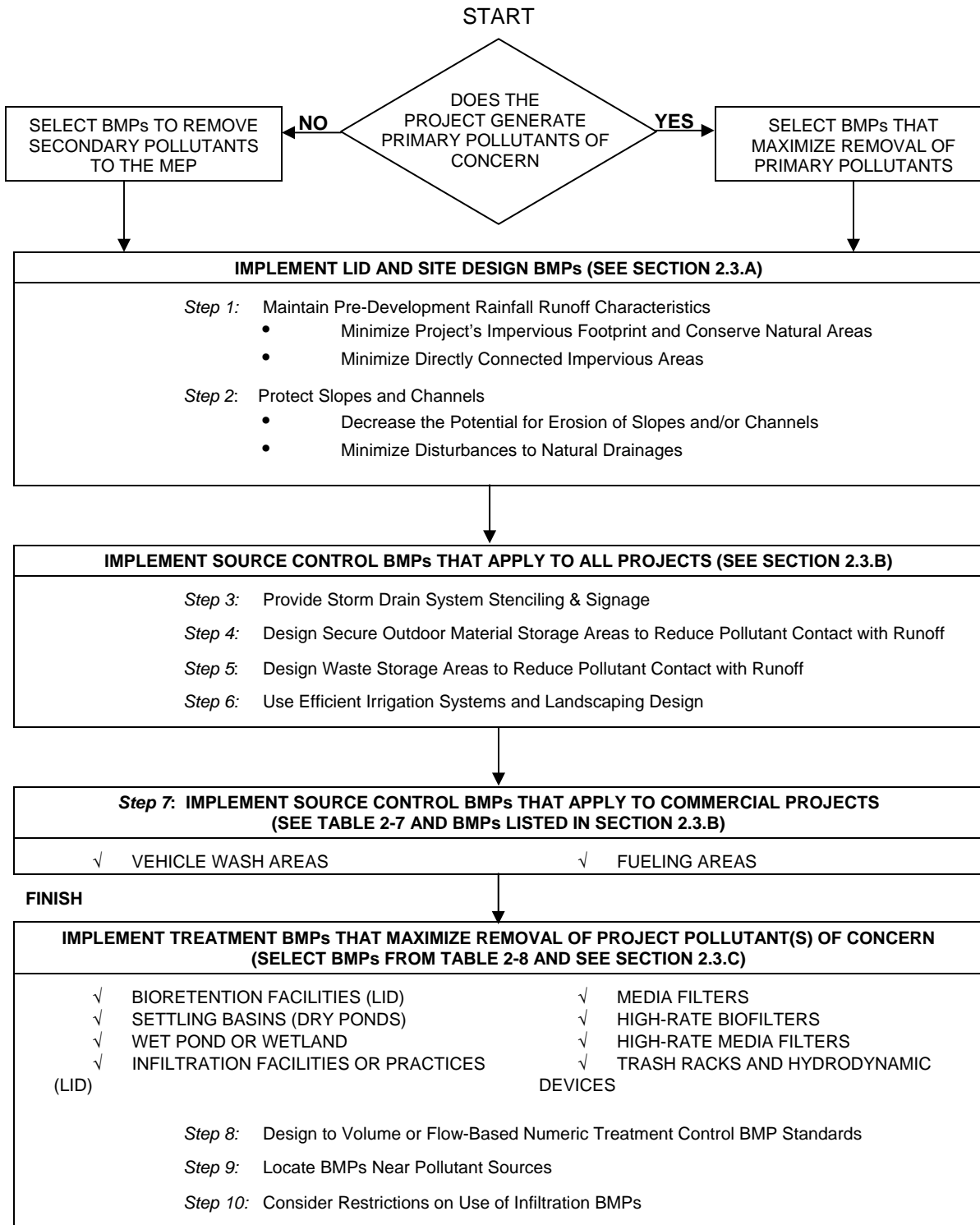




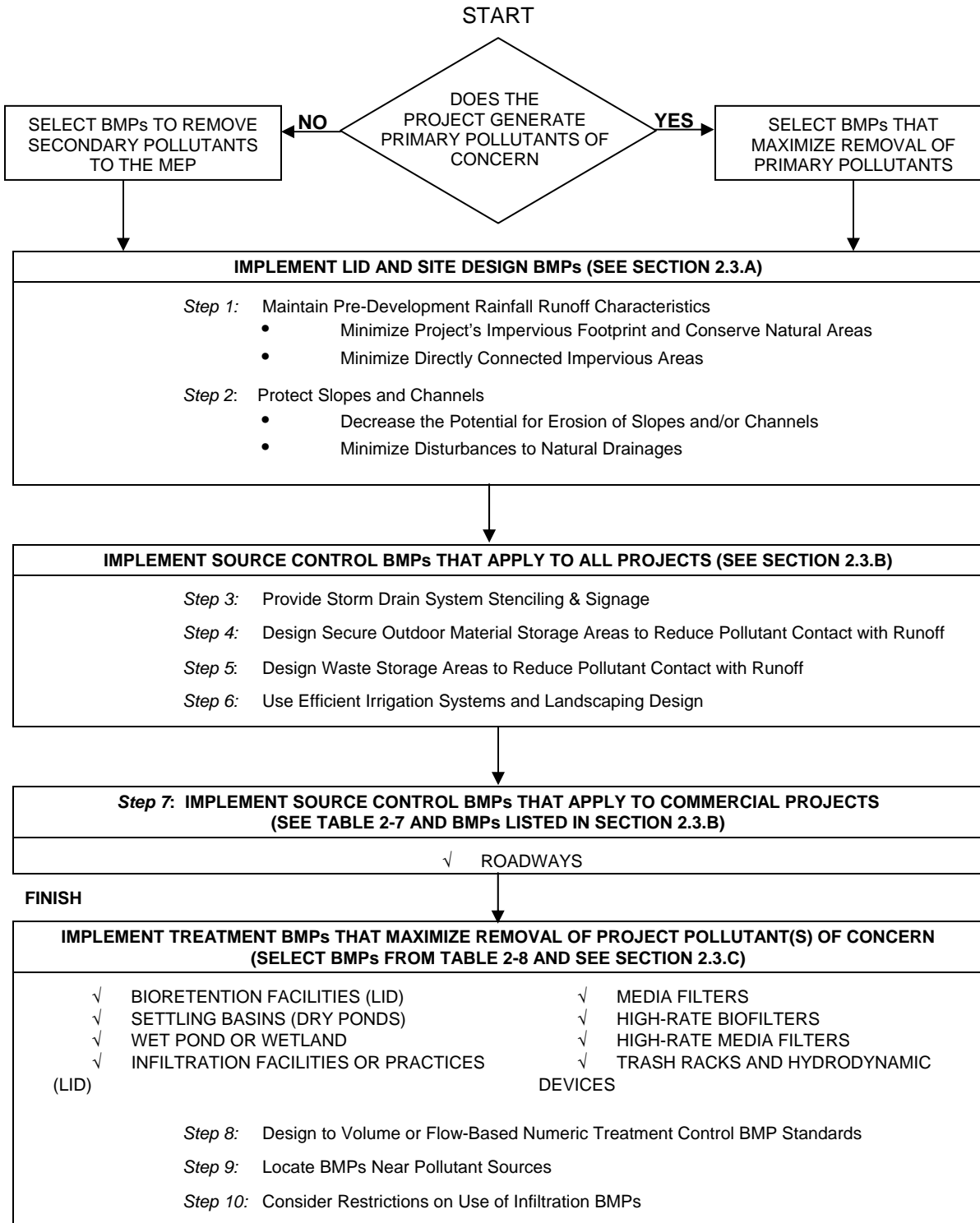
**Figure 2-6. Parking Lot BMP Selection Process**



**Figure 2-7. Retail Gasoline Outlet BMP Selection Process**



**Figure 2-8. Streets and Roads BMP Selection Process**



## 2.2 Identify Pollutants & Conditions Of Concern

Priority project proponents shall use this guidance to identify pollutants and conditions of concern, for which they need to mitigate or protect against. Once identified, appropriate control measures for these pollutants and conditions are specified in Section 2.3, “Establish Stormwater BMPs.” LID and site design and source control BMPs are required based on pollutants commonly associated with the proposed project type. Treatment Control BMPs are also required for the project’s expected pollutants of concern. The requirements listed in Sections VI.1.a-c of the Model SUSMP for identifying pollutants and conditions of concern are incorporated into the Port SUSMP.

### General Categories of Water Pollution

Urban runoff from a developed site has the potential to contribute pollutants, including oil and grease, suspended solids, metals, gasoline, pesticides, and pathogens to the stormwater conveyance system and receiving waters. For the purposes of identifying pollutants of concern and associated stormwater BMPs, pollutants are grouped in nine general categories as indicated in Table 2-3.

#### A) IDENTIFY POLLUTANTS FROM THE PROJECT AREA

Using Table 2-4, identify pollutants that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

**Table 2-4 Anticipated and Potential Pollutants Generated by Land Use Type**

Priority Project Categories	General Pollutant Categories								
	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Commercial Development >1 acre	P <sup>(1)</sup>	P <sup>(1)</sup>		P <sup>(2)</sup>	X	P <sup>(5)</sup>	X	P <sup>(3)</sup>	P <sup>(5)</sup>
Heavy industry /industrial development	X		X	X	X	X	X		
Automotive Repair Shops			X	X <sup>(4)(5)</sup>	X		X		
Restaurants					X	X	X	X	
Parking Lots	P <sup>(1)</sup>	P <sup>(1)</sup>	X		X	P <sup>(1)</sup>	X		P <sup>(1)</sup>
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P <sup>(1)</sup>	X	X <sup>(4)</sup>	X	P <sup>(5)</sup>	X		
X = anticipated P = potential (1) A potential pollutant if landscaping exists on-site. (2) A potential pollutant if the project includes uncovered parking areas. (3) A potential pollutant if land use involves food or animal waste products. (4) Including petroleum hydrocarbons. (5) Including solvents.									

## B) IDENTIFY POLLUTANTS OF CONCERN

Pollutants generated by the proposed priority project that exhibit one or more of the following characteristics are considered primary pollutants of concern:

- Current loadings or historical deposits of the pollutant are impairing the beneficial uses of a receiving water;
- Elevated levels of the pollutant are found in water or sediments of a receiving water and/or have the potential to be toxic to or bioaccumulate in organisms therein; and
- Inputs of the pollutant are at a level high enough to be considered potentially toxic.

To identify primary pollutants of concern in receiving waters, each priority project shall, at a minimum, do the following:

1. For each of the proposed projects discharge points, identify the receiving water(s) that each discharge point proposes to discharge to, including hydrologic unit basin number(s), as identified in the most recent version of the *Water Quality Control Plan for the San Diego Basin*<sup>1</sup>, prepared by the San Diego Regional Water Quality Control Board.
2. Identify any receiving waters, into which the developed area would discharge to, listed on the most recent list of Clean Water Act Section 303(d) impaired water bodies<sup>2</sup>. List any and all pollutants for which the receiving waters are impaired.
3. Compare the list of pollutants for which the receiving waters are impaired with the pollutants anticipated to be generated by the project (as identified in Table 2-4). Any pollutants identified by Table 2-4 which are also causing impairment of receiving waters shall be considered primary pollutants of concern.

For projects where no primary pollutants of concern exist, those pollutants identified through the use of Table 2-4 shall be considered secondary pollutants of concern.

## C) IDENTIFY CONDITIONS OF CONCERN

Common impacts to the hydrologic regime resulting from development typically include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to a priority project site's

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1. [http://www.swrcb.ca.gov/~rwqcb9/Programs/Planning\\_and\\_Services/SD\\_Basin/sd\\_basin.html](http://www.swrcb.ca.gov/~rwqcb9/Programs/Planning_and_Services/SD_Basin/sd_basin.html)

2. [http://www.swrcb.ca.gov/tmdl/303d\\_lists.html](http://www.swrcb.ca.gov/tmdl/303d_lists.html), San Diego is in Region 9

hydrologic regime would be considered a condition of concern if the change would impact downstream channels and habitat integrity.

Because of these potential impacts, the following steps shall be followed by each priority project:

1. Evaluate the project's conditions of concern in a drainage study as part of the USMP. The drainage study and the USMP shall be prepared by a registered civil engineer in the State of California, with experience in drainage design and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, wet season groundwater depth, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed.
2. As part of the drainage study, a qualified, licensed professional shall provide a report on proposed infiltration techniques (trenches, basins, dry wells, permeable pavements with underground reservoir for infiltration) regarding any potential adverse geotechnical concerns. Geotechnical conditions such as: slope stability, expansive soils, compressible soils, seepage, groundwater depth, and loss of foundation or pavement subgrade strength should be addressed, and mitigation measures provided.
3. As part of the drainage study, the civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of an altered flow regime.
4. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, peak flow rate, flow velocity, runoff volume, time of concentration, and detention volume (if appropriate). These characteristics shall be developed for the two-year and 10-year frequency, Type B storm, of six-hour and 24-hour duration for the coastal areas of San Diego County (as described in the San Diego Hydrology Manual, September 2002). The largest peak flow should be included in the report. The drainage study shall report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions affecting downstream conditions of concern would be maintained or improved by the proposed project, satisfactory to the Port, by incorporating the site design, source control, and treatment control requirements identified in Section 2.3.

Interim Hydromodification Criteria For Priority Development Projects that disturb 50 acres or more:

1. Priority Development Project (PDP) post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations (Interim Hydromodification Criteria), where the increased discharge flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, attributable to changes in flow rates and durations.



2. PDPs disturbing 50 acres or more shall implement hydrologic controls to manage post-project runoff flow rates and durations as required by the Interim Hydromodification Criteria.

## 2.3 Establish Stormwater BMPs

LID and site design BMPs reduce the need for source and/or treatment control BMPs, and source control BMPs may reduce the amount of treatment control BMPs needed. Throughout all the following sections, all priority projects shall consider, and incorporate and implement where expressly required by the Permit and if not so required where determined applicable and feasible by the Port, stormwater BMPs into the project design, in the following progression:

- LID and site Design BMPs
- Source Control BMPs
- Treatment Control BMPs

Priority projects must implement LID and site design BMPs and source control BMPs, and must also implement treatment control BMPs unless a waiver is granted based on the infeasibility of all treatment control BMPs. LID BMPs must meet minimum requirements set out in the Municipal Permit section D.1d.(4). BMPs must also achieve certain performance standards set out in the municipal permit section D.1.d.(5) and (6) . Selection of BMPs from the menus included and the rules set forth in the Port SUSMP Document fulfills these requirements.

In addition, runoff treated by LID and site design or source control BMPs, such as rooftop runoff treated in landscaping, may be useful in reducing the quantity of runoff required to be treated in Section 2.3C “Treatment Control BMPs.”

### A) LOW IMPACT DEVELOPMENT (LID) AND SITE DESIGN BMPS

Priority projects shall be designed so as to minimize directly connected impervious surfaces and to promote infiltration using LID techniques. Priority projects shall, to the maximum extent practicable, minimize the introduction of pollutants and conditions of concern that may result in significant impacts, generated from site runoff to the stormwater conveyance system. Priority Projects shall also control post-development peak stormwater runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat. Priority projects can address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Many of these techniques are outlined and reviewed in the County of San Diego’s LID Handbook and Appendices. Mimicking a site’s natural hydrologic regime can be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the stormwater conveyance system, and minimizing clearing and grading.
- Providing runoff storage measures dispersed throughout a site's landscape with the use of bioretention facilities and detention, retention, and infiltration practices.
- Implementing on-lot hydrologically functional landscape design and management practices.

These design principles offer an innovative approach to urban stormwater management, one that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates stormwater controls throughout the urban landscape. Useful resources for applying these principles, referenced in the appendix, include the County of San Diego's LID Handbook (2007), *Start at the Source* (1999), *Low-Impact Development Design Strategies* (1999), the City of Portland's Stormwater Manual (2004), and the Contra Costa Clean Water Program's *Stormwater C.3 Guidebook* (2006).

#### Step 1. Objective: Maintain Pre-Development Rainfall Runoff Characteristics

Priority projects shall control post-development peak stormwater runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion. Design concepts to maintain pre-development conditions are presented in Table 2-5. In addition, projects should control runoff discharge volumes and durations to the maximum extent practicable using the site design, source control, and treatment control requirements identified in Section 2.3.

#### Step 2. Protect Slopes and Channels

Project plans shall include stormwater BMPs to decrease the potential for erosion of slopes and/or channels, consistent with local codes and ordinances and with the approval of all agencies with jurisdiction, e.g., the U.S. Army Corps of Engineers, the San Diego RWQCB, and the California Department of Fish and Game. The following design principles shall be considered, and incorporated and implemented, unless determined to be infeasible by both the project proponent and the Port:

- Minimize disturbances to Natural Drainages
- Convey runoff safely from the tops of slopes.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize permanent channel crossings.

- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Other design principles that are comparable and equally effective.

**Table 2-5 Design Concepts to Maintain Pre-Development Conditions**

<p>Design Concept 1:</p> <p>Minimize Project's Impervious Footprint &amp; Conserve Natural Areas</p>	<p>The following site design options shall be considered and, incorporated and implemented unless determined to be infeasible by both the project proponent and the Port, during the site planning and approval process, consistent with applicable General Plan policies and other development regulations.</p> <ol style="list-style-type: none"> <li>1. Minimize and disconnect impervious surfaces. This can be achieved in various ways, including, but not limited to increasing building density (number of stories above or below ground) and developing land use regulations seeking to limit impervious surfaces. Decreasing the project's footprint can substantially reduce the project's impacts to water quality and hydrologic conditions.</li> <li>2. Conserve natural areas, soils, and vegetation where feasible. This can be achieved by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition. The following list provides a guideline for determining the least sensitive portions of the site, in order of increasing sensitivity. Project proponents should also refer to the City of San Diego MSCP or other biological regulations as appropriate.             <ol style="list-style-type: none"> <li>a. Areas devoid of vegetation, including previously graded areas and agricultural fields.</li> <li>b. Areas of non-native vegetation, disturbed habitats and eucalyptus woodlands.</li> <li>c. Areas of chamise or mixed chaparral, and non-native grasslands.</li> <li>d. Areas containing coastal scrub communities.</li> <li>e. All other upland communities.</li> <li>f. Occupied habitat of sensitive species and all wetlands (see definition of "Environmentally Sensitive Area").</li> <li>g. All areas necessary to maintain the viability of wildlife corridors.</li> </ol> </li> <li>3. Construct walkways, trails, patios, overflow parking lots and alleys and other low-traffic areas with permeable surfaces, such as pervious concrete, permeable asphalt, unit pavers, and granular materials.</li> <li>4. Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.</li> <li>5. Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.</li> <li>6. Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.</li> <li>7. Use natural drainage systems to the maximum extent practicable.</li> <li>8. Other site design options that are comparable, and equally effective.</li> <li>9. Minimize soil compaction in landscaped or natural areas.</li> </ol>
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Table 2-5 Design Concepts to Maintain Pre-Development Conditions

Design Concept 2:  Minimize Directly Connected Impervious Areas (DCIAs)	Priority projects shall consider, and incorporate and implement the following design characteristics, unless determined to be infeasible by both the project proponent and the Port. <ol style="list-style-type: none"> <li>1. Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm drain.</li> <li>2. Where landscaping is proposed, drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.</li> <li>3. Other design characteristics that are comparable and equally effective.</li> </ol>
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B) SOURCE CONTROL BMPS

Step 3. Provide Storm Drain System Stenciling and Signage

Storm drain stencils are highly visible source control messages, typically placed directly adjacent to storm drain inlets. The stencils contain a brief statement that prohibits the dumping of improper materials into the urban runoff conveyance system. Graphical icons, either illustrating anti-dumping symbols or images of receiving water fauna, are effective supplements to the anti-dumping message. Priority projects shall include the following requirements in the project design.

- Provide stenciling or labeling of all storm drain inlets and catch basins within the project area with prohibitive language (such as: “NO DUMPING – DRAINS TO BAY”) and/or graphical icons to discourage illegal dumping.
- Post signs and prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.
- Maintain legibility of stencils and signs.

Step 4. Design Outdoor Material Storage Areas to Reduce Pollution Introduction

Improper storage of materials outdoors may increase the potential for toxic compounds, oil and grease, heavy metals, nutrients, suspended solids, and other pollutants to enter the urban runoff conveyance system. Where the priority project plans include outdoor areas for storage of hazardous materials that may contribute pollutants to the urban runoff conveyance system, the following stormwater BMPs are required:

1. Hazardous materials with the potential to contaminate urban runoff shall either be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with runoff or spillage to the stormwater conveyance system; or (2) protected by secondary containment structures such as berms, dikes, or curbs.

2. The storage area shall be paved and sufficiently impervious to contain leaks and spills.
3. The storage area shall have a roof or awning to minimize direct precipitation within the secondary containment area.

#### Step 5. Design Trash Storage Areas to Reduce Pollution Introduction

All trash container areas shall meet the following requirements (limited exclusion: detached residential homes):

1. Paved with an impervious surface, designed not to allow run-on from adjoining areas, screened or walled to prevent off-site transport of trash; and
2. Provide attached lids on all trash containers that exclude rain, or roof or awning to minimize direct precipitation.

#### Step 6. Use Efficient Irrigation Systems & Landscape Design

Priority projects shall design the timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the stormwater conveyance system. (Limited exclusion: detached residential homes.) In compliance with the Water Conservation in Landscaping Act, the following methods to reduce excessive irrigation runoff shall be considered, and incorporated and implemented, unless determined to be infeasible by both the project proponent and the Port:

1. Employing rain shutoff devices to prevent irrigation after precipitation.
2. Designing irrigation systems to each landscape area's specific water requirements.
3. Using flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
4. Employing other comparable, equally effective, methods to reduce irrigation water runoff.

#### Step 7. Incorporate Requirements Applicable to Individual Priority Project Categories

Where identified in Table 2-6, the following requirements shall be incorporated into applicable priority projects during the stormwater BMP selection and design process. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for "Equipment Wash Areas and "Parking Areas" into the project design). Source control BMP requirements for individual priority project features are identified in Table 2-7.

**Table 2-6 Site Design and Source Control Stormwater BMP Selection Matrix.**

Priority Project Category	Site Design BMPs <sup>(1)</sup>	Source Control BMPs <sup>(2)</sup>	Requirements Applicable to Individual Priority Project Features <sup>(3)</sup>							
			Dock Areas	Maintenance Bays	Vehicle Wash Areas	Outdoor Processing Areas	Equipment Wash Areas	Parking Areas	Roadways	Fueling Areas
Commercial Projects > 1 acre	R	R	R	R	R	R				
Industrial Development > 1 Acre	R	R	R	R	R	R	R			R
Automotive Repair Shop	R	R	R	R	R		R			R
Restaurants	R	R	R				R			
Parking Lots	R	R						R <sup>(4)</sup>		
Retail Gasoline Outlets	R	R			R					R
Streets, Highways & Freeways	R	R							R	
R=Required; select BMPs as required from the applicable steps in Section 2.2.A and B or equivalent as identified in Appendix A.  (1) Refer to Section 2.3.A (2) Refer to Section 2.3.B (3) Priority project categories must apply specific stormwater BMP requirements, where applicable. Projects are subject to the requirements of all priority project categories that apply. (4) Applies if the paved area totals ≥5,000 square feet or with ≥15 parking spaces and is potentially exposed to urban runoff.										

**Table 2-7 Source Control BMPs for Individual Priority Categories**

Individual Priority Project Feature	Source Control BMPs
Dock Areas	<ul style="list-style-type: none"> <li>▪ Cover loading dock areas, or design drainage to preclude urban run-on and runoff.</li> <li>▪ Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.</li> <li>▪ Other features which are comparable and equally effective.</li> </ul>
Maintenance Bays	<ul style="list-style-type: none"> <li>▪ Repair/maintenance bays shall be indoors; or, designed to preclude urban run-on and runoff; and</li> <li>▪ Design a repair/maintenance bay drainage system to capture all wash water, leaks and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm drain system is prohibited.</li> </ul> <p style="text-align: center;">OR</p> <ul style="list-style-type: none"> <li>▪ Other features which are comparable and equally effective.</li> </ul>
Vehicle Wash/Steam Cleaning Areas	<ol style="list-style-type: none"> <li>1. Areas shall be self-contained; or covered with a roof or overhang;</li> <li>2. Equipped with a clarifier or other pretreatment facility;</li> <li>3. Properly connected to a sanitary sewer.</li> <li>4. Other features which are comparable and equally effective.</li> </ol>
Outdoor Processing Areas	<p>Outdoor process equipment operations, such as rock grinding or crushing, painting or coating, grinding or sanding, degreasing or parts cleaning, landfills, waste piles, and wastewater and solid waste treatment and disposal, and other operations determined to be a potential threat to water quality by the Port shall adhere to the following requirements.</p> <ol style="list-style-type: none"> <li>1. Cover or enclose areas that would be the most significant source of pollutants; or, slope the area toward a dead-end sump; or, discharge to the sanitary sewer system. Discharges to the sanitary sewer must comply with City of San Diego metropolitan Waste Water Department Requirements.</li> <li>2. Grade or berm area to prevent run-on from surrounding areas.</li> <li>3. Installation of storm drains in areas of equipment repair is prohibited.</li> <li>4. Other features which are comparable or equally effective.</li> </ol>
Equipment Wash Areas	<p>Outdoor equipment/accessory washing and steam cleaning activities at priority projects shall use the following:</p> <ol style="list-style-type: none"> <li>1. Be self-contained; or covered with a roof or overhang;</li> <li>2. Be equipped with a clarifier, grease trap or other pretreatment facility, as appropriate;</li> <li>3. Be properly connected to a sanitary sewer.</li> <li>4. Other features which are comparable or equally effective.</li> </ol>
Parking Areas	<p>To minimize the offsite transport of pollutants from parking areas, the following design concepts shall be considered, and incorporated and implemented, unless determined to be infeasible by both the project proponent and the Port:</p> <ol style="list-style-type: none"> <li>1. Where landscaping is proposed in parking areas, incorporate landscape areas into the drainage design.</li> <li>2. Overflow parking (parking stalls provided in excess of the Port's minimum parking requirements) should be constructed with permeable paving.</li> <li>3. Other design concepts that are comparable and equally effective.</li> </ol>
Roadways	<p>Priority roadway projects shall select treatment control BMPs following the treatment control selection procedure identified in Section 2.3, "Establish Stormwater BMPs."</p>
Fueling Areas	<p>Retail and non-retail fuel dispensing areas shall contain the following:</p> <ol style="list-style-type: none"> <li>1. Overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area shall drain to the project's treatment control BMP(s) prior to discharging to the stormwater conveyance system.</li> <li>2. Paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete shall be prohibited.</li> <li>3. Have an appropriate slope to prevent ponding, and must be separated from the rest of the site by a grade break that prevents run-on of urban runoff.</li> <li>4. At a minimum, the concrete fuel dispensing area must extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less.</li> </ol>



### C) TREATMENT CONTROL BMPS

Minimizing a development's detrimental effects on water quality can be most effectively achieved through the use of a combination of site design, source and treatment control stormwater BMPs. Where projects have been designed to minimize, to the maximum extent practicable, the introduction of anticipated pollutants of concern that may result in significant impacts to the receiving waters through the implementation of site design and source control stormwater BMPs, the development would still have the potential for pollutants of concern to enter the stormwater conveyance system. Therefore, priority projects shall be designed to remove pollutants of concern from the stormwater conveyance system to the maximum extent practicable through the incorporation and implementation of treatment control BMPs.

In meeting the requirements in this section, priority projects shall implement a single or combination of stormwater BMPs that will remove anticipated pollutants of concern in site runoff to the maximum extent practicable. Treatment control BMPs with a high or medium pollutant removal efficiency for the project's most significant pollutant of concern shall be selected. Treatment control BMPs with a low removal efficiency ranking shall only be approved by the Copermittee when a feasibility analysis has been conducted which exhibits that implementation of treatment control BMPs with a high or medium removal efficiency ranking are infeasible.

To select a structural treatment BMP using the Treatment Control BMP Selection Matrix (Table 2-8), each priority project shall compare the list of pollutants for which the downstream receiving waters are impaired (if any), with the pollutants anticipated to be generated by the project (as identified in Table 2-4). Any pollutants identified by Table 2-4 which are also causing a Clean Water Act section 303(d) impairment of the receiving waters of the project shall be considered primary pollutants of concern. Priority projects that are anticipated to generate a primary pollutant of concern shall meet all applicable requirements in Section 2.3C, and shall select a single or combination of stormwater BMPs from Table 2-8, which maximizes pollutant removal for the particular primary pollutant(s) of concern.

Priority projects that are not anticipated to generate a pollutant for which the receiving water is Clean Water Act Section 303(d) impaired shall meet applicable standard requirements in Section 2.3C, and shall select a single or combination of stormwater BMPs from Table 2-8, which are effective for pollutant removal of the identified secondary pollutants of concern, consistent with the "maximum extent practicable" standard defined in Attachment D of the Municipal Permit.

Where a site generates both primary and secondary pollutants of concern, primary pollutants of concern receive priority for BMP selection. For such sites, selected BMPs must only maximize pollutant removal for the primary pollutants of concern. Where a site generates only secondary pollutants of concern, selected BMPs shall target the secondary pollutant of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 2-4),

consistent with the maximum extent practicable standard defined in Attachment D of the Municipal Permit.

**Table 2-8 Treatment Control BMP Selection Matrix<sup>(1)</sup>**

<b>Pollutants of Concern</b>	<b>Bioretention Facilities (LID)</b>	<b>Settling Basins (Dry Ponds)</b>	<b>Wet Ponds and Wetlands</b>	<b>Infiltration Facilities or Practices (LID)</b>	<b>Media Filters</b>	<b>High-rate biofilters</b>	<b>High-rate media filters</b>	<b>Trash Racks &amp; Hydro-dynamic Devices</b>
<b>Coarse Sediment and Trash</b>	High	High	High	High	High	High	High	High
<b>Pollutants that tend to associate with fine particles during treatment</b>	High	High	High	High	High	Medium	Medium	Low
<b>Pollutants that tend to be dissolved following treatment</b>	Medium	Low	Medium	High	Low	Low	Low	Low

**Notes on Treatment Control BMP Categories**

All rankings are relative. Ranking of all facilities assumes proper sizing, design, and periodic maintenance. Following are general descriptions of each category.

- **Bioretention Facilities** (infiltration planters, flow-through planters, bioretention areas, and bioretention swales). Facilities are designed to capture runoff and infiltrate slowly through soil media which also supports vegetation. Bioretention facilities, except for flow-through planters, effectively promote infiltration into native soils. In clay soils, facilities may capture excess treated runoff in an underdrain piped to the municipal storm drain system. Typical criteria: an infiltration surface area at least 4% of tributary impervious area, 6-inch average depth of top reservoir, 18-inch soil layer, 12-inch to 18-inch gravel subsurface storage layer.
- **Settling Basins and Wetlands** (extended detention basins, “wet” basins, decorative or recreational lakes or water features also used for stormwater treatment, constructed wetlands). Facilities are designed to capture a minimum water quality volume of 80% of total runoff and detain for a minimum of 48 hours. Some wetland designs have proven effective in removing nutrients, but performance varies.
- **Infiltration Facilities or Practices** (infiltration basins, infiltration trenches, dry wells, dispersal of runoff to landscape, pervious pavements). These facilities and landscape designs capture, retain, and infiltrate a minimum of 80% of runoff into the ground. Infiltration facilities are generally only feasible in permeable (Hydrologic Soil Group A or B) soils. Volume and area of infiltration facilities depends on soil permeability and safety factor used. Typical criteria: Infiltration facilities should have pretreatment to remove silt to prolong life of the facility. A 10-foot vertical separation from average seasonal groundwater depth is required. Dispersal to landscape may be accomplished in any soil type and generally requires a maximum 2:1 ratio impervious:pervious and concave topography to ensure the first 1 inch of rainfall is retained.

- **Media Filters** (sand filters). Filters designed to treat runoff produced by a rainfall of 0.2 inches per hour (or 2 × 85<sup>th</sup> percentile hourly rainfall intensity) by slow infiltration through sand or other media. Typical criteria: Surface loading rate not to exceed 5 inches/hour. Entire surface of the sand must be accessible for maintenance.
  
- **High Rate Biofilters** (tree wells, typically proprietary). Biofilters with specially designed media to rapidly filter runoff while removing some pollutants. Filterra® (proprietary version) recommends surface loading rates of up to 100 inches/hour.
  
- **High-rate Media Filters** (typically proprietary). Vaults with replaceable cartridge filters filled with inorganic media.
  
- **Drainage Inserts** have low effectiveness in removing pollutants that tend to associate with fine particles and have medium effectiveness in removing coarse sediment and trash. They are sometimes used to augment more effective treatment facilities and are sometimes used alone when more effective facilities have been deemed infeasible.

**Notes on Pollutants of Concern:**

In Table 3, Pollutants of Concern are grouped as gross pollutants, pollutants that tend to associate with fine particles, and pollutants that remain dissolved.

Pollutant	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X	X	
Nutrients		X	X
Heavy Metals		X	
Organic Compounds		X	
Trash & Debris	X		
Oxygen Demanding		X	
Bacteria		X	
Oil & Grease		X	
Pesticides		X	

Alternative stormwater BMPs not identified in Table 2-8 may be approved at the discretion of the Port, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 2-8.

#### Step 8. Design to Treatment Control BMP Standards

All priority projects shall design, construct and implement structural treatment control BMPs that meet the design standards of this section, unless specifically exempted by the limited exclusions listed at the end of Step 8. Structural treatment control BMPs required by this section shall be operational prior to the use of any dependent development, and shall be located and designed in accordance with the requirements here in Step 8 and below in Step 9.

Treatment control BMPs must be designed to meet one of the volume-based or flow-based numeric sizing criteria identified in Table 2-9. Treatment BMP design must also consider any impacts to treatment BMP performance due tidal influence of the subsurface storm drain system within the tidelands. This is particularly relevant to subsurface filtration systems, hydrodynamic separator systems, detention or infiltration basins, and wet ponds/wetlands.

#### Limited Exclusions:

1. Proposed restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical sizing criteria requirements listed in Section 2.3.C, Step 8.
2. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in Section 2.3.C, Step 8 apply only to the addition, and not to the entire development.

**Table 2-9 Numeric Sizing Criteria for Structural Treatment Control BMPs**

***Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:***

1. The volume of runoff produced from a 24-hour 85<sup>th</sup> percentile storm event, as determined from the County of San Diego's 85<sup>th</sup> percentile isopluvial map at <http://www.sdcountry.ca.gov/dpw/docs/pct85.pdf>. If a project is located between isopluvial contours, the rainfall amount used to design volume-based BMPs shall be interpolated between contours for the project site.
2. The volume of runoff produced by the 85<sup>th</sup> percentile 24-hour runoff event, determined as the maximized capture urban runoff volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ ASCE Manual of Practice No. 87, (1998)*; or
3. The volume of annual runoff based on unit basin storage volume, to achieve 90 percent or more volume treatment by the method recommended in *California Stormwater Best Management Practices Handbook – Industrial/ Commercial, (1993)*, or
4. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85<sup>th</sup> percentile 24-hour runoff event. Under this criterion, hourly rainfall data may be used to calculate the 85<sup>th</sup> percentile storm event by calculating storm event totals for the period of historic record where individual storm events are separated by a minimum of six hours of no rain. The 85<sup>th</sup> percentile storm event shall be determined by ranking storm event totals from the period of record. National Weather Service gauges or other credible sources acceptable to the Port shall be used to obtain hourly rainfall data from a minimum 20-year period.

***Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:***

1. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour for each hour of a storm event; or
2. The maximum flow rate of runoff produced by the 85<sup>th</sup> percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two, for each hour of a storm event; or
3. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85<sup>th</sup> percentile hourly rainfall intensity multiplied by a factor of two, for each hour of a storm event.

### Step 9. Locate BMPs Near Pollutant Sources

Structural treatment control stormwater BMPs should be implemented close to pollutant sources to minimize costs and maximize pollutant removal prior to runoff entering receiving waters. Such BMPs may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following requirements:

1. All structural treatment control BMPs shall be located so as to infiltrate, filter, and/or treat the required runoff volume or flow prior to its discharge to any receiving water body supporting beneficial uses;
2. Multiple post-construction structural treatment control BMPs for a single priority development project shall collectively be designed to comply with the design standards of Step 8;
3. Shared stormwater BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;
4. Interim stormwater BMPs that provide equivalent or greater treatment than is required by Step 8 may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

### Step 10. Restrictions on Use of Infiltration BMPs

Due to the presence of high tidally influenced groundwater throughout the Port tide-lands jurisdiction, it is not anticipated that Infiltration BMPs would be considered feasible for most projects. However, there may be specific applications in specific locations that may be suitable. If Infiltration BMPs are implemented, they must meet the conditions presented in this section. At a minimum, use of structural treatment BMPs that are designed to primarily function as infiltration devices shall meet the following conditions<sup>3</sup>:

- Urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants, such as sedimentation or filtration, prior to infiltration.
- All dry weather flows shall be diverted from infiltration devices except for those non-stormwater discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to stormwater conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl

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3. These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and dechlorinated swimming pool discharges.

- Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used.
- The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet or as approved on an individual, site-specific basis by the Port. Where groundwater does not support beneficial uses, this vertical distance criterion may be reduced, provided groundwater quality is maintained.
- The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses.
- Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); and nurseries.
- The horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as approved on an individual, site-specific basis by the Port.

Where infiltration BMPs are considered, their performance shall be evaluated by the project proponent for impacts on groundwater quality and approved by the Port. Three factors significantly influence the potential for urban runoff to contaminate ground water. They are (i) pollutant mobility, (ii) pollutant abundance in urban runoff, (iii) and soluble fraction of pollutant. The risk of contamination of groundwater may be reduced by pretreatment of urban runoff. A discussion of limitations and guidance for infiltration practices is contained in, *Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration, Report No. EPA/600/R-94/051, USEPA (1994)*.

## 2.4 Proof of Ongoing Stormwater BMP Maintenance

Stormwater BMP maintenance will be provided by the Port for capital projects (i.e., public entity maintenance) and will be provided by individual tenants for tenant projects (i.e., through lease



provisions). As part of project review for both capital and tenant priority projects that include interim or permanent structural BMPs, the Port will verify that appropriate mechanisms are in-place. Maintenance requirements identified in below are required by the Municipal Permit and the Model SUSMP.

A) MAINTENANCE REQUIREMENTS

- (1) Operation & Maintenance (O&M) Plan: The Port will require that a copy of a satisfactory Operation & Maintenance (O&M) plan, prepared by the tenant/project proponent is included in the USMP. The O&M Plan must describe the designated responsible party to manage the stormwater BMP(s), any necessary employee training and duties, operating schedule, maintenance frequency, specific maintenance activities, copies of resource agency permits, and any other necessary activities. At a minimum, the O&M Plan shall require the inspection and servicing of all structural BMPs on an annual basis. Further, annual written verification of effective operation and maintenance of each approved treatment control BMP by the responsible party is required to be submitted to the Port prior to each wet season. The tenant shall document all maintenance requirements and shall retain records for at least 5 years. These documents shall be made available to the Port for inspection upon request at any time. O&M Plans will also be prepared for capital projects that include structural BMPs.
- (2) Access Easement/Agreement: The Port maintains rights to access tenant properties as part of lease provisions. These rights extend to any access required related to structural BMPs.

B) MAINTENANCE MECHANISMS

The maintenance mechanisms below apply to Port projects:

- (1) Public entity maintenance: The Port will provide stormwater BMP maintenance for its capital projects. Funding will be provided on an on-going basis through the inclusion of maintenance costs in annual operating budgets for any departments having BMP maintenance responsibility.
- (2) Lease provisions: The Port will assure stormwater BMP maintenance, repair and replacement of tenant projects through conditions in tenant leases.
- (3) Other Mechanisms: On a case by case basis, the Port may consider other mechanisms for treatment BMP maintenance such as inclusion of maintenance conditions in a use permit; or alternative mechanisms, subject to Port approval.

## C) VERIFICATION MECHANISMS

For discretionary projects, stormwater BMP maintenance requirements shall be incorporated into the project plan approval conditions, and shall be consistent with permits issued by resource agencies, before decision-maker approval of discretionary permits. For projects requiring ministerial permits, stormwater BMP maintenance requirements will be incorporated into the permit conditions before the issuance of any ministerial permits.

Sample conditions included in Project Plan Approval Letters for tenant projects are provided in Appendix D.

For capital projects requiring structural treatment BMPs, the Port will establish a method of stormwater BMP maintenance prior to the commencement of construction.

## 2.5 Waiver Of Structural Treatment BMP Requirements

The Model SUSMP and the Municipal Permit allow jurisdictions to waive requirements for implementing structural treatment BMPs on a project-specific basis if infeasibility can be established. The Port encourages all project proponents to make every attempt to comply with structural treatment BMP requirements. The Model SUSMP and Municipal Permit do not allow waivers from Site Design or Source Control BMPs and all priority projects must comply with these requirements. In addition, priority projects may not cause or contribute to any exceedance of water quality objectives and pollutants in runoff must be reduced to the MEP.

## 2.6 Alternative Methods for Achieving Treatment Requirements

In accordance with provisions of the Model SUSMP, the Port may implement the Local Equivalent Area Drainage (LEAD) Method, as proposed by the City of San Diego in its May 16, 2002 letter, for meeting the BMP requirements in Section 2.3.C, Step 8, "Design to Treatment Control BMP Standards," for inclusion in their jurisdictional SUSMP. The alternative method must minimally meet the following criteria:

- The alternative treatment area shall be located within the proximity of the project;
- The alternative treatment area shall discharge to the same receiving water as the project;
- The alternative treatment area shall be equivalent or greater than the project footprint;

- The alternative treatment area shall have an equivalent or greater impervious surface area than the project;
- The alternative treatment area shall have an equivalent or greater pollutant load than the project;
- Site Design and Source Control BMPs (Sections 2.3.A and B) shall be required in the project design;
- Alternative treatments shall be limited to redevelopment and/or infill projects.

The Port may implement an alternative method for no more than three pilot projects within its jurisdiction during this permit cycle. For each project where an alternative method is implemented, the effectiveness of the alternative method shall be monitored and reported on to the Regional Board by the end of the permit cycle.

The Port has not identified any pilot projects for the LEAD Method at this time. Suitable projects may be identified in the future. Candidate projects for LEAD Method pilot evaluation should be brought to the attention of the Port Environmental Services Department. Interested parties should review details of the LEAD Method provided in Appendix C of the Model SUSMP ([www.swrcb.ca.gov/rwqcb9/programs/sdstormwater.html](http://www.swrcb.ca.gov/rwqcb9/programs/sdstormwater.html)).

## 2.7 Site Design Stormwater Treatment Credits

The Copermittees may develop and submit for public review and comment and Regional Board approval a regional Model Site Design Stormwater Treatment Credits program that allows reductions in the volume or flow of stormwater that must be captured or treated on a project in return for the inclusion of specified project design features in the project. The Model Site Design Stormwater Treatment Credits program shall be deemed to be a part of this Jurisdictional SUSMP following Regional Board approval. Any such model program shall specify the conditions under which project proponents can be credited for the use of site design features and low impact development techniques that can reduce the volume of stormwater runoff, preserve natural areas, and minimize the pollutant loads generated and potentially discharged from the site. Any Site Design Stormwater Treatment Credits program implemented by the Port within its jurisdiction shall be consistent and compliant with this model approved by the Regional Board.

## Appendix A

## Stormwater Best Management Practices

### A) STORMWATER BEST MANAGEMENT PRACTICES

The following are a list of BMPs may be used to minimize the introduction of pollutants of concern that may result in significant impacts to receiving waters. Other BMPs approved by the Copermittee as being equally or more effective in pollutant reduction than comparable BMPs identified below are acceptable. See Appendix B: Suggested Resources for additional sources of information. All BMPs must comply with local zoning and building codes and other applicable regulations.

#### **LID and Site Design BMPs**

##### Minimizing Impervious Areas

- Reduce sidewalk widths
- Incorporate landscaped buffer areas between sidewalks and streets.
- Design residential streets for the minimum required pavement widths
- Minimize the number of residential street cul-de-sacs and incorporate landscaped areas within cul-de-sac centers with curb-cuts to reduce their impervious cover.
- Use open space development that incorporates smaller lot sizes
- Increase building density while decreasing the building footprint
- Reduce overall lot imperviousness by promoting alternative driveway surfaces and shared driveways that connect two or more homes together
- Reduce overall imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in spillover parking areas

##### Increase Rainfall Infiltration

- Use permeable materials for private sidewalks, driveways, parking lots, and interior roadway surfaces (examples: hybrid lots, parking groves, permeable overflow parking, etc.)
- Use curb-cuts to direct pavement runoff into swales, landscaping, and natural areas prior to entering the MS4.
- Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas, and avoid routing rooftop runoff to the roadway or the urban runoff conveyance system
- Pitch driveways and parking areas toward yards and vegetated areas prior to draining into the MS4.
- Conserve and utilize natural soils and/or use amended soils to encourage light infiltration/ percolation.
- Minimize disturbances to natural drainages
- Minimize soil compaction in planned green space (landscaped areas, lawns, etc.) and re-till soils when compacted by grading/construction equipment.

##### Maximize Rainfall Interception

- Maximizing canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.
- Cisterns / Rain barrels.
- Foundation landscaping.

B) MINIMIZE DIRECTLY CONNECTED IMPERVIOUS AREAS (DCIAS)

- Draining rooftops into adjacent landscaping prior to discharging to the storm drain
- Use curb-cuts to allow parking lots to drain into landscape areas co-designed as biofiltration areas and/or swales prior to draining into the MS4
- Draining roads, sidewalks, and impervious trails into adjacent landscaping

Slope and Channel Protection

- Use of natural drainage systems to the maximum extent practicable
- Stabilized permanent channel crossings
- Planting native or drought tolerant vegetation on slopes
- Energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels

Source Control BMPs

- Storm drain system stenciling and signage
- Outdoor material and trash storage area designed to reduce or control rainfall runoff
- Efficient irrigation system

Treatment Control BMPs

- Biofilters
- Bioretention Swale (detains and infiltrates water through soil)
- Stormwater Planter Box (open-bottomed)
- Stormwater Flow-Through Planter (sealed bottom)
- Vegetated filter strip
- Bioretention Area
- Vegetated Roofs / Modules / Walls
- Detention Basins
- Extended/dry detention basin with grass/vegetated lining
- Extended/dry detention basin with impervious lining
- Infiltration basin
- Infiltration trench
- Dry well
- Permeable Paving
- Gravel
- Permeable asphalt
- Pervious concrete
- Unit pavers, ungrouted, set on sand or gravel
- Subsurface Reservoir Bed
- Wet pond (permanent pool)
- Constructed wetland
- Media filtration
- Sand filtration
- Swirl Concentrator
- Cyclone Separator
- Trash racks and screens

**Appendix B**

**Suggested Resources**

SUGGESTED RESOURCES	HOW TO GET A COPY
<p><i>The County of San Diego Low Impact Development Handbook; Stormwater Management Strategies</i> . (2007).</p> <p>Presents guidance for LID stormwater planning and management techniques. Fact Sheets on LID BMPs are provided in the Appendices.</p>	<p>The County of San Diego The Department of Planning and Land Use 5201 Ruffin Road, Suite B San Diego, CA 92123 <a href="http://www.sdcounty.ca.gov/dplu/LID_PR.html">http://www.sdcounty.ca.gov/dplu/LID_PR.html</a> <a href="http://www.sdcounty.ca.gov/dplu/">www.sdcounty.ca.gov/dplu/</a></p>
<p><i>Better Site Design: A Handbook for Changing Development Rules in Your Community</i> (1998)</p> <p>Presents guidance for different model development alternatives.</p>	<p>Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 <a href="http://www.cwp.org/PublicationStore/bsd.htm">http://www.cwp.org/PublicationStore/bsd.htm</a></p>
<p><i>California Urban runoff Best Management Practices Handbooks</i> (2003) for Construction Activity, Municipal, and Industrial/Commercial</p> <p>Presents a description of a large variety of Structural BMPs, Treatment Control, BMPs and Source Control BMPs</p>	<p>Los Angeles County Department of Public Works Cashiers Office 900 S. Fremont Avenue Alhambra, CA 91803 626-458-6959 <a href="http://www.cabmphandbooks.org">www.cabmphandbooks.org</a></p>
<p>Caltrans Urban runoff Quality Handbook: Planning and Design Staff Guide (Best Management Practices Handbooks (1998)</p> <p>Presents guidance for design of urban runoff BMPs</p>	<p>California Department of Transportation P.O. Box 942874 Sacramento, CA 94274-0001 916-653-2975</p>
<p><i>Bioretention Manual (updated 2002)</i></p> <p>Presents guidance for designing bioretention facilities.</p>	<p>Prince George's County Watershed Protection Branch 9400 Peppercorn Place, Suite 600 Landover, MD 20785 <a href="http://www.co.pg.md.us/Government/AgencyIndex/DER/ESD/Bioretention/bioretention.asp">http://www.co.pg.md.us/Government/AgencyIndex/DER/ESD/Bioretention/bioretention.asp</a></p>
<p>Contra Costa Clean Water Program <i>Stormwater C.3 Guidebook</i></p> <p>Includes an integrated design approach to meet California Stormwater NPDES treatment and hydrograph modification management requirements using Low Impact Development site design techniques and facilities.</p>	<p>Contra Costa Clean Water Program 255 Glacier Drive Martinez, CA 94553  <a href="http://www.cccleanwater.org/construction/nd.php">www.cccleanwater.org/construction/nd.php</a></p>
<p><i>Design of Stormwater Filtering Systems</i> (1996) by Richard A. Claytor and Thomas R. Schuler</p> <p>Presents detailed engineering guidance on ten different urban runoff-filtering systems.</p>	<p>Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 <a href="http://www.cwp.org/PublicationStore/special.htm">http://www.cwp.org/PublicationStore/special.htm</a></p>
<p><i>Development Planning for Stormwater Management, A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), (May 2000)</i></p>	<p>Los Angeles County Department of Public Works <a href="http://dpw.co.la.ca.us/epd/">http://dpw.co.la.ca.us/epd/</a> or <a href="http://www.888cleanLA.com">http://www.888cleanLA.com</a></p>
<p><i>Florida Development Manual: A Guide to Sound Land and Water Management</i> (1988)</p> <p>Presents detailed guidance for designing BMPs</p>	<p>Florida Department of the Environment 2600 Blairstone Road, Mail Station 3570 Tallahassee, FL 32399</p>

SUGGESTED RESOURCES	HOW TO GET A COPY
<p><i>Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters</i> (1993) Report No. EPA-840-B-92-002.</p> <p>Provides an overview of, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.</p>	<p>National Technical Information Service U.S. Department of Commerce            Springfield, VA 22161            800-553-6847  <a href="http://www.ntis.gov/">http://www.ntis.gov/</a></p>
<p>Guide for BMP Selection in Urban Developed Areas (2001)</p>	<p><i>ASCE Envir. and Water Res. Inst.</i>            1801 Alexander Bell Dr.            Reston, VA 20191-4400            (800) 548-2723</p>
<p>Low-Impact Development Design Strategies - An Integrated Design Approach (June 1999)</p>	<p><i>Prince George's County, Maryland</i>  <i>Department of Environmental Resource Programs and Planning Division</i>            9400 Peppercorn Place            Largo, Maryland 20774  <a href="http://www.co.pg.md.us/Government/AgencyIndex/DER/ESD/low-impact.asp?nivel=foldmenu(8)">http://www.co.pg.md.us/Government/AgencyIndex/DER/ESD/low-impact.asp?nivel=foldmenu(8)</a></p>
<p><i>Maryland Stormwater Design Manual</i> (1999)</p> <p>Presents guidance for designing urban runoff BMPs</p>	<p>Maryland Department of the Environment            2500 Broening Highway            Baltimore, MD 21224  <a href="http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp">http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp</a></p>
<p>National Stormwater Best Management Practices (BMP) Database, Version 1.0</p> <p>Provides data on performance and evaluation of urban runoff BMPs</p>	<p>American Society of Civil Engineers            1801 Alexander Bell Drive            Reston, VA 20191            703-296-6000</p>
<p>National Stormwater Best Management Practices Database (2001)</p>	<p><i>Urban Water Resources Research Council of ASCE</i>  <i>Wright Water Engineers, Inc.</i>            (303) 480-1700</p>
<p><i>Operation, Maintenance and Management of Stormwater Management</i> (1997)</p> <p>Provides a thorough look at stormwater practices including, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.</p>	<p>Watershed Management Institute, Inc.            410 White Oak Drive            Crawfordville, FL 32327</p> <p><a href="http://stormwaterfinance.urbancenter.iupui.edu/PDFs/OMMSWM.pdf">http://stormwaterfinance.urbancenter.iupui.edu/PDFs/OMMSWM.pdf</a></p>
<p><i>Portland Stormwater Management Manual</i> (2004)</p> <p>Includes design illustrations and criteria for bioretention facilities.</p>	<p>Environmental Services            1120 SW 5th Ave., Rm. 1000            Portland, OR 97204            503-823-7740</p> <p><a href="http://www.portlandonline.com/bes/index.cfm?c=35122&amp;">http://www.portlandonline.com/bes/index.cfm?c=35122&amp;</a></p>
<p>Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration</p>	<p><i>Report No. EPA/600/R-94/051, USEPA (1994).</i></p>
<p>Preliminary Data Summary of Urban runoff Best Management Practices (August 1999)</p> <p>EPA-821-R-99-012</p>	<p><a href="http://www.epa.gov/ost/stormwater/">http://www.epa.gov/ost/stormwater/</a></p>

SUGGESTED RESOURCES	HOW TO GET A COPY
Reference Guide for Stormwater Best Management Practices (July 2000)	City of Los Angeles Urban runoff Management Division 650 South Spring Street, 7 <sup>th</sup> Floor Los Angeles, California 90014 <a href="http://www.lacity.org/san/swmd/">http://www.lacity.org/san/swmd/</a>
<i>Second Nature: Adapting LA's Landscape for Sustainable Living</i> (1999) by Tree People  Detailed discussion of BMP designs presented to conserve water, improve water quality, and achieve flood protection.	Tree People 12601 Mullholland Drive Beverly Hills, CA 90210 (818) 623-4600 Fax (818) 753-4625
<i>Start at the Source</i> (1999)  Detailed discussion of permeable pavements and alternative driveway designs presented.	Bay Area Stormwater Management Agencies Association 2101 Webster Street Suite 500 Oakland, CA 510-286-1255 <a href="http://www.basmaa.org">www.basmaa.org</a>
<i>Stormwater Management in Washington State</i> (1999) Vols. 1-5  Presents detailed guidance on BMP design for new development and construction.	Department of Printing State of Washington Department of Ecology P.O. Box 798 Olympia, WA 98507-0798 360-407-7529
Stormwater, Grading and Drainage Control Code, Seattle Municipal Code Section 22.800-22.808, and Director's Rules, Volumes 1-4. (Ordinance 119965, effective July 5, 2000)	City of Seattle Department of Design, Construction & Land Use 700 5 <sup>th</sup> Avenue, Suite 1900 Seattle, WA 98104-5070 (206) 684-8880 <a href="http://www.seattle.gov/dclu/codes/default.asp">http://www.seattle.gov/dclu/codes/default.asp</a>
<i>Texas Nonpoint Source Book</i> – Online Module (1998) <a href="http://www.txnpsbook.org">www.txnpsbook.org</a>  Presents BMP design and guidance information on-line	Texas Statewide Urban Runoff Quality Task Force North Central Texas Council of Governments 616 Six Flags Drive Arlington, TX 76005 817-695-9150
<i>The Practice of Watershed Protection</i> by Thomas R. Shchuler and Heather K. Holland	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 <a href="http://www.cwp.org/PublicationStore/practice.htm">http://www.cwp.org/PublicationStore/practice.htm</a>
<i>Urban Storm Drainage, Criteria Manual – Volume 3, Best Management Practices</i> (1999)  Presents guidance for designing BMPs	Urban Drainage and Flood Control District 2480 West 26th Avenue, Suite 156-B Denver, CO 80211 303-455-6277

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## Standard Industrial Classification (SIC) Code Information

U.S. Department of Labor Occupational Safety & Health Administration ([www.osha.gov](http://www.osha.gov))

### SIC Description for 5013

Division F: *Wholesale Trade*

Major Group 50: *Wholesale Trade-durable Goods*

Industry Group 501: *Motor Vehicles And Motor Vehicle Parts And*

5013 Motor Vehicle Supplies and New Parts

Establishments primarily engaged in the wholesale distribution of motor vehicle supplies, accessories, tools, and equipment; and new motor vehicle parts.

- Automobile engine testing equipment electrical-wholesale
- Automobile glass-wholesale
- Automobile service station equipment-wholesale
- Automotive accessories-wholesale
- Automotive engines, new-wholesale
- Automotive parts, new-wholesale
- Automotive stampings-wholesale
- Automotive supplies-wholesale
- Batteries, automotive-wholesale
- Engine electrical equipment, automotive-wholesale
- Garage service equipment-wholesale
- Hardware, automotive-wholesale
- Motorcycle parts-wholesale
- Pumps, measuring and dispensing: gasoline and oil-wholesale
- Seat belts, automotive-wholesale
- Seat covers, automotive-wholesale
- Service station equipment, automobile-wholesale
- Testing equipment, electrical: automotive-wholesale
- Tools and equipment, automotive-wholesale
- Wheels, motor vehicle: new-wholesale

### **SIC Description for 5014**

Division F: *Wholesale Trade*

Major Group 75: *Automotive Repair, Services, And Parking*

5014 Tires and Tubes

Establishments primarily engaged in the wholesale distribution of tires and tubes for passenger and commercial vehicles.

- Repair materials, tire and tube-wholesale
- Tires, used-wholesale
- Tires and tubes, new-wholesale
- Tires, used-wholesale

### **SIC Description for 5541**

Division G: *Retail Trade*

Major Group 55: *Automotive Dealers and Gasoline Service Stations*

Industry Group 554: *Gasoline Service Stations*

5541 Gasoline Service Stations

Gasoline service stations primarily engaged in selling gasoline and lubricating oils. These establishments frequently sell other merchandise, such as tires, batteries, and other automobile parts, or perform minor repair work. Gasoline stations combined with other activities, such as grocery stores, convenience stores, or carwashes, are classified according to the primary activity.

- Automobile service stations-retail
- Filling stations, gasoline-retail
- Gasoline and oil-retail
- Marine service stations-retail
- Service stations, gasoline-retail
- Truck stops-retail

### **SIC Description for 5812**

Division G: *Retail Trade*

Major Group 58: *Eating And Drinking Places*

Industry Group 581: *Eating And Drinking Places*

5812 Eating Places

Establishments primarily engaged in the retail sale of prepared food and drinks for on-premise or immediate consumption. Caterers and industrial and institutional food service establishments are also included in this industry.

- Automats (eating places)
- Beaneries
- Box lunch stands
- Buffets (eating places)
- Cafes
- Cafeterias
- Carry-out restaurants
- Caterers
- Coffee shops
- Commissary restaurants
- Concession stands, prepared food (e.g., in airports and sports arenas)
- Contract feeding
- Dairy bars
- Diners (eating places)
- Dining rooms
- Dinner theaters
- Drive-in restaurants
- Fast food restaurants
- Food bars
- Food service, institutional
- Frozen custard stands
- Grills (eating places)
- Hamburger stands
- Hot dog (frankfurter) stands
- Ice cream stands
- Industrial feeding
- Lunch bars
- Lunch counters
- Luncheonettes
- Lunchrooms
- Oyster bars
- Pizza parlors
- Pizzerias
- Refreshment stands
- Restaurants
- Restaurants, carry-out
- Restaurants, fast food
- Sandwich bars or shops
- Snack shops
- Soda fountains
- Soft drink stands
- Submarine sandwich shops
- Tea rooms
- Theaters, dinner

## **SIC Description for 7532**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, and Parking*

Industry Group 753: *Automotive Repair Shops*

7532 Top, Body, and Upholstery Repair Shops and Paint Shops

Establishments primarily engaged in the repair of automotive tops, bodies, and interiors, or automotive painting and refinishing. Also included in this industry are establishments primarily engaged in customizing automobiles, trucks, and vans except on a factory basis. Establishments primarily engaged in customizing automobiles, trucks, and vans on a factory basis are classified in Manufacturing, Industry Group 371.

- Antique and classic automobile restoration
- Automotive body shops
- Automotive interior shops
- Automotive paint shops
- Automotive tops (canvas or plastic), installation, repair, or sales and
- Automotive trim shops
- Bump shops (automotive repair)
- Collision shops, automotive
- Customizing automobiles, trucks or vans: except on a factory basis
- Upholstery repair, automotive
- Van conversions, except on a factory basis

## **SIC Description for 7533**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, and Parking*

Industry Group 753: *Automotive Repair Shops*

7533 Automotive Exhaust System Repair Shops

Establishments primarily engaged in the installation, repair, or sale and installation of automotive exhaust systems. The sale of mufflers, tail pipes, and catalytic converters is considered to be incidental to the installation of these products.

- Catalytic converters, automotive: installation, repair, or sales and

- Exhaust system services, automotive
- Mufflers, automotive: installation, repair, or sales and installation

### **SIC Description for 7534**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

7534 Tire Retreading and Repair Shops

Establishments primarily engaged in repairing and retreading automotive tires. Establishments classified here may either retread customers' tires or retread tires for sale or exchange to the user or the trade.

- Rebuilding and retreading tires for the trade
- Retreading tires
- Tire recapping
- Tire repair shops
- Tire studding and restudding
- Vulcanizing tires and tubes

### **SIC Description for 7536**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

7536 Automotive Glass Replacement Shops

Establishments primarily engaged in the installation, repair, or sales and installation of automotive glass. The sale of the glass is considered incidental to the replacement.

- Glass replacement and repair, automotive

### **SIC Description for 7537**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

### 7537 Automotive Transmission Repair Shops

Establishments primarily engaged in the installation, repair, or sales and installation of automotive transmissions. The sale of transmissions and related parts is considered incidental to the installation or repair of these products.

- Automatic transmission repair, automotive
- Transmission repair, automotive
- Transmission, automotive: installation, repair, or sale and installation

### **SIC Description for 7538**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

### 7538 General Automotive Repair Shops

Establishments primarily engaged in general automotive repair. Establishments primarily engaged in industrial truck repair are classified in Industry 7699.

- Automotive repair shops, general
- Diesel engine repair, automotive
- Engine repair, automotive
- Engine repair, truck: except industrial
- Garages, general automotive repair and service
- Motor repair, automotive
- Truck engine repair, except industrial

### **SIC Description for 7539**

Division I: *Services*

Major Group 75: *Automotive Repair, Services, And Parking*

Industry Group 753: *Automotive Repair Shops*

### 7539 Automotive Repair Shops, Not Elsewhere Classified

Establishments primarily engaged in specialized automotive repair, not elsewhere classified, such as fuel service (carburetor repair), brake relining, front-end and wheel alignment, and radiator repair. Establishments primarily engaged in automotive welding are classified in Industry 7692.

- Air-conditioner repair, automotive
- Automotive springs, rebuilding and repair
- Axle straightening, automotive
- Brake linings, sale and installation
- Brake repairing, automotive
- Carburetor repair
- Electrical service, automotive (battery and ignition repair)
- Frame repair shops, automotive
- Front end repair, automotive
- Fuel system conversion, automotive
- Fuel system repair, automotive
- Generator and starter repair, automotive
- Radiator repair shops, automotive
- Wheel alignment, automotive



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Appendix D

Tenant Improvement Projects -  
Post-Construction/Operational Phase  
Stormwater Conditions

**Tenant Improvement Projects – POST-CONSTRUCTION / OPERATIONAL PHASE  
STORMWATER CONDITIONS**

**CONDITION OF APPROVAL # 1:**

The following statement shall be added to Project Plan Approval Letter for all tenant projects:

“All Port tidelands are regulated under Regional Water Quality Control Board Order No. R9-2007-0001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108758, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District (Municipal Permit), as adopted, amended, and/or modified. The Municipal Permit prohibits any activities that could degrade stormwater quality. Post-construction / operational use of this project site must comply with the Municipal Permit and District direction related to permitted activities including the requirements found in the District Jurisdictional Urban Runoff Management Document (JURMP). The JURMP is available on the District website: ([http://www.portofsandiego.org/sandiego\\_environment/jurmp.asp](http://www.portofsandiego.org/sandiego_environment/jurmp.asp)) or by contacting the District Recreation and Environmental Services Department, (619) 686-6254.

No discharges of any material or waste, including potable water, wash water, dust, soil, trash and debris, may contaminate stormwater or enter the stormwater conveyance system. Any such material that inadvertently contaminates stormwater or enters the stormwater conveyance system as part of site operations must be removed immediately. All unauthorized discharges to the stormwater conveyance system or the Bay or the ocean must be reported immediately to the Recreation and Environmental Services Department, in order to address any regulatory permit requirements regarding spill notifications.

Best management practices (BMPs) must be implemented by the Tenant to control the potential release of any materials or wastes being handled or stored on-site which could enter the stormwater conveyance system due to wind or stormwater runoff.

In addition, this project is subject to the Port Standard Urban Stormwater Mitigation Plan (SUSMP) process. As such, approval of the project by the District is necessarily conditioned upon submission by the project proponent of a project specific urban Stormwater Mitigation Plan (USMP) that meets District requirements. Project approval requires full implementation of all USMP structural and non-structural BMPs throughout the life of the project. The implementation and

maintenance of the USMP BMPs constitute regulatory obligations for the leasee, and failure to comply with the Municipal Permit, the JURMP, or the Port approved USMP, including the specific BMPs contained therein, may be considered a default under the lease.



**Dan Cloak  
Environmental**

**BROWN AND  
CALDWELL**

**133904.004**

**TO:** Sara Agahi, County of San Diego

**CC:** Chris Herencia, Brown and Caldwell; Mike Flake, Brown and Caldwell; Tony Dubin, Brown and Caldwell; Dan Cloak, Dan Cloak Environmental Consulting; Andy Collison, PWA

**FROM:** Nancy Gardiner, Brown and Caldwell

**AUTHORS:** Christie Beeman and Andy Collison, PWA

**REVIEWER:** Tony Dubin, Brown and Caldwell

**DATE:** October 30, 2007

**SUBJECT:** Development of Interim Hydromodification Criteria

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Regional Water Quality Control Board Order R9-2007-0001 Provision D.1.g (6) (Board Order) requires the County of San Diego and its NPDES Co-permittees to identify Interim Hydromodification Criteria (IHC) within 365 days of Order adoption (i.e., by January 24, 2008). The interim criteria will apply until the final Hydrograph Modification Management Plan (HMP) is implemented. The IHC is described in the order as “an interim range of runoff flow rates for which Priority Development Project post-project runoff flow rates and durations shall not exceed pre-project runoff flow rates and durations.” The purpose of the IHC is to prevent development-related changes in stormwater runoff from causing, or further accelerating, stream channel erosion or other adverse impacts to beneficial stream uses. This memorandum provides background on fluvial geomorphology and hydrograph modification management, describes flow control criteria applied in other HMPs, and provides a recommendation for developing the San Diego IHC.

#### GEOMORPHIC CONTEXT

Stream channels form in response to the sediment and runoff delivered from the watershed, in combination with channel slope and underlying geology. In a stable stream channel, water and sediment are in balance so that the channel neither aggrades nor erodes over time, though the channel may adjust dynamically to individual storm events. There are environmental influences that alter channel geomorphology including fire, landslides and tectonic uplift or subsidence. When these changes occur, stream channels adjust over time to achieve a new dynamic equilibrium under the altered conditions.

Anthropogenic land use changes have altered the balance of runoff and sediment supply in many Southern California watersheds, beginning with the introduction of cattle grazing in the 19<sup>th</sup> century. Modern land development tends to increase the rate and volume of runoff delivered to stream channels, due to the increase in impervious surfaces and drainage efficiency. In the Southern and Central coast regions of California, these anthropogenic changes have caused degradation of many

stream channels, and the magnitude and rate of these changes has not allowed for adjustment to a new equilibrium state.

#### HYDROGRAPH MODIFICATION

Hydrograph modification refers to changes in the magnitude and frequency of stream flows as a result of urbanization, and the resulting impacts on the receiving channels in terms of erosion, sedimentation and degradation of instream habitat. The degree to which a channel will erode is a function of the increase in driving forces (shear stress), the resistance of the channel (critical shear stress), the change in sediment delivery, and the geomorphic condition of the channel. Critical shear stress is the stress threshold above which erosion occurs. Not all flows cause erosion -- only those that generate shear stress in excess of the critical shear stress of the bank and bed materials. Urbanization increases the shear stress exerted on the channel by stream flows and can trigger erosion in the form of incision (channel downcutting) or widening (bank erosion) or both. Increases in flow below critical shear stress levels have little or no effect on the channel.

The existing (pre-project) geomorphic condition of the receiving channel is important because it influences the response of the channel to the imposed stresses. Stream channels that have been previously impacted by earlier land use changes or direct interventions may not be in equilibrium with existing conditions, and these instabilities can influence channel response to hydrograph modification. For example, in an aggrading channel an increase in effective stress may *increase* channel stability by bringing sediment transport capacity closer to sediment load, while in an eroding channel a small increase in effective stress may cause a large increase in erosion. Changes in sediment or water delivery can also cause fundamental geomorphic thresholds to be crossed, for example by converting a wide and shallow braided channel into a narrow and deep single thread channel.

The standard for hydrograph modification management is to meet pre-project conditions. Where receiving stream channels are already unstable, it can best be thought of as a method to avoid accelerating or exacerbating existing problems. Where receiving stream channels are in a state of dynamic equilibrium, hydrograph modification management may prevent the onset of erosion or other problems.

#### HYDROLOGIC CRITERIA

It is well established that watershed urbanization tends to increase the frequency and duration of stormwater runoff, and the effect is most dramatic for smaller, more frequent runoff events (Beighley et al., 2003, Hollis 1975). Rainfall events that may have been absorbed or retained by a natural ground surface produce runoff when those surfaces are paved. These smaller events are also associated with stream flows that are most important for erosion, due to the combination of their magnitude and frequency. The most geomorphically-effective flows are those that are both large enough to move an appreciable amount of sediment and frequent enough to have a significant cumulative impact, generally around the 1- to 5-year recurrence interval (Q1-Q5) (Wolman & Miller, 1960). Much of the impact of hydrograph modification is an increase in the frequency of geomorphically effective flows.

One way to manage hydrograph modification is to control site runoff to levels that are equal to or less than pre-project runoff, as required by the IHC. The other fundamental approach is to allow increased flow to channels but to modify the gradient, cross section and/or boundary materials to achieve stable conditions under the changed flow regime. Hydrograph Modification Management

Plans that have been adopted in the Bay Area (Contra Costa, Santa Clara, Alameda) and approaches under consideration in other areas of California (Sacramento, Los Angeles, SCWRPPP) vary as to the emphasis placed on flow control versus other approaches. However, there is a general consensus that both the frequency and duration of flows must be controlled, necessitating the use of continuous simulation hydrologic modeling for evaluating potential impacts of development (as opposed to design storm methods typically used in flood control analysis). It is also generally accepted that events smaller than  $Q_{10}$  are the most critical for hydrograph modification management. The examples below illustrate how different regulatory approaches have led to different compliance criteria.

#### *Flow Control Approach*

Conventional flood control detention basins are designed to control peak flows for large events to pre-project levels and meter the excess runoff out over a longer period. This approach can increase the duration of small but still erosive flows and can cause extensive channel erosion (WA State Department of Ecology, 2001). More recently, detention basins for hydrograph modification management have employed multi-stage outlet works designed to match both the duration and magnitude of flows within a critical range. To avoid the erosive effect of extended low flows, the maximum rate at which excess water is eventually released is set below the erosive threshold. The Santa Clara (SCVURPPP) HMP focused on the use of detention basins for hydrograph modification management and therefore strongly emphasized the lower flow control limit for site runoff. SCVURPPP defined the lower flow control limit as the flow rate (expressed as a percentage of  $Q_2$ ) that generates the critical shear stress on a channel ( $Q_c$ ); that is, the minimum flow that could initiate erosion in the channel bed and banks. SCVURPPP estimated  $Q_c$  to be  $0.1Q_2$ , based on an estimate of bed and bank material shear resistance at selected cross sections in two creeks. As a result of this study, both the Santa Clara and Alameda HMPs adopted  $0.1Q_2$  as the lower limit for flow control regulation.

#### *Low Impact Development (LID) Approach*

The LID approach to hydrograph modification management relies on site design and best management practices to mitigate for hydrograph modification impacts. By minimizing directly connected impervious area and promoting infiltration, LID approaches mimic natural hydrologic conditions to counteract the hydrologic effects of development. Because more water is retained on-site and in distributed facilities, the lower discharge limit is less critical for LID facilities since different facilities will discharge into the stream system at different times. By contrast to the Santa Clara approach, the Contra Costa HMP strongly emphasized the use of LID for hydrograph modification management. The HMP is therefore targeted the range of flows most likely to cause erosion impacts (i.e., less than  $Q_{10}$ ), without defining a specific lower limit for flow control.

#### RECOMMENDATION

The Board Order specifically requires defining a “range of runoff flow rates” to be regulated under the IHC. Runoff flow rates are commonly understood as design storm peak flow rates such as  $Q_2$  or  $Q_{10}$ , and in fact the interim standard recently adopted by the County of Los Angeles consists of a single peak flow rate ( $Q_2$ ). This approach is appealing because it is very simple and can be evaluated using design storm models and methods commonly used for flood control analysis. However, it is widely recognized that the design storm approach is not adequate for characterizing the most critical hydrograph modification effects of development (i.e., increased duration and frequency of small runoff events).

Continuous simulation hydrologic modeling permits statistical analysis of the frequency, magnitude and duration of runoff over an extended period (typically 20 years or more) and is based upon actual, historical rainfall records for a project area. Potential project impacts on the frequency and duration of smaller flows can be readily evaluated by comparing model output for pre- and post-project conditions. The Board Order acknowledges the efficacy of continuous simulation for hydrograph modification analysis and requires its use in the development of the HMP. Because continuous simulation hydrologic modeling is the most appropriate analytical tool and because the Board Order requires its use, we recommend using a continuous simulation compliance standard for the IHC.

We recommend the following Interim Hydrologic Criteria, which are modified from the Contra Costa HMP. Two compliance options are provided – curve-matching based on continuous simulation modeling, and implementation of LID. The curve-matching approach, as described below, would be available to project proponents once the IHC are approved by the Co-permittees. The LID implementation option would become available later. It would rely on design and sizing procedures created and approved (by Co-permittees) during the course of developing the final HMP. If the Co-permittees do not approve LID design guidance during the period that the IHC are in place, the curve-matching standard would be the default compliance standard.

The range of flows to be managed under the curve-matching option is expressed as a percentage of the 5-year peak flow (Q5) based on the understanding that dominant discharge for Southern CA streams is in the vicinity of Q5. The curve-matching range is presented as an estimate at this time and may be refined prior to adoption of the final IHC.

1. Estimated post-project runoff durations and peak flows do not exceed pre-project durations and peak flows. The project proponent must use a continuous simulation hydrologic computer model such as USEPA's Hydrograph Simulation Program—Fortran (HSPF) to simulate pre-project and post-project runoff, including the effect of proposed IMPs, detention basins, or other stormwater management facilities. To use this method, the project proponent shall compare the pre-project and post-project model output for a rainfall record of at least 30 years, and shall show the following criteria are met:
  - a. For flow rates from 20% of the pre-project 5-year runoff event (0.2Q5) to the pre-project 10-year runoff event (Q10), the post-project discharge rates and durations shall not deviate above the pre-project rates and durations by more than 10% over more than 10% of the length of the flow duration curve. *(Note that the 0.2Q5 end of the range may be modified).*
  - b. For flow rates from 0.2Q5 to Q5, the post-project peak flows shall not exceed pre-project peak flows. For flow rates from Q5 to Q10, post-project peak flows may exceed pre-project flows by up to 10% for a 1-year frequency interval. For example, post-project flows could exceed pre-project flows by up to 10% for the interval from Q9 to Q10 or from Q5.5 to Q6.5, but not from Q8 to Q10. *(Note that the 0.2Q5 end of the range may be modified).*
2. Implementation of Low Impact Development Integrated Management Practices (LID IMPs). The project proponent may implement LID IMPs to manage hydrograph modification impacts, using design procedures, criteria, and sizing factors (ratios of LID IMP volume or area to tributary area) specified by the Co-permittees. The Co-permittees' LID IMP designs and sizing factors shall be determined using continuous simulation of runoff from a long-term rainfall record.

The Order provides for exemptions from the IHC of development projects disturbing 50 acres or more when:

- “(a) The project would discharge into channels that are concrete-lined or significantly hardened (e.g., with rip-rap, sackcrete, etc.) downstream to their outfall in bays or the ocean;
- (b) The project would discharge into underground storm drains discharging directly to bays or the ocean; or
- (c) The project would discharge to a channel where the watershed areas below the project’s discharge points are highly impervious (e.g. >70%).”

In addition, we recommend adding another exemption criterion (currently not written in the permit) to provide some additional flexibility for applicants in complying with the Interim Hydromodification Criteria, as follows:

- (d) The applicant conducts an assessment incorporating sediment transport modeling across the range of geomorphically-significant flows that demonstrates to the permitting agencies satisfaction that the project flows and sediment reductions will not detrimentally affect the receiving water.



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# **APPENDIX D**

# **INVENTORIES**

**Table D-1 Approved Treatment Control BMP Inventory (3/24/2008)**

Facility Name	Address Number	Street Name	City	State	Zip Code	Hydrologic Area	Treatment Control BMP
Sun Harbor Marina	5104	North Harbor Drive	San Diego	CA	92106	908.10	FloGard+Plus™ storm drain filtration system
Red Sails Inn	2614	Shelter Island Drive	San Diego	CA	92106	908.10	Abtech® catch basin inserts
Continental Maritime	1995	Bay Front Street	San Diego	CA	92113	908.22	FloGaurd™ catch basin inserts
Cabrillo Isle Marina	1450	Harbor Island Drive	San Diego	CA	92101	908.21	Kristar Flo-Gard+Plus™ catch basin filter insert
							Porous pavement strips (4-5 feet wide)
Spiro's Gyros	1201	First Street	Coronado	CA	92118	910.10	Grass swales
Sheraton Harbor Island - Temporary Parking	1380	Harbor Island Drive	San Diego	CA	92101	908.21	Gravel lot for infiltration
							Potted trees
Island Prime Restaurant Harbor Island East	880	Harbor Island Drive	San Diego	CA	92101	908.21	Catch Basin/Curb Inlet Inserts
Hilton San Diego Convention Center Hotel and Park	One	Park Boulevard	San Diego	CA	92101	908.22	Biofilters
							Detention basin
							FloGard Trench Drainage inserts
							Oil-water separators
							Hydrodynamic separator system (CDS)
TAMT Railroad Pavement and Track Improvements	802	Terminal Street	San Diego	CA	92101	908.22	Hydrodynamic separator system (CDS)
							Drainage inserts
							Infiltration Strip
Harbor Drive Improvements at 8th Street	at 8th Street	Harbor Drive	San Diego	CA	91950	908.22	Re-vegetation of biofilters after construction
							Drainage inserts
Shelter Pointe Hotel and Marina	1551	Shelter Island Drive	San Diego	CA	92106	908.10	Fossil filter inserts
Coronado Cays Boat Storage Yard	30	Caribe Causeway	Coronado	CA	92118	910.10	Drainage inserts
							Infiltration System
M-Lane Extension Project	2798	Harbor Drive	San Diego	CA	92113	908.22	Oil-water separator
Pier 32, National City Marina	3201	Marina Way	National City	CA	91950	908.32	Baysaver water quality units
Convention Center Hotel Parking Facility San Diego	111	W. Harbor Drive	San Diego	CA	92101	908.22	Oil water separator
							Filter inserts
							Riprap for erosion control

**Table D-2 March 24, 2008 Construction Sites Inventory**

Facility Name	Address Number	Street Name	City	Hydrologic Area	Project size
Campbell Sediment Remediation and Aquatic Enhancements	N/A	Convention Center Way	San Diego	908.22	8.5
Hilton San Diego Convention Center Hotel and Park	One	Park Boulevard	San Diego	908.22	10.9 acres
Pier 32, National City Marina	3201	Marina Way	National City	908.32	3.5 acres
Marina Green (Point Loma Marina)	4960	N. Harbor Drive	San Diego	908.10	2.44 acres
Yacht Club Promenade	N/A	Strand Way	Coronado	910.10	5.44 acres
Driscoll Kettenburg Boatyard Renovations	2810	Carleton Street	San Diego	908.10	2.38 acres
Koehler Kraft	2302	Shelter Island Drive	San Diego	908.10	0.25 acres
Navy Pier	1355	N. Harbor Drive	San Diego	908.21	5.66 acres/0 acres soil disturbed soil
Parc del Sol - Cannery Workers Tribute	N/A	Crosby Street	San Diego	908.22	0.23 acres
Shelter Island Drive Pavement Repairs	N/A	Shelter Island Drive	San Diego	908.10	4 acres
Shelter Island Marina Dock Repair	2071	Shelter Island Drive	San Diego	908.10	0.459
Pepper Park Boat Launch Ramp	N/A	W. 32nd Street	National City	908.32	2.7 acres/0.37 acre disturbed soil
Goodrich - South Campus Demolition, Phase 3	555	Marina Parkway	Chula Vista	909.12	34 acres
Shelter Island HGI - Island Palm Hotel	2051	Shelter Island Drive	San Diego	908.10	1.5 acres
Yacht Harbor Hotel and Restaurant	5005	N. Harbor Drive	San Diego	908.10	0.5 acre

**Table D-1 Approved Treatment Control BMP Inventory (3/24/2008)**

Facility Name	Address Number	Street Name	City	State	Zip Code	Hydrologic Area	Treatment Control BMP
Marina Green (Point Loma Marina)	4960	N. Harbor Drive	San Diego	CA	92106	908.10	Hydrodynamic separator system (CDS)
							Porous Pavement
Goodrich - South Campus Demolition, Phase 3		H Street	Chula Vista	CA	91910	909.12	Biofiltration swales
Seaport Village Expansion	881	W. Harbor Drive	San Diego	CA	92101		Roof downspout filter
							Drainage inserts
Water Transportation Center	not yet assigned	Convention Center Way	San Diego	CA	92101	908.21	Biofilters
							Bioswales
							Hydrodynamic separator system (CDS)
Shelter Island Drive Pavement Repairs	N/A	Shelter Island Drive	San Diego	CA	92106	908.10	Drainage inserts
Driscoll Kettenburg Boatyard Renovations	2810	Carleton Street	San Diego	CA	92106	908.10	Fossil filter inserts
							oil/water separator
Shelter Island HGI - Island Palm Hotel	2051	Shelter Island Drive	San Diego	CA	92106	908.10	Hydrodynamic separator
Nielson Beaumont Marine	2420	Shelter Island Drive	San Diego	CA	92106	908.10	oil/water separator
							drainage inserts
Palm Avenue Street End Improvements	N/A	W. Palm Avenue	Imperial Beach	CA	91932	910.1	Storm water pump station

**Table D-3 2007-2008 Inventory of Municipal Facilities and Areas**

Facility Name	Address Number	Street Name	City	State	Zip Code	Hydrologic Area	Potential Pollutants								
							Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
Tenth Avenue Marine Terminal		Crosby Street	San Diego	CA	92101	908.22		X	X	X	X	X		X	X
National City Marine Terminal	1400	Bay Marina Drive	National City	CA	92123	908.32			X		X	X		X	X
Cruise Ship Terminal	1150	N. Harbor Drive	San Diego	CA	92101	908.21			X		X	X		X	X
Administration Building and Annex	3165	Pacific Highway	San Diego	CA	92101	908.21			X		X				X
Corporate Learning Center	2980	Pacific Highway	San Diego	CA	92101	908.21									X
Material Support and Management Center	1411	Palm Avenue	San Diego	CA	92101	908.21					X				X
General Services Work Control Center	1400	Tidelands Avenue	National City	CA	92123	908.32	X	X	X	X	X	X	X	X	X
Boat Mechanic and Dive Locker	1401	Shelter Island Drive	San Diego	CA	92106	908.1	X	X	X		X	X			X
Boat Demolition Yard	891	G Street	Chula Vista	CA	91910	909.12	X	X	X	X	X	X		X	X
Harbor Police Headquarters	3380	N. Harbor Drive	San Diego	CA	92101	908.21		X	X		X				X
Harbor Police Dispatch and Mooring Office	1401	Shelter Island Drive	San Diego	CA	92106	908.1									X
Harbor Police South Bay Sub-station	950	Marina Way	Chula Vista	CA	91910	909.12									X

**Table D-3 2007-2008 Inventory of Municipal Facilities and Areas**

Facility Name	Location	City	State	Zip Code	Hydrologic Area	Potential Pollutants								
						Potential pollutants that may be generated by the facility. A facility can be identified as having more								
						Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
Cancer Survivor's Park	North Harbor Drive	San Diego	CA	92101	908.21		X		X		X	X	X	X
Cesar Chavez Park	S. Harbor Drive and Cesar Chavez Parkway	San Diego	CA	92101	908.22	X	X	X	X		X	X	X	X
Chula Vista Bayfront Park	Marina Way	Chula Vista	CA	91910	909.12		X	X	X	X	X	X	X	X
Chula Vista Bayside Park	Bayside Parkway	Chula Vista	CA	91910	909.12	X	X	X	X		X	X	X	X
Coronado Grand Caribe Shoreline Park	Grand Caribe Causeway and Caribe Cay Boulevard	Coronado	CA	92118	910.1		X		X		X	X	X	X
Coronado Landing Park	Adjacent to Ferry Landing Marketplace	Coronado	CA	92118	910.1		X		X		X	X	X	X
Coronado Tidelands Park	Mullinix Drive and Glorietta Boulevard	Coronado	CA	92118	910.1		X		X		X	X	X	X
Embarcadero Marina Park, North	Kettner Boulevard	San Diego	CA	92101	908.21		X		X		X	X	X	X
Embarcadero Marina Park, South	Marina Park Way	San Diego	CA	92101	908.21	X	X	X	X		X	X	X	X
Glorietta Bay Park	Strand Way and Rendova Rd	Coronado	CA	92178	910.1		X	X	X	X	X	X	X	X
Harbor Island Park	Harbor Island Drive	San Diego	CA	92101	908.21		X		X		X	X	X	X
Imperial Beach Dunes Park	Seacoast Drive	Imperial Beach	CA	91932	910.1		X		X		X	X	X	X
Marina View Park	Marina Park Way	Chula Vista	CA	91910	909.12		X		X		X	X	X	X
Pepper Park	Tidelands Avenue	National City	CA	91950	908.32	X	X	X	X	X	X	X	X	X
Shelter Island Shoreline Park	Shelter Island Drive	San Diego	CA	92106	908.1	X	X	X	X	X	X	X	X	X
Spanish Landing Park	North Harbor Drive	San Diego	CA	92101	908.21		X		X		X	X	X	X
Tuna Harbor Park	Tuna Lane and G Street	San Diego	CA	92101	908.21		X		X		X	X	X	X

**Table D-3 2007-2008 Inventory of Municipal Facilities and Areas**

Facility Name	Location	City	State	Zip Code	Hydrologic Area	Potential Pollutants								
						Potential pollutants that may be generated by the facility. A facility can be identified as having more								
						Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
Imperial Beach Portwood Pier Plaza	Seacoast Drive and Evergreen	Imperial Beach	CA	91932	910.1	X	X	X	X		X	X	X	X
Shelter Island Parking	West end of Shelter Island - in front of HPD Mooring Office	San Diego	CA	92106	908.1	X	X	X		X			X	X
Shelter Island Parking	From fishing pier to east side of boat launch ramp	San Diego	CA	92106	908.1	X	X	X		X			X	X
Shelter Island Parking	North of boat launch ramp	San Diego	CA	92106	908.1	X	X	X		X			X	X
Shelter Island Parking	West of boat launch ramp/boat trailer parking	San Diego	CA	92106	908.1	X	X	X		X			X	X
Shelter Island Parking	East end of Shelter Island - in front of Bali Hai	San Diego	CA	92106	908.1	X	X	X		X			X	X
Shelter Island Parking	East end of Shelter Island - South of Kohler Kraft	San Diego	CA	92106	908.1	X	X	X		X			X	X
Shelter Island Parking	Across street from Red Sails Inn	San Diego	CA	92106	908.1	X	X	X		X			X	X
Shelter Island Parking	Across street and north of Red Sails Inn	San Diego	CA	92106	908.1	X	X	X		X			X	X
America's Cup Harbor Parking	In front of Pt. Loma Seafoods	San Diego	CA	92106	908.1	X	X	X		X			X	X
America's Cup Harbor Parking	North of Fisherman's Landing	San Diego	CA	92106	908.1	X	X	X		X			X	X
America's Cup Harbor Parking	North Harbor Drive - west of Holiday Inn	San Diego	CA	92106	908.1	X	X	X		X			X	X
America's Cup Harbor Parking	Near Driscoll's Wharf	San Diego	CA	92106	908.1	X	X	X		X			X	X
Spanish Landing Parking	West parking lot within the park	San Diego	CA	92101	908.1	X	X	X		X			X	X
Spanish Landing Parking	East Parking lot within the park	San Diego	CA	92101	908.21	X	X	X		X			X	X



**Table D-3 2007-2008 Inventory of Municipal Facilities and Areas**

Facility Name	Location	City	State	Zip Code	Hydrologic Area	Potential Pollutants								
						Potential pollutants that may be generated by the facility. A facility can be identified as having more								
						Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
Harbor Island Parking	Lot at Harbor Island Park	San Diego	CA	92101	908.21	X	X	X		X			X	X
Harbor Island Parking	Near Cancer Survivor's Park	San Diego	CA	92101	908.21	X	X	X		X			X	X
Harbor Island Parking	Surrounding HPD Headquarters	San Diego	CA	92101	908.21	X	X	X		X			X	X
Harbor Island Parking	HPD Auxiliary Parking Lot	San Diego	CA	92101	908.21	X	X	X		X			X	X
Port Administration	Visitor/carpool parking lot	San Diego	CA	92101	908.21	X	X	X		X			X	X
Port Administration	Employee parking lot	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	Harbor Drive parking lots	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	Harbor Drive - from Grape Street to CST	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	East side of Harbor Drive	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	CST longterm parking	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	Broadway and Harbor Drive	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	G Street Mole / Tuna Harbor Park	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	Coral Reef Room parking lot	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	South of Lane Field at Pacific Hwy	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	Seaport Village - south of Chesapeake Fish Co.	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	Embarcadero Park North	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	Embarcadero Park South	San Diego	CA	92101	908.21	X	X	X		X			X	X
Embarcadero Parking	Old Police Headquarters	San Diego	CA	92101	908.21	X	X	X		X			X	X
Barrio Logan	Cesar Chavez Park Parking Lot	San Diego	CA	92101	908.22	X	X	X		X			X	X

**Table D-3 2007-2008 Inventory of Municipal Facilities and Areas**

Facility Name	Location	City	State	Zip Code	Hydrologic Area	Potential Pollutants								
						Potential pollutants that may be generated by the facility. A facility can be identified as having more								
						Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash
South Bay Parking	General Services Facility Parking	National City	CA	91950	908.32	X	X	X		X			X	X
South Bay Parking	Pepper Park parking lot	National City	CA	91950	908.32	X	X	X		X			X	X
South Bay Parking	Bayside Park north parking lot	Chula Vista	CA	91910	909.12	X	X	X		X			X	X
South Bay Parking	Bayside Park south parking lot	Chula Vista	CA	91910	909.12	X	X	X		X			X	X
South Bay Parking	Bayfront Park (J Street Marina)	Chula Vista	CA	91910	909.12	X	X	X		X			X	X
South Bay Parking	Marina Way West	Chula Vista	CA	91910	909.12	X	X	X		X			X	X
South Bay Parking	Marina Way East	Chula Vista	CA	91910	909.12	X	X	X		X			X	X
Imperial Beach Parking	Imperial Beach Pier parking	Imperial Beach	CA	91932	910.1	X	X	X		X			X	X
Imperial Beach Parking	Imperial Beach Dunes Park	Imperial Beach	CA	91932	910.1	X	X	X		X			X	X
Coronado Parking	Tidelands Park parking lot	Coronado	CA	92118	910.1	X	X	X		X			X	X
Coronado Parking	Ferry Landing parking lot	Coronado	CA	92118	910.1	X	X	X		X			X	X

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed			
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash		
PT	Continental Maritime	1995		Bay Front Street	San Diego	CA	92113	908.22	3731	3	Conducts shipbuilding, maintenance, and repair of large vessels. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes		
PT	Dixieline Lumber	1400		West 28th Street	National City	CA	91950	908.32	2439	38	Facilities involved in the wholesale trade of building supplies such as lumber, stone, masonry materials, insulation, roofing materials, and other construction materials. Also includes retail trade for lumber. Does not include mobile construction contractors or hardware stores.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Driscoll Boat Works	2500		Shelter Island Drive	San Diego	CA	92106	908.1	3732	3	Conducts maintenance, repair, cleaning, and/or painting of private boats. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Driscoll's West	2500		Shelter Island Drive	San Diego	CA	92106	908.1	3732	3	Conducts maintenance, repair, cleaning, and/or painting of private boats. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Fabrication Technologies	1850		Tidelands Avenue	National City	CA	91950	909.12		0		Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Harvest Meat	1022		Bay Marina Drive	National City	CA	91950	909.12		0		Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Kelco	2025		E. Harbor Drive	San Diego	CA	92101	908.21	2099	10	Stationary facilities involved in the production, distribution, and/or sales of food. This includes restaurants, fast food, grocery stores, as well as food manufacturing and/or distribution facilities. This does <b>not</b> include mobile facilities (5963).	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Knight and Carver Yachtcenter, Inc.	1313		Bay Marina Drive	National City	CA	91930	908.32	3732	3	Conducts maintenance, repair, cleaning, and/or painting of private boats. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Koehler Kraft Company, Inc.	2302		Shelter Island Drive	San Diego	CA	92106	908.1	3732	3	Conducts maintenance, repair, cleaning, and/or painting of private boats. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	National Steel and Shipbuilding Company	2798		Harbor Drive	San Diego	CA	92113	908.22	3731	3	Conducts shipbuilding, maintenance, and repair of large vessels. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Nielsen Beaumont Marine, Inc.	2420		Shelter Island Drive	San Diego	CA	92106	908.1	3732	3	Conducts maintenance, repair, cleaning, and/or painting of private boats. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Ortiz and Allds Sandblasting and Painting	1313		Bay Marina Drive	National City	CA	91930	908.32	3471	27	Conducts maintenance, repair, cleaning, and/or painting of private boats. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Pepper Oil	2300		Tidelands Avenue	National City	CA	91950	909.12	5172	8	Establishment primarily engaged in the wholesale distribution of petroleum and petroleum products.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	San Diego Cold Storage	1240		West 28th Street	National City	CA	91950	908.32		0		Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Shelter Island Boatyard	2330		Shelter Island Drive	San Diego	CA	92106	908.1	3732	3	Conducts maintenance, repair, cleaning, and/or painting of private boats. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Solar Turbines	2200		Pacific Highway	San Diego	CA	92101	908.21	3511	27	Establishments primarily engaged in the manufacture of fabricated metal and other products.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Marine Group Boatworks	997		G Street	Chula Vista	CA	91910	909.12	3732	3	Conducts maintenance, repair, cleaning, and/or painting of private boats. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	South Bay Power Plant	990		Bay Boulevard	Chula Vista	CA	91911	910.2	4911	36	Facilities involved in the generation and of gas and electric power. Does not include petroleum pipelines (461X)	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	BAE Systems	2205		Belt Street	San Diego	CA	92113	908.22	3731	3	Conducts shipbuilding, maintenance, and repair of large vessels. Includes overhauling and dry docking facilities.	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Weyerhaeuser	2801		Tidelands Avenue	National City	CA	91950	909.12	2439	38	Facilities involved in the wholesale trade of building supplies such as lumber, stone, masonry materials, insulation, roofing materials, and other construction materials. Also includes retail trade for lumber. Does not include mobile construction contractors or hardware stores.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	A Few of My Favorite Things	859	B	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed	
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash
PT	A J's American Grille	1551		Shelter Island Drive	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Alamo Flags	851		West Harbor Drive	San Diego	CA	92101	908.21	5999	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No
PT	Alfiere Restaurant	1590		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	American Nostalgia	823	A	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No
PT	American Seafood Co. Inc.	4904		North Harbor Drive	San Diego	CA	92101	908.1	5421	10	Performs storage, processing, packaging, and shipping of fresh seafood.	No	No	No	No	Yes	No	No	No	Yes	No	Yes	No
PT	Anthony's Fish Grotto and Star of the Sea Room	1360		North Harbor Drive	San Diego	CA	92110	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Aquamarine Seafood Brokerage	565	B	Harbor Lane	San Diego	CA	92101	908.21	5421	10	Performs storage, processing, packaging, and shipping of fresh seafood.	No	No	No	No	Yes	No	No	No	Yes	No	Yes	No
PT	Art for Wildlife Galleries	1201	101	First Street	Coronado	CA	92118	910.1	5999	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No
PT	Assagio Pizza Pasta Plus	879		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Avis Rental Car	3180		North Harbor Drive	San Diego	CA	92101	908.21	7514	7	Temporary storage and/or parking of vehicles or equipment. May include temporary storage containers.	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
PT	Azzura Point	4000		Coronado Bay Road	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Baker Marine Instruments and Repair	2425		Shelter Island Drive	San Diego	CA	92106	908.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No
PT	Bali Hai Restaurant	2230		Shelter Island Drive	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PT	Bay Beach Cafe	1201	114	First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PT	Bay Cafe (Harbor Excursion Snack)	1050		North Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Bay Club Bar and Grill	2131		Shelter Island Drive	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Bay Club Hotel	2131		Shelter Island Drive	San Diego	CA	92106	908.1	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	No	No
PT	Bay Club Marina	2131		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Baywatch Cruise	1551		Shelter Island Drive	San Diego	CA	92106	908.1	4489	16	Provides water-based excursions and/or transportation primarily aimed at providing entertainment to visitors.	No	No	No	No	Yes	No	No	No	Yes	No	Yes	No
PT	Ben and Jerry's	859		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Best Western Island Palms Hotel	2051		Shelter Island Drive	San Diego	CA	92106	908.1	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	No	No
PT	Best Western Posada At The Yacht Harbor	5005		North Harbor Drive	San Diego	CA	92106	908.1	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	No	No
PT	Big Dogs	849	A	West Harbor Drive	San Diego	CA	92101	908.21	5651	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed			
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash		
PT	Bike San Diego	641		17th Street	San Diego	CA	92101	908.21	7999	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No		
PT	Bikeman Limo Bikes	704		West Market Street	San Diego	CA	92101	908.21	7999	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No		
PT	Bikes and Beyond	1201	122	First Street	Coronado	CA	92118	910.1	7999	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No		
PT	Blue Wave Bar and Grill	2051		Shelter Island Drive	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Bob Stivers Shell #2	2521		Pacific Highway	San Diego	CA	92101	908.21	5541	8	Provides retail or wholesale fueling services and may provide auto maintenance services	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	
PT	Budget Rent A Car	2535		Pacific Highway	San Diego	CA	92101	908.21	7514	7	Temporary storage and/or parking of vehicles or equipment. May include temporary storage containers.	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Burger King	1201	201	First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Buster's Beach House	807		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Cabrillo Isle Marina	1450		Harbor Island Drive	San Diego	CA	92101	908.21	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Cabrillo Yacht Sales	5104		North Harbor Drive	San Diego	CA	92101	908.1	5551	0	Indoor sales offices and/or showrooms for boats and automobiles.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	California Yacht Marina	640		Marina Parkway	Chula Vista	CA	91910	909.12	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	California Yogurt Company	1201		First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Captain Coronado's Trading Company	1201	222	First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Captain Hunt Tobacconist	851		D West Harbor Drive	San Diego	CA	92101	908.21	5993	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Captain's Cove	851		C West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Carousel Music Box	853		A West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Cays Lounge	4000		Coronado Bay Road	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Cays Yacht Sales	2540		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Chesapeake Fish Company	535		Harbor Lane	San Diego	CA	92101	908.21	5421	10	Performs storage, processing, packaging, and shipping of fresh seafood.	No	No	No	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	
PT	Chula Vista Bait and Tackle	469		Bayside Parkway	Chula Vista	CA	91910	909.12	5941	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Chula Vista Marina (and Yacht Club)	550		Marina Parkway	Chula Vista	CA	91910	909.12	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Chula Vista Marina/RV Park, Ltd.	550		Marina Parkway	Chula Vista	CA	91910	909.12	7033	7	Provides parking spots, hook-ups for Recreational Vehicles.	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
PT	Cinderella Carriage Company	801		West Harbor Drive	San Diego	CA	92101	908.21	7999	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Cloud 9 Shuttle	3520		Kurtz Street	San Diego	CA	92110	908.21	4119	7	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Cold Stone Creamery	1201	222	First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed			
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash		
PT	Colman Marine Diesel	2390		Shelter Island Drive	San Diego	CA	92106	908.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No		
PT	Company of Nuts and Candy	809	E	West Harbor Drive	San Diego	CA	92101	908.21	2064	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	
PT	Consummate Catering	1631		Strand Way	Coronado	CA	92118	910.1	5812	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Coordinated Maritime Services	1551		Shelter Island Drive	San Diego	CA	92106	908.1	5551	0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Coronado Cays Yacht Club	30		Caribe Cay Boulevard North	Coronado	CA	92118	910.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Coronado Ferry Company	1201	K6	First Street	Coronado	CA	92118	910.1		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Coronado Ferry Landing	1201		First Street	Coronado	CA	92118	910.1	4489	16	Provides water-based excursions and/or transportation primarily aimed at providing entertainment to visitors.	No	No	No	No	Yes	No	No	No	Yes	No	No	No	No	
PT	Coronado Holidays	1201		First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Coronado Island Marriott Resort	2000		Second Street	Coronado	CA	92118	910.1	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	No	No	No	
PT	Coronado Pedicab Company	1312		Second Street	Coronado	CA	92118	910.1	7999	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Coronado Yacht Club	1631		Strand Way	Coronado	CA	92118	910.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Courtyard Gallery	1201		First Street	Coronado	CA	92118	910.1	5999	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Cow-A-Bunga Micro Ice Creamery	10	E	Evergreen Avenue	Imperial Beach	CA	91932	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	
PT	Crazy Shirts	817	A	West Harbor Drive	San Diego	CA	92101	908.21	5651	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Creative Time	867	A	West Harbor Drive	San Diego	CA	92101	908.21	5999	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Crown City Kids	1201	217	First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Crow's Nest Yacht Sales and Ship Brokerage	2515		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	
PT	Crystal Pacific	1201		First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Crystal Palace	809	G	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Custom Marine Electronics	2525		Shelter Island Drive	San Diego	CA	92106	908.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	D.W.'s Pub	333		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PT	Del Sol	803	E	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Deli by the Bay	1201	K5	First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Destination	857		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Discover Nature	869		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Dockside Deli	1880		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed	
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash
PT	Downwind Marine	2804		Canon Street	San Diego	CA	92106	908.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No
PT	Driscoll's Wharf	4904		North Harbor Drive	San Diego	CA	92101	908.1	4493	16	Provides dock slips for sportfishing vessels, both public and private. May also provide restrooms, trash containers, fish cleaning areas, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Edgewater Grill	861		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Eichenlaub Marine	2608		Shelter Island Drive	San Diego	CA	92106	908.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No
PT	Elegant Illusions, Inc.	839		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No
PT	Fish Market Restaurant and Top of the Market	750		North Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Fisherman's Landing	2838		Garrison Street	San Diego	CA	92106	908.1	4493	16	Provides dock slips for sportfishing vessels, both public and private. May also provide restrooms, trash containers, fish cleaning areas, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Fraser Yachts	2353		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	No	No	No	No	No	No	No	No	No	No	No	No
PT	Galley at H and M Landing	2803		Emerson Street	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Galley at the Marina	550		Marina Parkway	Chula Vista	CA	91910	909.12	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Galley Deli	1450		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Glorietta Bay Marina	1715		Strand Way	Coronado	CA	92118	910.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Gold Coast Anchoring Marina	2353		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Greek Islands Cafe	879		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	H and M Sportfishing Landing	2803		Emerson Street	San Diego	CA	92106	908.1	4493	16	Provides dock slips for sportfishing vessels, both public and private. May also provide restrooms, trash containers, fish cleaning areas, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Haberdashery	817	21	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No
PT	Half Moon Anchorage	2303		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Harbor House	831		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Harbor Island Deli and Liquor	2040		Harbor Island Drive	San Diego	CA	92101	908.21	5921	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Harbor Island Fuel Dock	2040		Harbor Island Drive	San Diego	CA	92101	908.21	5541	8	Provides retail or wholesale fueling services and may provide auto maintenance services	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes
PT	Harbor Island West Marina	2040		Harbor Island Drive	San Diego	CA	92101	908.21	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed		
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash	
PT	Harbors Edge Restaurant	1380		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Hazelwoods on The Bay	1355		North Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Hertz Rental Car	3202		North Harbor Drive	San Diego	CA	92101	908.21	7514	7	Temporary storage and/or parking of vehicles or equipment. May include temporary storage containers.	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
PT	High Seas Fuel Dock	2540		Shelter Island Drive	San Diego	CA	92106	908.1	5541	8	Provides retail or wholesale fueling services and may provide auto maintenance services	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
PT	Holiday Inn on the Bay	1355		North Harbor Drive	San Diego	CA	92101	908.21	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No
PT	Holiday Inn San Diego Bayside	4875		North Harbor Drive	San Diego	CA	92106	908.1	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No
PT	Horizon Marine Inc	1880		Harbor Island Drive	San Diego	CA	92101	908.21	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Hornblower Cruises and Events	1066		North Harbor Drive	San Diego	CA	92101	908.21	4489	16	Provides water-based excursions and/or transportation primarily aimed at providing entertainment to visitors.	No	No	No	No	Yes	No	No	No	Yes	No	Yes	Yes	No
PT	Hot Licks	865		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Hudson Bay Seafood Restaurant	1403		Scott Street	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Humphrey's	2303		Shelter Island Drive	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Humphrey's Half Moon Inn and Suites	2303		Shelter Island Drive	San Diego	CA	92106	908.1	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No
PT	Il Fornaio	1333		First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Island Hoppers	803		West Harbor Drive	San Diego	CA	92101	908.21	5651	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Island Prime	880		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Island Shores Realty	1201	212	First Street	Coronado	CA	92118	910.1		0	Indoor sales offices for the sales of homes.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Joe's Crab Shack	525		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Jolly Lolly	851		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Kaffeen's	1201		First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Kite Flight	839		West Harbor Drive	San Diego	CA	92101	908.21	5945	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	La Camisa	1201	109	First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	La Cantina Bar and Grill	4000		Coronado Bay Road	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	La Provence Bistro and Bar	2000		Second Avenue	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No



Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed			
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash		
PT	Lael's	1		Market Place	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	
PT	Latitudes	825	B	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Le Cadeau	837		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Lee Palm Sportfishing	2801		Emerson Street	San Diego	CA	92106	908.1		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	L'Escala Restaurant	2000		Second Avenue	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Life Is Charming	849		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Loews Coronado Bay Resort	4000		Coronado Bay Road	Coronado	CA	92118	910.1	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No	
PT	Loews Coronado Bay Resort Marina	4000		Coronado Bay Road	Coronado	CA	92118	910.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	MacDonald Yacht Brokerage	1450		Harbor Island Drive	San Diego	CA	92104	908.21	5551	0	Indoor sales offices and/or showrooms for boats and automobiles.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Magnet Max	817	C	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Manchester Grand Hyatt	1		Market Place	San Diego	CA	92101	908.21	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No	
PT	Margaritas Kitchen and Cantina	879	A	West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PT	Marina Cortez, Inc.	1880		Harbor Island Drive	San Diego	CA	92101	908.21	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Marina Kona Kai (and Yacht Club)	1551		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Marion's Fish Market	879		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PT	Maritime Museum Assoc. of SD	1492		North Harbor Drive	San Diego	CA	92101	908.21	8412	0	Provides tourist attractions of various historic artifacts, vehicles, and equipment.	Yes	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	
PT	Market Cafe	4000		Coronado Bay Road	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Marlin Club (Fish Weighing)	2445		Shelter Island Drive	San Diego	CA	92106	908.1		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Mascot Boutique	1201	103	First Street	Coronado	CA	92118	910.1	5651	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Men's Island Sportswear	1201	218	First Street	Coronado	CA	92118	910.1	5611	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Mistletoe	837	D	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Molly's	333		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PT	Mystic Mermaid	839		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	National Rental Car	3280		North Harbor Drive	San Diego	CA	92101	908.21	7514	7	Temporary storage and/or parking of vehicles or equipment. May include temporary storage containers.	No	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Navy Federal Credit Union	1201	123	First Street	Coronado	CA	92118	910.1	6061	0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed		
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash	
PT	North Sails San Diego	1111		Anchorage Lane	San Diego	CA	92106	908.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Orion Charters, Inc.	3842		Liggett Drive	San Diego	CA	92106	908.1		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Outboard Boating Club	2210		Shelter Island Drive	San Diego	CA	92106	908.1		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Papanani's	1450		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Pearson Marine Fuels Inc	2435		Shelter Island Drive	San Diego	CA	92106	908.1	5541	8	Provides retail or wholesale fueling services and may provide auto maintenance services	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
PT	Peohe's Restaurant	1201		First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Pewter by Ricker	839		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Pizza Nova	5120		North Harbor Drive	San Diego	CA	92101	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Planet Advertising Group	839		West Harbor Drive	San Diego	CA	92101	908.21		0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Point Loma Cafe and Bayside Bar	4865		North Harbor Drive	San Diego	CA	92101	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Point Loma Seafoods	2805		Emerson Street	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
PT	Point Loma Sportfishing Association	1403		Scott Street	San Diego	CA	92106	908.1	4493	16	Provides dock slips for sportfishing vessels, both public and private. May also provide restrooms, trash containers, fish cleaning areas, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Poquitos	825		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Red Sails Inn	2614		Shelter Island Drive	San Diego	CA	92106	908.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Regali Gourmet and Gifts	1201	105	First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Rubber Ducky Bath Company	1201	108	First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Ruth's Chris Steak House	1355		North Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	Safari Animal Collection	865		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Sail, U.S.A.			P.O. Box 6431	San Diego	CA	92166			0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Sally Huss Gallery	837		West Harbor Drive	San Diego	CA	92101	908.21	5999	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Sally's Restaurant (Hyatt Regency San Diego)	1		Market Place	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
PT	San Diego Aircraft Carrier Museum	1355		North Harbor Drive	San Diego	CA	92101	908.21	8412	0	Provides tourist attractions of various historic artifacts, vehicles, and equipment.	Yes	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No
PT	San Diego Airport Hilton	1960		Harbor Island Drive	San Diego	CA	92101	908.21	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed			
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash		
PT	San Diego Burger Company	879	G	West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	
PT	San Diego City Store	803		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	San Diego Harbor Excursion	1050		North Harbor Drive	San Diego	CA	92101	908.21	4489	16	Provides water-based excursions and/or transportation primarily aimed at providing entertainment to visitors.	No	No	No	No	Yes	No	No	No	Yes	No	No	No	No	
PT	San Diego Harley Davidson	861	B	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	San Diego Marine Exchange, Inc.	2636		Shelter Island Drive	San Diego	CA	92106	908.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	San Diego Marriott Hotel	333		West Harbor Drive	San Diego	CA	92101	908.21	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	No	
PT	San Diego Marriott Marina	333		West Harbor Drive	San Diego	CA	92101	908.21	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	San Diego Pier Cafe	885		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	San Diego Port Tenants Association	2390	210	Shelter Island Drive	San Diego	CA	92106	908.1		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	San Diego Sportfishing Association	2171	E	India Street	San Diego	CA	92101	908.21		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	San Diego Water Taxi	891		West Harbor Drive	San Diego	CA	92101	908.21	4489	16	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	Yes	No	
PT	San Diego Yacht Club	1011		Anchorage Lane	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
PT	Scandinavian Specialties	817	E	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Scottish Treasures	1201	213	First Street	San Diego	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	SD Charter Boat Company	1551		Shelter Island Drive	San Diego	CA	92106	908.1		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Seaforth Downtown Boat Rental	333		West Harbor Drive	San Diego	CA	92101	908.21	7999	16	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	Yes	No	
PT	Seaport Coffee and Fudge Factory	859		West Harbor Drive	San Diego	CA	92101	908.21	2064	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Seaport Cookie Company	813	C	West Harbor Drive	San Diego	CA	92101	908.21	2052	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Seaport Grill	879	B	West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PT	Seaport Village	849		West Harbor Drive	San Diego	CA	92101	908.21		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Seaport Village Deli	881		West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Seaport Village Popcorn Company	839	F	West Harbor Drive	San Diego	CA	92101	908.21	2096	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Seaport Village Shell Shop	817		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Shelter Cove Marina	2240		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

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Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed				
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash			
PT	Shelter Island Marina	2071		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
PT	Shelter Island Yachtways	2330		Shelter Island Drive	San Diego	CA	92106	908.1	5551	0	Indoor sales offices and/or showrooms for boats and automobiles.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
PT	Shelter Pointe Hotel	1551		Shelter Island Drive	San Diego	CA	92106	908.1	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No	
PT	Sheraton San Diego Hotel	1380		Harbor Island Drive	San Diego	CA	92101	908.21	7011	0	Provides temporary lodging of visitors. May also include parking, restrooms, and laundry facilities.	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No	
PT	Sheraton San Diego Marina	1380		Harbor Island Drive	San Diego	CA	92101	908.21	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Sierra Pacific Restaurant	1960		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Silver Crossing	823	B	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Silver Gate Yacht Club	2091		Shelter Island Drive	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
PT	So Cal Truck Stop	2250		Tidelands Avenue	National City	CA	91950	909.12	5541	8	Provides retail or wholesale fueling services and may provide auto maintenance services	No	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes	Yes
PT	Soap Opera	817		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	South Bay Fish & Grill	570		Marina Parkway	Chula Vista	CA	91910	909.12	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Southpaw Shop	1378		Temple Heights Drive	Oceanside	CA	92056	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Southwestern Indian Den	1201	104	First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Southwestern Yacht Club	2702		Qualtrough Street	San Diego	CA	92106	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Spectacular Shades	809	F	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Spiro's Gyros	1201	K4	First Street	Coronado	CA	92118	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Sports Headquarters	805	A	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Stamp Diego	803		West Harbor Drive	San Diego	CA	92101	908.21	5999	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Stephen Clayton Galleries	1201	111	First Street	Coronado	CA	92118	910.1	5999	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Sun Harbor Marina	5104		North Harbor Drive	San Diego	CA	92101	908.1	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Sunroad Marina	955		Harbor Island Drive	San Diego	CA	92101	908.21	4493	16	Provides dock slips for boaters. May also provide restrooms, trash containers, and storage for employees and tenants.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Sunset Deli and Bakery by the Bay	200		Marina Parkway	San Diego	CA	92101	909.12	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	Swings 'N Things	859		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	The Apple Box	837		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	The Boathouse	2040		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
PT	The Elephant and Castle	1355		North Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No

Table D-4 Inventory of Industrial and Commercial Facilities

Agency	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip Code	Hydrologic Area	SIC Code	BLTEA Category Number	Principal Products / Services	Potential Pollutants								Tributary to 303(d) Listed	Threat to water quality	Threat Confirmed		
												Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment				Trash	
PT	The French Room Footwear and Clothing	1201	106	First Street	Coronado	CA	92118	910.1	5651	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	The Lavender Gift Shop	1201	107	First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	The Magic Shop	849		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	The Marine Group	1311		First Street	Coronado	CA	92118	910.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	The Mugger	863		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	The Tile Shop	849		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	The Tin Fish Restaurant	910		Seacoast Drive	Imperial Beach	CA	91932	910.1	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	The Toy Cottage	809	C	West Harbor Drive	San Diego	CA	92101	908.21	5945	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Tom Ham's Lighthouse	2150		Harbor Island Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Top it Off	809	B	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Top of the Hyatt	1		Market Place	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Trails West Silver and Leather	821		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Travelworld of Coronado	1201		First Street	Coronado	CA	92118	910.1		0	Indoor office space for various non-manufacturing activities. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Upstart Crow and Company	835	C	West Harbor Drive	San Diego	CA	92101	908.21		0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Victorian Scales	835	C	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Village Cafe	809	A	West Harbor Drive	San Diego	CA	92101	908.21	5812	10	Provides food services for the general public. Typically includes seating area, restrooms, product storage, and indoor cleaning areas. Also may include fryer(s) in kitchen.	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	Village Hat Shop	835		West Harbor Drive	San Diego	CA	92101	908.21	5699	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Westwind Chimes	1201		First Street	Coronado	CA	92118	910.1	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Whiskers the Ultimate Cat Shop	863	A	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Whitt/Krauss	839	2	West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Windsong	867		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Worldview Gifts	867		West Harbor Drive	San Diego	CA	92101	908.21	5947	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Wyland Galleries	855		West Harbor Drive	San Diego	CA	92101	908.21	5999	0	Indoor sales of specialty products. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Yacht Docktor	2390	109	Shelter Island Drive	San Diego	CA	92106	908.1	5551	0	Provides indoor offices for the sales and/or distribution of maritime equipment. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	General Petroleum Corporation	1290	Suite 105	N. Johnson Drive	El Cajon	CA	92020	908.21	5172	8	Establishment primarily engaged in the wholesale distribution of petroleum and petroleum products.	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PT	San Diego Pedicab	620		C Street	San Diego	CA	92101	908.21	7999	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Sunset Pedicab	509		5th Avenue	San Diego	CA	92101	908.21	7999	0	Specialty services primarily involved in non-motorized transportation of tourists. Little to no potential for pollutant generating activities.	No	No	No	No	No	No	No	No	No	No	No	No	No
PT	Old Town Trolley and Seal Tours	2115		Kurtz Street	San Diego	CA	92110	908.21	4489	16	Provides water-based excursions and/or transportation primarily aimed at providing entertainment to visitors.	No	No	No	No	Yes	No	No	No	Yes	No	No	No	No

# **APPENDIX E**

## **DRY WEATHER MONITORING PROGRAM**

## 1.0 Introduction

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9-2007-0001 Section II.B.3., the Port of San Diego (Port) has developed a dry weather analytical and field screening monitoring program as part of its JURMP. The program objective is to detect and eliminate illicit connections and illegal discharges to the municipal separate storm sewer system (MS4) during the dry season by conducting field observations, field screening monitoring, and laboratory analytical monitoring at selected stations within the Port. The dry weather monitoring results will provide the Port with a characterization of its urban runoff flow and may identify patterns or areas where pollutant problems are concentrated.

## 2.0 Municipal Separate Storm Sewer System (MS4) Maps

The Port has completed a set of maps of the MS4 infrastructure located on Port Tidelands (Appendix F). These maps show both Port owned and combined (Port shared with neighboring jurisdiction) storm drains, MS4 dry weather monitoring station locations, and alternate monitoring locations.

## 3.0 Dry Weather Monitoring Station Locations

### 3.1 *Selection Criteria*

All Port outfalls drain into the San Diego Bay. Due to the low land elevation and little to no relief, a large majority of inlets are tidally influenced and have tidal presence during high, and even medium or ebbing tides. In addition, many neighboring jurisdictions have easements for portions of their MS4 that cross Port tidelands and drain directly into the bay without receiving any influences from tidelands property. Additionally, many of the Port's storm drain lines are connected with neighboring storm drains, thus their outputs into the bay represent combined discharges (or discharges wholly representative of the neighboring jurisdiction) from the upstream jurisdiction.

The Port's DWM program is designed to identify the portions of the MS4 that have flow (runoff) contribution primarily from Port property. Because some outfalls that discharge directly into the bay have little to no Port contribution (no inlets or catch basins on Port property), the Port is

unable to conduct source investigations and has little to no enforcement ability on the runoff from these outfalls. In these cases, the Port will report concerns to the neighboring jurisdiction from which the runoff is emanating. However, the focus of the dry weather monitoring program will remain on portions of the MS4 into which the Port contributes runoff.

Given these unique circumstances, the Port has designed its sampling plan to conduct dry weather monitoring only during low tides and has selected sites in which a large percentage of the possible runoff contribution will come from Port (or Port tenant) activities.

### **3.2 Dry Weather Monitoring Locations**

After a thorough analysis MS4 locations, drainage basins, and surrounding land uses the Port has selected ten dry weather sampling sites and four alternate sites. Using guidelines written in the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9-2007-0001 (II.B.3.a.), the Port believes these sites best represent a variety of land uses and maximizes coverage of drainage areas. Every attempt has been made to select sites located, to the degree practicable, at the farthest downstream outfall or manhole within each drainage area. Other factors considered in the site selection include accessibility, bay mixing rates, critical habitat, hydrological variables, traffic density, safety, and historically identified problem areas.

1. Point Loma/ Anchorage Lane (Figure F-3): This location drains runoff from residential uses (City of San Diego residents), commercial uses (parking lots and restaurants), light industry, and traffic areas. The outfall drains into Shelter Island Yacht Basin near the B-Dock of San Diego Yacht Club. The outfall is not easily and safely accessible for sampling. Samples may be collected at the street inlet on Anchorage Lane in front of North Sails Inc. or in an inlet in the parking lot on the corner of Anchorage Lane.

2. Shelter Island/Boat Launch (Figure F-3): This location drains runoff associated with light industry, the traffic and parking areas, and commercial uses.. This site represents the outfall point of the conveyance system with 5 inlets. Samples may be collected at the outfall during low tides or at the traffic circle main inlet.

3. America's Cup Harbor/ACE Parking Lot (Figure F-3): This drains runoff from commercial activity (hotels) and parking areas. The outfall is located at Sun Harbor Marina. Samples are collected from an inlet location in an ACE parking lot along North Harbor Dr. next to the Best Western Posada at the Yacht Harbor hotel across from Sun Harbor Marina.

4. Laurel Street outlet (Figure F-5): This site primarily drains runoff from industrial areas, parking lots, and heavily used traffic areas (Pacific Highway, Harbor Drive, and Laurel Street). Two outfalls drain into the Laurel Street Anchorage. The sampling locations are associated with the larger of the two pipes (that is, the 54" pipe) and may be collected at this outfall or in the Harbor Drive parking area, or in the Solar Turbines parking lot across Harbor Drive.



5. Navy Pier (Figure F-5): This site drains recreational and traffic areas along the north side of Tuna Harbor Park as well as the adjacent parking lot and roadway along Harbor Drive.

6. Seaport Village/ Tuna Boat Pier (Figure F-6): This site drains runoff from Port property along the downtown San Diego Shoreline. The land uses include commercial, light industrial, and the vehicle traffic along Harbor Drive and Pacific Highway. The outfall drains into San Diego Bay on the south side of the Tuna Boat Pier. Samples may be collected at the outfall or at the Harbor Drive inlet between Pacific Highway and Kettner Blvd.

7. Pepper Park (Figure F-7): This site drains runoff from a variety of Port land uses within the National City drainage basin. The land uses include recreational use at Pepper Park, parking lot traffic, commercial use along 32nd Street, Quay Avenue, Tidelands Avenue, and industrial use from a portion of National City Marine Terminal. The outfall drains into the Sweetwater Channel, west of the boat launch ramp. The site is located across the channel from the Sweetwater Marsh National Wildlife Refuge. Samples may be collected from the outfall or from an inlet near the playground in Pepper Park.

8. Bayside Park (Figure F-8): This site primarily drains industrial land use areas with a smaller contribution from traffic and parking areas on G Street in Chula Vista. The outfall drains from the north side of Bayside Park onto a public beach. This location is in the back reach of the Bay where the receiving water has 50% flushing time of about two weeks. This site is also located between two ecological preserves, Sweetwater Marsh National Wildlife Refuge to the north and South Bay National Wildlife Refuge to the south. This site is also a location in the coastal monitoring program and is monitored year round for bacteria. Samples may be collected at the inlet on the end of G Street or at the Bayside Park outfall.

9. Tidelands Park (Figure F-6): This site is representative of park and recreational land use areas. Runoff is primarily from park irrigation. Additionally, the site drains runoff from the parking lot. The outfall is approximately 150 feet from a recreational beach. The site is the third outfall north of the beach.

10. Ferry Landing (Figure F-6): This site drains runoff from a large commercial retail complex. This section of the MS4 also drains First Street (City of Coronado) and the Ferry Landing parking lot. Runoff discharges near a small beach located approximately 50 feet from the outfall. Samples may be collected from this outfall during low tides.

### **3.3 *Alternate Sampling Locations***

1. Shelter Island (Figure F-3): This site is located west of Site 2, within the Shelter Island/Boat Launch parking lot. The outfall drains land uses associated with landscaping, commercial, traffic, and parking areas. This site is also sampled in accordance with the coastal monitoring program. Samples may be collected at the outfall during low tides.

2. Harbor Island (Figure F-4): This site drains runoff from land uses associated with commercial, recreation, parking, and traffic uses. The site is located on Harbor Island across from the Hilton San Diego Airport/Harbor Island hotel. Samples may be collected from the outfall located in the rip-rap at low tides.

3. Spanish Landing Area (Figure F-4): This site drains runoff from industrial land use areas (San Diego International Airport West Terminal and parking lots), recreational land use areas and parking lots, and traffic areas along Harbor Drive. The outfall drains into Harbor Island West Basin. Samples may be collected at the outfall or in the Spanish Landing parking lot inlet.

4. Tidelands Park (Figure F-6): This site drains runoff associated with park and recreational uses and a parking lot. The outfall is approximately 80 feet from a recreational beach and is also a location in the coastal monitoring program. The site is the second outfall north of beach. Samples may be collected at the outfall during low tides.

## 4.0 Sampling Frequencies

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9-2007-0001 (II.B.3.), the Port will conduct dry weather monitoring at each site identified above during the period May 1 – September 30. Each of the sites will be visited three times during the period between May 1 – September 30. Alternate sites within the same drainage area will be visited if the primary sites do not have flow during the inspection. All site visits will include: field observations of all locations and alternates, if necessary; field screening analysis at all locations where water is present (ponded or flowing); and laboratory analysis at a minimum of 25% of the sites where water is present. Dry weather monitoring will not be performed during a rain event or within 72 hours after the end of a rain event.

## 5.0 Field Screening and Laboratory Analytical Sampling

### 5.1 Procedures

Field screening and laboratory analytical sampling will be conducted in accordance with the sampling protocols outlined in the Port's Field Sampling Manual (Appendix G). See the Dry Weather Monitoring Section in the Field Sampling Manual for details on sample collection, equipment preparation and maintenance, QA/QC, COC forms, and guidance for completing the field data forms. All field personnel will have a copy of this sampling manual for reference during field operations.

## 5.2 **Field Screening**

Field screening will consist of a series of qualitative field observations, flow measurement, and field analyses of selected water quality parameters. Information regarding weather conditions, the amount of time since last rainfall/storm discharge, and type of stormwater conveyance will be recorded. The site location, specific observations, and results of the field water quality analyses will be recorded on a standard field data form (Figure E-1) regardless of whether water samples were collected. The field data form will also be used to record the results of the laboratory analytical monitoring and will be submitted to the SDRWQCB as part of the required annual dry weather monitoring reporting. The field screening process will involve the following:

### 1. Qualitative Observations

Qualitative field observations will be made during each site visit whether or not water is present at the site. These observations are intended to provide a general assessment of the site. The following observations will be recorded:

- a) Weather conditions
- b) Time since the last rain event
- c) Quantity of rain
- d) Conveyance type
- e) Surrounding land uses
- f) Tidal stage

If flow or ponded runoff is observed at the site, the following observations will be recorded in addition to those mentioned above:

- a) Flow estimation
- b) Runoff characteristics, including
  - 1) Odor
  - 2) Color
  - 3) Clarity
  - 4) Floatables
  - 5) Deposits
  - 6) Vegetation
  - 7) Biology

Photographs of each location will also be used to provide additional information and documentation of site conditions.

### 2. Field Water Quality Analyses

Dry weather field screening samples will be measured with a suitable combination of field meters, test strips, colorimetric, and spectrophotometric test methods. At each site with ponded or flowing water, grab samples will be collected and field analyzed for the following constituents:

- a) Specific conductance (including Total Dissolved Solids (TDS))
- b) Turbidity
- c) pH
- d) Reactive Phosphorous (Ortho-P)
- e) Nitrate Nitrogen
- f) Ammonia Nitrogen
- g) Surfactants (MBAS)
- h) Temperature

The Port will adequately train field personnel to achieve consistent, accurate results from the observational, flow estimation, and field analytical monitoring components. Field instruments will be calibrated before each sampling event, and the viability of test kit reagents will be checked periodically. The Port may analyze duplicate samples in the field to assess precision. The Port may also submit periodic sample splits and sample blanks to the laboratory for analysis of these constituents to assess the accuracy of the field testing methods and/or sampling equipment. Documentation of sampling events and calibration records will be kept in order to maintain a high level of quality control. See the Field Sampling Manual for a detailed description of the QA/QC methods the Port may utilize during sample collection to assure quality control.

### **5.3    *Laboratory Analytical Monitoring***

Grab samples will be collected and submitted to a state-certified laboratory for analysis at a minimum of 25% of those sites in which flowing or ponded runoff is observed. The following constituents will be analyzed:

- a) Total Hardness
- b) Oil and Grease
- c) Diazinon and Chlorpyrifos
- d) Dissolved Cadmium, Copper, Lead, and Zinc
- e) Enterococcus, Total Coliform, and Fecal Coliform Bacteria

Field personnel will follow strict sampling and chain-of-custody protocols when collecting dry weather laboratory analytical samples. See the Field Sampling Manual for a detailed discussion of the chain-of-custody procedures required during sample collection.

**Figure E-1. Dry Weather Storm Drain Monitoring Data And Observation Form.**



**PORT OF SAN DIEGO**  
 ENVIRONMENTAL SERVICES DEPARTMENT  
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 (619) 686-6254

**San Diego Stormwater Copermittees**  
**Dry Weather Monitoring Field Datasheet**

Routine Investigation       IC/ID Follow-Up For \_\_\_\_\_

**GENERAL SITE DESCRIPTION** (NAD 83 decimal degrees to 5th place)

Site ID		Latitude	(e.g., 33.41174)	Watershed	Hydrologic Unit	(e.g., 7.00)
Location		Longitude	(e.g., -117.35213)		Hydrologic Area	(e.g., 7.10)
Date		TB Page			Hydrologic Subarea (Optional)	(e.g., 7.11)
Time		Observer		Discharge Area (Optional)		

**Land Use (Primary)** (Check one only)     Residential     Commercial     Industrial     Agricultural     Parks     Open

**Land Use (Secondary)** (Optional, greater than 10%)     Residential     Commercial     Industrial     Agricultural     Parks     Open

**Conveyance** (Check one only)     Manhole     Catch Basin     Outlet     Concrete Channel     Natural Creek     Earthen Channel

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**ATMOSPHERIC CONDITIONS**

**Weather**     Sunny     Partly Cloudy     Overcast     Fog  
 N/A     Low     Incoming     High     Outgoing    **Tide Height:** \_\_\_\_\_ ft.

**Last Rain**     > 72 hours     < 72 hours

**Rainfall**     None     < 0.1"     > 0.1"

**RUNOFF CHARACTERISTICS**

**Odor**     None     Musty     Rotten Eggs     Chemical     Sewage     Other \_\_\_\_\_

**Color**     None     Yellow     Brown     White     Gray     Other \_\_\_\_\_

**Clarity**     Clear     Slightly Cloudy     Opaque     Other \_\_\_\_\_

**Floatables**     None     Trash     Bubbles/Foam     Sheen     Fecal Matter     Other \_\_\_\_\_

**Deposits**     None     Sediment/Gravel     Fine Particulates     Stains     Oily Deposits     Other \_\_\_\_\_

**Vegetation**     None     Limited     Normal     Excessive     Other \_\_\_\_\_

**Biology**     None     Insects     Algae     Snails/Fish     Mussels/Barnacles     Other \_\_\_\_\_

**Flow Observed**     Yes     No     Ponded     Tidal

**Does the storm drain flow reach the Receiving Water?**     Yes     No     N/A

**Evidence of Overland Flow?**     Yes     No     Irrigation Runoff     Other: \_\_\_\_\_

**Photo Taken**     Yes     No    **Photo #** \_\_\_\_\_

---

**Field Screening Samples Collected?**     Yes     No

Water Temp (°C)	NH <sub>3</sub> -N (mg/L)	NO <sub>3</sub> -N (mg/L)	React PO <sub>4</sub> (mg/L)
pH (pH units)	TURB (NTU)	COND (mS/cm)	Surfactants(mg/l.)

**Analytical Lab Samples Collected?**     Yes     No

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**FLOW ESTIMATION WORKSHEETS**

<b>Flowing Creek or Box Culvert</b>	<b>Filling a Bottle or Known Volume</b>	<b>Flowing Pipe</b>
Width	Volume	Diameter
Depth	Time to Fill	Depth
Velocity	Flow	Velocity
Flow		Flow

**COMMENTS:** \_\_\_\_\_

Revised 4/20/2004



PORT OF SAN DIEGO  
ENVIRONMENTAL SERVICES DEPARTMENT  
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San Diego Stormwater Copermittees

## Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

### 1. Residential

#### Residential (general)

Single- and multi-family homes, mobile home parks, etc.

#### Rural residential (For the County of San Diego and other appropriate Copermittees)

Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

### 2. Commercial

Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

### 3. Agricultural

Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

### 4. Industrial

Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

### 5. Parks

Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

### 6. Open

Vacant and undeveloped lands, etc.

Revised 4/20/2004

## 5.4 **Trash Assessment**

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program (B.3.c.), an assessment of the amount and extent of trash will be conducted at each of the dry weather sampling locations. The evaluation of trash will include an area surrounding the MS4 and receiving water. The amount and extent of trash will be estimated based upon an observer's first glance of the site. A qualitative rating will be assigned to each site based on the following criteria:

- **Optimal:** On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
- **Suboptimal:** On first glance, little or no trash visible. After close inspection a small amount of trash (~10-50 pieces) evident in evaluated area.
- **Marginal:** Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
- **Submarginal:** Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- **Poor:** Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

In addition to the above evaluations, those sites which are determined to be "Submarginal" or "Poor" will be assessed for the type of trash present. A determination of the potential source of the trash will also be conducted and recorded. These assessments will include a numerical ranking associated with the prevalence of each type of trash present at the sampling site. Best professional judgment will be used to determine how the trash accumulated at the site (i.e., dumping, littering, upstream sources, or unable to determine) and the potential source of the trash (i.e., household, construction, industrial, school, homeless encampments, or unable to determine). This information will be input onto a field form portrayed in Figure E-2.

Sites will also evaluate the threat to human health and/or threat to aquatic health. There may be instances in which sites may pose a threat to both categories. The evaluation of each category is presented below.

- Threat to Human Health: Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added at the bottom of the field sheet for clarification.
- Threat to Aquatic Health: Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added at the bottom of the field sheet for clarification.



Figure E-2. Trash Assessment Form.

## Trash Assessment Form

SITE ID: \_\_\_\_\_ DATE: \_\_\_\_\_

LOCATION: \_\_\_\_\_ TIME: \_\_\_\_\_

OBSERVER: \_\_\_\_\_

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):

ESTIMATED AREA OF ASSESSMENT L X W (FT):

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: <input type="checkbox"/> MS4 <input type="checkbox"/> RECEIVING WATER <input type="checkbox"/> BOTH	
<input type="checkbox"/> <b>Optimal</b>	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
<input type="checkbox"/> <b>Suboptimal</b>	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
<input type="checkbox"/> <b>Marginal</b>	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
<input type="checkbox"/> <b>Submarginal</b>	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
<input type="checkbox"/> <b>Poor</b>	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

\* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
<input type="checkbox"/> <b>Threat Human Health</b>	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc...). Comments should be added for clarification.
<input type="checkbox"/> <b>Threat to Aquatic Health</b>	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

▪ Complete the following section for Submarginal or Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

\* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).  
 DO NOT rank types of trash that are not present in evaluated area.

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## 6.0 Source Identification Follow-Up Investigations

The major objective of the dry weather monitoring program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the MS4 as required in Section D.4.c of the Permit. The Port has established an IC/ID program presented in Chapter 9 of the JURMP Document. An IC/ID investigation can be triggered by exceedances of field screening and laboratory results gathered during dry weather monitoring. In addition, an IC/ID investigation can be generated as a result of qualitative observations of dry weather monitoring sites. Criteria to determine if field screening and analytical monitoring results or qualitative observations necessitate an IC/ID investigation are described below.

### 6.1 *Action Levels*

The action levels for initiating source identification investigations for field screening and laboratory analytical parameters are summarized in Table E-1. These action levels will provide guidance to Port staff when interpreting the results of the field and laboratory sampling. There may be instances when exceedances of action levels may be misleading. Some action levels may be exceeded as a result of natural conditions such as groundwater input (e.g. high NO<sub>3</sub> or specific conductance), the influence of CO<sub>2</sub> uptake during photosynthesis on ambient pH levels, or the influence of concrete conveyances on water temperature during the summer months.

### 6.2 *Qualitative Observations*

Qualitative observations (dead animals, strong odors, the presence of an oily sheen on the water surface, etc.) may indicate that a discharge of pollutants has occurred and that serious water quality problems are present. These observations will assist Port staff in characterizing the “health” of the site. Additionally, qualitative observations may show serious water quality problems when field and analytical sampling results are either within limits or not immediately available. In these cases, best professional judgment will be utilized when interpreting water quality data.

**TABLE E-1. ACTION LEVELS FOR FIELD SCREENING AND LABORATORY PARAMETERS**

<b>Field Screening Analytes</b>	<b>Action Levels<sup>1</sup></b>	<b>Source/ Notes</b>
pH	<6.5 or >9.0	Basin Plan, with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia. USEPA Multi-sector General Permit
Orthophosphate-P (mg/L)	2.0	
Nitrate-N (mg/L)	10.0	Basin Plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Based on Workgroup experience. May also consider unionized ammonia fraction.
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observation (e.g. unusual colors and lack of clarity), and unusual odors.
Temperature (°C)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, etc.
Conductivity (mS/cm)	Best Professional Judgment	Values > 5 mS/cm may indicate IC/ID however; EC may be highly elevated in some regions due to high-TDS groundwater exfiltration to surface water, mineral dissolution, drought, and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Knowledge of area background conditions is important. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing.
Surfactants (MBAS) (mg/L)	1.0	Basin Plan, with allowance based on Workgroup field experience and possible field reagent interferences.
<b>Laboratory Analytes</b>	<b>Action Levels</b>	<b>Source/ Notes</b>
Oil and Grease (mg/L)	15	USEPA Multi-sector General Permit. If petroleum sheen is observed, the sample should be collected from the water surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxics Rule	Use California Toxics Rule Table, 1-hour criteria to determine appropriate action level for individual samples.
Dissolved Copper (µg/L)	California Toxics Rule	Table provides benchmarks based on hardness and dissolved metals concentration. For example, at 300 mg/L hardness the following action levels would apply: Cd – 14 ppb; Cu – 38 ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Lead (µg/L)	California Toxics Rule	
Dissolved Zinc (µg/L)	California Toxics Rule	
Total Coliform (MPN/ 100 mL)	50,000	Bacteria levels in many storm drains are likely to exceed public health guidance criteria. Use confidence interval test and best professional judgment to identify conveyances for source ID.
Fecal Coliform (MPN/ 100 mL)	20,000	
Enterococcus (MPN/ 100 mL)	10,000	
<b>Notes</b>		
<sup>1</sup> The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within-site and between-site sample variability.		
°C	degrees Celsius	
mS/cm	milliSiemens	
mg/L	milligram per liter	
IC/ID	illegal connection/illicit discharge	
MBAS	methylene blue active substances	
MPN/100 mL	most probable number (of colony forming units) per 100 milliliters	
NTU	nephelometric turbidity unit	
ppb	parts per billion	
USEPA	United States Environment Protection Agency	
WQO	Water Quality Objectives	

Within two business days of field screening or laboratory analytical sampling results exceeding the action levels, the Port will determine if an IC/ID is occurring and conduct an investigation to identify the source of the discharge or provide rationale as to why the discharge does not pose a threat to water quality and does not need further investigation. In the case of a field screening result that exceeds an action level, re-sampling will be conducted between 4 and 24 hours after the initial sampling. If the follow up results confirm the presence of elevated pollutant levels, field personnel will refer the condition to the Port IC/ID program for investigation. (See Section 9.3, Prevention, Reporting, and Response). When a laboratory sample result exceeds the action level guidelines, the Port may re-sample the site within two business days or refer the site to the IC/ID program for a source identification investigation. If on a return visit, there is no flow or ponded water present, Port will identify the site in the database and continue the investigation on the next visit. The determination of whether to resample or to initiate an investigation will include assessing all collected qualitative and quantitative data, analyzing action level exceedances, and using best professional judgment when making the final decision.

If a determination that an IC/ID has occurred, Port staff will conduct a source identification (See Section 9.5 Investigation and Follow-up Procedures). Investigators have procedures and tools which aid in source identification. First and foremost, staff will conduct a visual observation of the site to determine if the cause of the discharge is apparent (i.e., excessive trash, dead animals, runoff entering a nearby inlet, etc). Port staff also will have access to an updated map of the MS4 surrounding each sampling location. The map can be used to trace the storm drain conveyance system to determine possible sources and discharge locations. If runoff is present in upstream stormdrains, further samples can also be collected to determine potential sources.

Due to the limited extent of the Port jurisdiction, there may be instances in which the source of a discharge may occur within jurisdictions surrounding the Port District. In these cases, the Port will contact the relevant jurisdiction and coordinate an investigation upstream of the discharge location. Tests such as dye testing, smoke testing, or video inspections may be used to determine a source.

## 7.0 Elimination of Illegal Connections and Discharges

The Port will follow guidelines set forth in the Port JURMP Document Section 9.6, Enforcement, for eliminating illegal connections and discharges detected as a result of dry weather monitoring. Once the discharge has been detected and stopped, Port staff may utilize escalating enforcement mechanisms to ensure the responsible party does not continue to discharge into the MS4 and receiving waters. If the discharge extent is widespread or poses immediate and severe risk to public health, other agencies will be notified (i.e., Department of Environmental Health, Coast Guard, Fire Department, etc). In the case of a sewage spill or

other pollutants which endanger environmental health, the RWQCB will be notified within 24 hours of detection of the discharge and the Port will also provide a written statement within 5 business days. Investigators will notify these agencies as soon as they determine the severity of the situation.

## 8.0 Program Assessment

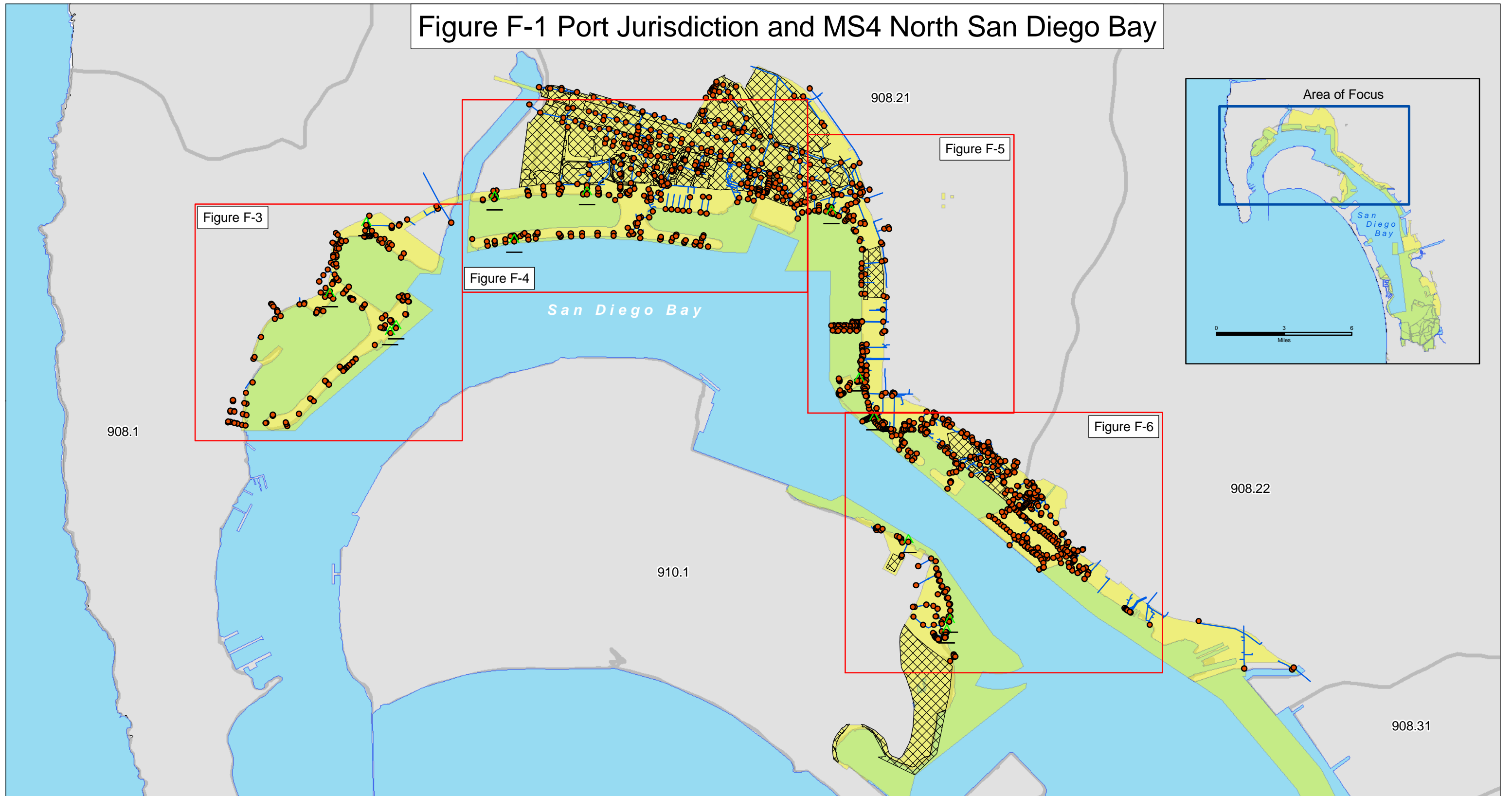
The dry weather monitoring program will be evaluated annually. A summary of findings, as well as monitoring data will be included in the Port's Jurisdictional URMP Annual Report. Criteria for evaluating the effectiveness of dry weather monitoring programs will include the number of sites monitored, the frequency of monitoring, the frequency of observed dry weather runoff, the number of field screening and laboratory samples collected, the number of source identification investigations conducted, and the number of water pollution sources identified and eliminated.

The Port will use the annual dry weather program assessment to refine and focus its approach for the next dry season. Sampling locations that indicate the presence of pollutants will continue to be monitored, possibly at a higher frequency. Locations that do not appear to have water quality problems or exhibit a decrease in dry weather flow may be monitored less frequently. The Port will also review changes in land use within its jurisdiction and adjust the dry weather program accordingly.

# **APPENDIX F**

## **MS4 MAPS**

Figure F-1 Port Jurisdiction and MS4 North San Diego Bay



**Legend**

**MS4**

- Inlets/Outfalls
- Drain Lines
- ▲ Dry Weather Sampling Point

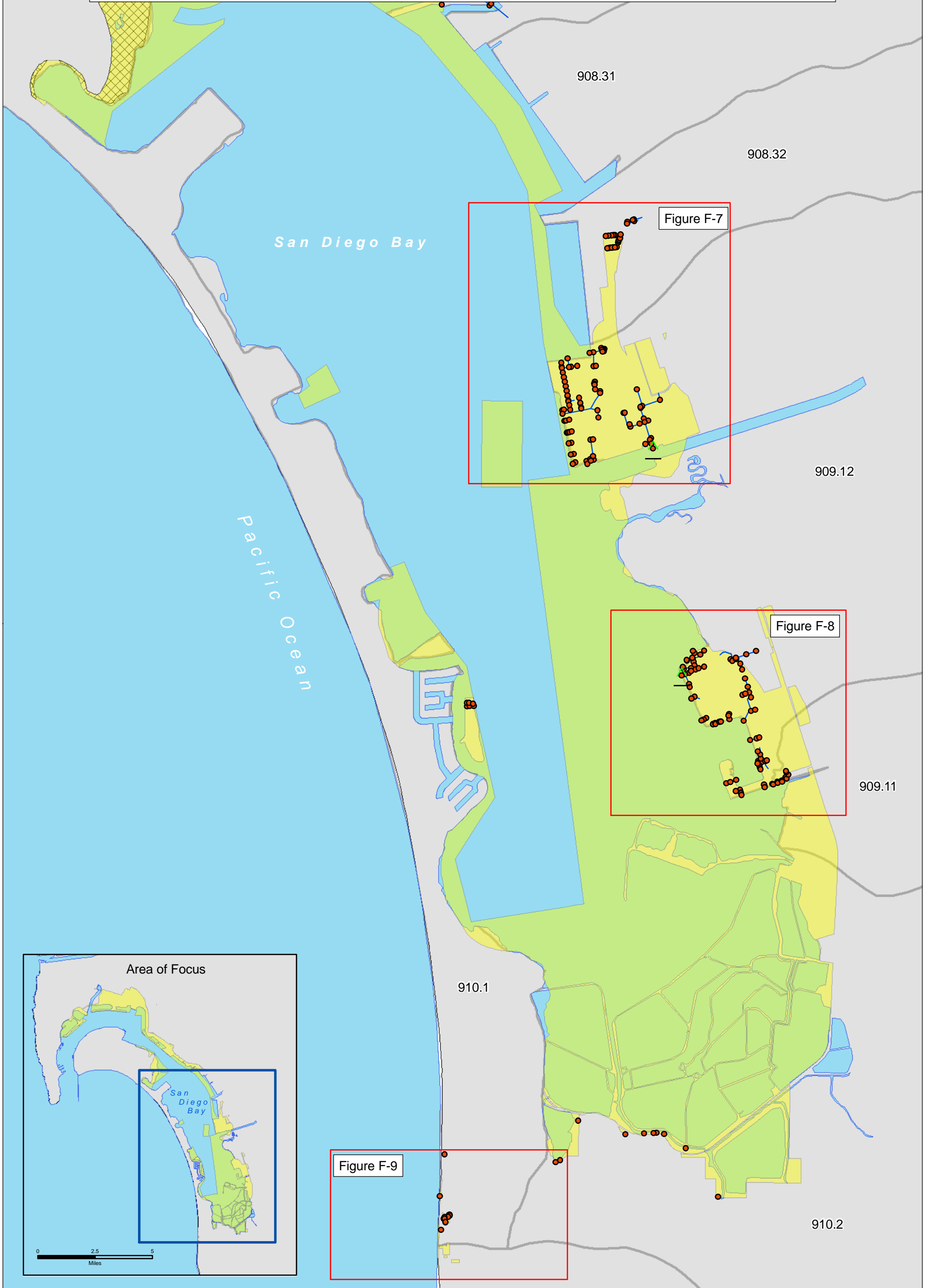
**Boundaries**

- Port Jurisdiction
- ⊞ Not Under Port Management
- ☞ Watersheds





Figure F-2 Port Jurisdiction and MS4 South San Diego Bay



**Legend**

**MS4**

- Inlets/Outfalls
- Drain Lines
- ▲ Dry Weather Sampling Point

**Boundaries**

- Port Jurisdiction
- ⊠ Not Under Port Management
- ☞ Watersheds

