THE PORT OF LOS ANGELES
425 S. Palos Verdes Street Post Office Box 151 San Pedro, CA 90733-0151 TEL/TDD 310 SEA-PORT www.portoflosangeles.org

Eric Garcetti *Mayor, City of Los Angeles*
Board of Harbor Commissioners: Jaime L. Lee *President*; David Arian *Vice President*; Lucia Moreno-Linares *Commissioner*; Anthony Pirozzi, Jr. *Commissioner*; Edward R. Renwick *Commissioner*
Eugene D. Seroka *Executive Director*

October 23, 2018

Cynthia Ruelas
United States Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

Dear Ms. Ruelas:

SUBJECT: CONDITIONAL APPROVAL FOR PORT OF LOS ANGELES WILMINGTON MARINE SERVICES, WILMINGTON, CALIFORNIA (USEPA ID: PCBCA2018001)

This letter serves as a response to the United States Environmental Protection Agency's (USEPA) September 11, 2018, correspondence entitled, *USEPA's Conditional Approval for Port of Los Angeles, Wilmington Marine Services*, which provides the following comments:

1. *"**PCB Action Levels for On-Site Soils.** The Port of LA has suggested a cleanup goal of 1 ppm for total PCBs in soil, which associated with is the RSL for industrial soil for Aroclor 1260 (0.99 ppm). This action level is acceptable for the Site's proposed use, as well as for worker protection. However, the Port of LA shall also implement best management practices (BMPs) at the Site to help ensure that residual PCBs in soils that may remain following remediation activities at the Site do not impact the adjacent waterway. USEPA is open to discussing possible BMPs with the Port of LA that may be implemented to help mitigate potential residual PCB migration."*

   Response: Comment acknowledged. Following site remediation activities, the City of Los Angeles Harbor Department (Harbor Department) will implement BMPs in consultation with USEPA.

2. *"**PCB Migration Evaluation.** Currently, the ground surface at the Site appears to be relatively even, and composed of hard surfaces (e.g., pavement) and soil. The Port of LA shall provide USEPA with information on the surface drainage*

infrastructures and outfall locations into receiving waters. Once the drainage and discharge locations at the Site are identified, the Port of LA shall collect samples of the particulates that accumulate at the drains or outlets to evaluate the migration patterns of PCBs. This may be done using various methods proposed by the Port of LA (e.g., use of a reverse witch's hat at drainage locations) depending on Site specific conditions. This data may be used to evaluate the contaminant pathways of potential PCB source area(s), and will help determine whether or not further PCB mitigation at the Site is warranted."

Response: Figure 2 of the attached *Storm Water Pollution Prevention Plan (SWPPP)*, illustrates the direction of surface water drainage and infrastructure at the Site. The SWPPP was developed for the Harbor Department's Construction and Maintenance Division facility as required under the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit (Order R4-2012-0175-01A, NPDES No. CAS004001). The site, referred to as "the annex," is included under the SWPPP. The Harbor Department is not aware of any storm water drains, features, or outfalls located within the site; therefore, collection of particulates or accumulation in drains or outlets is not feasible.

3. *"**Non-TSCA Contamination.** The USEPA only regulates PCB contamination at the Site. Based on the data submitted, it is apparent that on-site soil contains other non-PCB contaminants of concern (COCs), such as petroleum hydrocarbons and metals. The Port of LA shall work with other State and/or local implementing agencies to address other contamination that may be present in soil/sediment at the Site. Since the oversight of the cleanup or management of these COCs are not under USEPA's TSCA jurisdiction, these COCs will need to be addressed by another appropriate environmental overseeing agency."*

   Response: Comment acknowledged. The Harbor Department will manage non-TSCA COCs as appropriate in accordance with industry standards consistent with the level of care and skill exercised for similar sites at the Port of Los Angeles.

4. *"**PCB Extraction.** USEPA prefers that PCBs in soil be analyzed using the USEPA Method 8082 with Soxhlet extraction (USEPA Method 3540C). The Port of LA will need to specifically request that the analytical laboratory use Soxhlet extraction, as it is not generally used as the default extraction method by laboratories."*

   Response: Comment acknowledged. PCBs in soil will be analyzed utilizing the Soxhlet extraction method.

5. *"**PCB Contaminated Soil Removal.** The Port of LA requested approval for collection of additional in-situ characterization samples in order to limit the confirmation sampling warranted during removal efforts. Additional*

characterization may be conducted by the Port of LA in order to limit the extent of soil removal. However, USEPA recommends that the Port of LA keep us informed of these activities in order to ensure that any supplemental characterization, removal, and disposal activities are taking place in accordance with TSCA."

Response: Comment acknowledged. The Harbor Department will complete additional characterization activities in consultation with USEPA. Sample characterization may be conducted to identify and limit excavation boundaries, as well as to document that clean-up goals are met. In consultation with USEPA, these soil samples may be used as the confirmation samples for the remedial action.

6. *"**New Utility Construction.** The USEPA understands that a water pipeline will be constructed a depth of approximately 5 feet bgs across the eastern portion of the property as part of the redevelopment effort at the Site. USEPA recommends that any stained or visibly contaminated soil encountered be removed during the trenching effort. Furthermore, a Soil Management Plan (SMP) should be prepared, if one does not already exist, to address environmental issues associated with proposed utility construction activities, including, but not limited to: dust control, storm water run-on and run-off controls, and air monitoring."*

   Response: During waterline installation activities, the Harbor Department will segregate and stockpile any stained or visibly contaminated soil and cover with visqueen, plastic sheeting. Any such stockpile will be sampled and analyzed in accordance with the Harbor Department's Environmental Guidance for Industrial Fill Material for characterization reuse and/or disposal purposes. Utility installation activities will be conducted following the procedures and protocols set forth in Section 3.7.11 of the SWPPP, and BMPs will be implemented in accordance with Section 3.8 of the SWPPP in order to limit fugitive dust, control storm water run-on and run-off, etc. These documents, already in place, will serve as a SMP to help ensure that the soils are properly managed.

7. *"**Schedule.** The Port of LA shall incorporate the conditions of this approval amendment during field activities, and shall notify the USEPA of exact dates of TSCA activities prior to commencing work at the Site."*

   Response: Comment acknowledged. The Harbor Department will incorporate the conditions of USEPA's approval, and notify USEPA prior to commencing field work activities.

If you require additional information or have questions, please contact Mark Withrow at (310) 221-4783 or via email at mwithrow@portla.org.

Sincerely,

CHRISTOPHER CANNON
Director of Environmental Management

CC:LW:RB:MW:nix
ADP No.: 910820-562

Enclosure
cc: Heather Benfield, Tetra Tech, Inc.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

AUGUST 2017
ADDENDUM 2

Performed at:

PORT OF LOS ANGELES
CONSTRUCTION AND MAINTENANCE DIVISION
BERTH 161, 500 PIER "A" STREET
WILMINGTON, CALIFORNIA 90744

Performed for:

PORT OF LOS ANGELES
425 SOUTH PALOS VERDES STREET
SAN PEDRO, CALIFORNIA 90731

Copy to:

Bureau of Sanitation
Watershed Protection Division

Prepared by:

Pacific Edge Engineering, Inc.

26431 Crown Valley Parkway, Suite 270
Mission Viejo, CA 92691

TABLE OF CONTENTS

Section Page

1.0 CERTIFICATION III

2.0 INTRODUCTION 1

3.0 FACILITY DESCRIPTION AND SWPPP ORGANIZATION 3

3.1 FACILITY 3
3.2 SWPPP OBJECTIVES 3
3.3 PLANNING AND ORGANIZATION 4
3.3.1 Pollution Prevention Team 5
3.4 SITE MAP 5
3.5 LIST OF SIGNIFICANT MATERIALS 6
3.6 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES 6
3.7 ASSESSMENT OF POTENTIAL POLLUTANT SOURCES 11
3.7.1 Vehicle, Sea Vessel and Equipment Fueling 11
3.7.1.1 UST Area & Fuel Island (275-99) 11
3.7.1.2 Mobile Fuel Truck (290-13) 12
3.7.2 Vehicle & Equipment Maintenance (Heavy Equipment Repair Building [290-13] and Canopy (376-73), Garage [275-03]/Grease Rack [275-06] Building, Garage Canopy, and Tire Area) 12
3.7.3 Vehicle & Equipment Washing (276-13) 12
3.7.4 Diesel Generator Storage Tank Area (275-02) 13
3.7.5 Sea Vessel Maintenance 13
3.7.6 Employee & Visitor Parking 13
3.7.7 Chemical Storage and Distribution 14
3.7.8 Material & Equipment Storage Areas 14
3.7.9 Wood and Metal Recycling and Storage 14
3.7.10 Hazardous Waste Storage Area (275-93) 15
3.7.11 General Construction 15
3.7.12 Wood Dock Repair and Piling Replacement 15
3.7.13 Solid Waste Storage 16
3.7.14 Storm Drain System 16
3.7.15 Sewage System 16
3.8 STORMWATER BEST MANAGEMENT PRACTICES (BMPS) 16
3.8.1 Existing BMPs 16
3.8.1.1 Training 16

4.0 COMPLETED INSPECTION FORMS 29

5.0 RUNOFF SAMPLING 30

6.0 SWPPP TRAINING 31

6.1 EMPLOYEE TRAINING 31
6.2 TRAINING RECORDS 31

ED_004566_00003778-00006

TABLE OF CONTENTS (continued)

TABLES

Table 1 - Facility Information 3
Table 2 - Pollution Prevention Team 5
Table 3 - Potential Pollutant Sources 7
Table 4 - Applicable Best Management Practices 17

FIGURES

Figure 1 Site Location Map
Figure 2 Site Map

ATTACHMENTS

Attachment A LARWQCB No. Order R4-2012-0175-A01 Amending Order No. R4-2012-0175 as Amended by State Board Order WQ 2015-0075
Attachment B SWPPP Training Program
Attachment C Operational Control EMS07-142-01 for Filling USTs

ED_004566_00003778-00007

1.0 CERTIFICATION

This Storm Water Pollution Prevention Plan for the Los Angeles Harbor Department Construction and Maintenance Yard, Berth 161, has been reviewed, modified as necessary, and accepted for implementation.

Manuel Ramirez	Environmental Specialist

SWPPP ANNUAL REVIEW DOCUMENTATION

Review Dates	Signature	Amended	Not Amended	Page(s) amended
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	
		☐	☐	

ED_004566_00003778-00008

SWPPP AMENDMENT LOG

Amendment No.	Date	Description of Amendment	SWPPP Section	Prepared By
1	4/21/14	Revised/updated text to reflect 12/28/12 Order No. R4-2012-0175/NPDES No. CAS004001 requirements	All	PacEdge
1	4/21/14	Added SWPPP Documentation Review and SWPPP Amendment Log	Pages iv – vii	PacEdge
2	August 2017	Revised Responsible person for SWPPP to Manny Ramirez throughout	1.0	T. Bubier
2	August 2017	Revised language regarding covering of wood recycling bins	Throughout document and App. C	T. Bubier
2	August 2017	Revised text and Attachment A to reflect amended NPDES Permit	Section 2 and App. A	T. Bubier
2	August 2017	Revised Site Map to reflect current building/structure location, name, and number	Figure 2 (formerly Figure 3) and throughout document	T. Bubier
2	August 2017	Deleted Figure 2 Site Boundary	Figures	T. Bubier
2	August 2017	Update Table 2 Pollution Prevention Team	Table 2, Section 3.3.1	T. Bubier
2	August 2017	Revised language regarding management of bilge water	Table 3 Throughout document	T. Bubier
2	August 2017	Where needed, update activity, location, and description of potential pollution sources to reflect current conditions.	Throughout document	T. Bubier
2	August 2017	Update Applicable BMPs	Table 4	T. Bubier
2	August 2017	Update SWPPP Training Information as needed	Attachment B	T. Bubier

ED_004566_00003778-00009

Amendment No.	Date	Description of Amendment	SWPPP Section	Prepared By
2	August 2017	Updated Vehicle & Equipment Washing sections to reflect current washing operations	Throughout	T. Bubier

(949) 470-1937; (949) 470-0943 (FAX)
ED_004566_00003778-00010

2.0 INTRODUCTION

City of Los Angeles facilities or departments, which have the potential to discharge pollutants into storm water, are required to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This requirement comes from the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit (Order No. R4-2012-0175, NPDES No. CAS004001) issued to the Los Angeles County (Principal Permittee) and the 84 incorporated cities therein, except the City of Long Beach, by the Los Angeles Regional Water Quality Control Board (RWQCB). The Order R4-2012-0175 (hereafter referred to as the "NPDES Storm Water Permit" or "Permit") was adopted by the RWQCB on November 8, 2012 and became effective on December 28, 2012., The Permit was amended on June 16, 2015 by Order WQ 2015-0075 and further amended on September 8, 2016 by Order R4-2012-0175-01A. The Permit expires on December 28, 2017. However, in accordance with section 2235.4 of Title 23 of the California Code of Regulations, the terms and conditions of an expired permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulation on continuation of expired permit are complied with. Accordingly, if a new order is not adopted by the expiration date, then the Permittee shall continue to implement the requirements of this Order until a new one is adopted. A copy of the amended Permit is included as Attachment A.

As a co-permittee, the City of Los Angeles (City) has the responsibility to comply with the requirements of the Permit, including:

- Development and implementation of storm water programs
- Implementation of the countywide Storm Water Quality Management Program (SQMP)
- Implementation of specific storm water programs, projects and/or activities, which demonstrate compliance with the SQMP.

The Watershed Protection Division (WPD) of the City of Los Angeles Bureau of Sanitation is the lead office for the City's Storm Water Management Program. WPD represents the City on storm water and permit issues before the County of Los Angeles Department of Public Works (the County) and the RWQCB. WPD provides technical expertise and guidance to all City departments, bureaus, and divisions to ensure implementation and compliance with the Permit. WPD prepares and transmits an annual report to the County for submittal to the RWQCB and is the responsible agent that certifies that the City is in compliance with all Permit requirements.

The Permit contains a requirement for the City to implement a "Public Agency Activities Program". The program must be implemented to minimize storm water pollution impacts from public agency activities. The public agency requirements consist of:

- Public Construction Activities Management
- Public Facility Inventory
- Inventory of Existing Development for Retrofitting Opportunities
- Public Facility and Activity Management
- Vehicle and Equipment Wash Areas
- Landscape, Park, and Recreational Facilities Management

ED_004566_00003778-00011

- Storm Drain Operation and Maintenance
- Streets, Roads, and Parking Facilities Maintenance
- Emergency Procedures
- Municipal Employee and Contractor Training

A Public Agency Activities Storm Water Guide (Guide), 2nd Edition, February 2003, has been prepared for use by City departments and bureaus to ensure that they are well informed and in compliance with the applicable Permit requirements that affect their activities. This Guide provides procedures that are to be implemented and examples of SWPPPs for various City activities.

Facilities that meet the description in Section 3.1.2 (page 3-2) of the Guide for Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management of the Permit are those that:

- Conduct industrial activity, operates equipment, handles materials, and provides services similar to Federal Phase I facilities;
- Performs fleet vehicle service/maintenance on ten or more vehicles per day including repair, maintenance, and fueling;
- Performs maintenance and/or repair of heavy industrial machinery/equipment
- Stores chemicals, raw materials, or waste materials in quantities that require a hazardous materials business plan or a Spill Prevention, Control, and Countermeasures (SPCC) plan.

The activities conducted at Berth 161 are varied but most closely meet this description.

This SWPPP is being updated (Addendum 2) as a result of the State Water Resources Control Board amending the NPDES Permit by Order R4-2012-0175 and a significant change that has occurred at the Port of Los Angeles facility subject to the Permit (see Section 3.1).

This amended SWPPP has been organized to follow the suggested format provided in the Guide. The SWPPP is a living document that will be updated as necessary that will be updated as necessary and will include completed Inspection Forms (see Section 4.0).

ED_004566_00003778-00012

3.0 FACILITY DESCRIPTION AND SWPPP ORGANIZATION

3.1 FACILITY

The Port of Los Angeles (POLA) is administered by the Harbor Department, which is an independent, self-supporting department of the City of Los Angeles, California. The POLA is under the control of a five-member Board of Harbor Commissioners appointed by the Mayor and approved by the City Council. The POLA's Construction and Maintenance Division (C&M) occupy Berth 161 (the Facility). At the Facility, maintenance of POLA vehicles and sea vessels is conducted and various construction and hazardous materials used to support operations at the POLA are stored. A summary of the general facility information is presented below in Table 1:

Table 1 - Facility Information	
Name of the Facility	Berth 161 – Port of Los Angeles
Site Address	500 Pier "A" Street, Berth 161 Wilmington, CA 90744
Mailing Address	500 Pier "A" Street, Berth 161 Wilmington, CA 90744
Type of Facility	Vehicle Maintenance/Material Storage Yard
Operator of Facility	Port of Los Angeles – Construction and Maintenance Division
Owner of Facility	City of Los Angeles
Date SWPPP prepared (Prepared By)	September 1999 – (Los Angeles Harbor Department)
Updates	August 2017 – Addendum 2 April 2014 – Addendum 1 April 2012 April 2008 March 2007 February 2005 April 2001

In 2015, construction of the Wilmington Grade Separation project was completed. The project linked Harry Bridges Boulevard, Pier A Street, and Fries Avenue. As a result, a portion of the northern end of the Facility is now part of the newly constructed Pier A Street and Fries Avenue interchange. Due to the loss of a portion of the Facility, an asphalt area to the south called "The Annex" (formerly Wilmington Marine) has been added to the Facility and is used for mobile equipment storage.

3.2 SWPPP OBJECTIVES

The Permit (Item 9.c.i. [page 126-127]) requires City departments to inventory potential sources of storm waters pollution within their operations. Potential sources at C&M include vehicle storage and maintenance, chemical storage, equipment storage and maintenance facilities

ED_004566_00003778-00013

(including landscape maintenance-related operations), fueling or fuel storage facilities, hazardous waste handling and transfer facilities and material storage activities occur and thus implementation of a SWPPP is required. The purpose of the Permit is to protect water quality by reducing the amount of pollutants that could potentially reach the storm drainage system and receiving waters.

The minimum objectives of the SWPPP are to:

- Identify and evaluate sources of pollutants from the Facility that may affect the quality of storm water discharges from the Facility.
- Identify and implement site-specific best management practices (BMPs) to reduce or prevent pollutants in storm water discharges.

A copy of this SWPPP will be kept at the Facility, readily available to Facility personnel and regulatory agencies. The SWPPP will be reviewed periodically to assure all information and measures are current and accurate. This SWPPP will be updated whenever there is a change in operation, maintenance, or new construction at the Facility that may affect the quality of storm water discharges from the Facility.

3.3 PLANNING AND ORGANIZATION

The process utilized to develop this SWPPP includes the following five suggested steps presented in the Guide:

- Planning and Organization
- Facility Assessment
- Best Management Practice Selection
- Documentation and Implementation
- Evaluation

As part of the planning process, the most recent versions of the following Facility plans were reviewed and/or considered during development of the SWPPP:

- Spill Prevention, Control and Countermeasure (SPCC) Plan. This plan has been developed to prevent oil discharges from the Facility into navigable waters of the United States or adjoining shorelines.
- Los Angeles City Unified Hazardous Waste and Hazardous Materials Management Program (i.e. Business/Contingency Plan). This Program deals with hazardous materials, hazardous waste, and underground storage tanks.
- SWPPP documents (current and historical).

In addition, plans and reports required by the Hazardous Waste Source Reduction and Management Review Act of 1989 (commonly referred to as SB 14) were historically prepared for the Facility.

The Facility Assessment included the following:

ED_004566_00003778-00014

- Preparation of a Facility Site Map identifying buildings, storage sheds, containers, and other areas of interest.
- An inventory was compiled from chemical questionnaires completed by Berth 161 personnel during preparation of the Business/Contingency Plan.
- Identification and description of activities conducted at the Facility and potential pollutant sources from these activities.
- An assessment of pollutants that are likely present in storm water.

BMPs selected for the Facility were based on the Facility Assessment and include those BMPs required by the Permit and presented in the Guide for vehicle/equipment maintenance and storage facilities.

3.3.1 Pollution Prevention Team

The individuals listed below in Table 2 are responsible for developing and/or implementing this SWPPP.

Table 2 - Pollution Prevention Team	
Name	**Function**
Manny Ramirez Environmental Specialist II Harbor Department (310) 732-6827	SWPPP Coordinator, Training & Implementation
Tim Clark Director of Port Construction & Maintenance Harbor Department (310) 732-3555	SWPPP Development
Christopher Cannon Director of Environmental Management Harbor Department (310) 732-3675	SWPPP Development
Frank Albers Senior Management Analyst II Port Construction & Maintenance (310) 732-3988	SWPPP Data Management

Any contractor hired by the Permittee to conduct activities, including but not limited to, storm and/or sanitary sewer system inspection and repair, street sweeping, trash pick-up and disposal, and street and right-of-way construction and repair shall be contractually required to implement and maintain the activity specific BMPs. Each permittee shall conduct oversight of contractor activities to insure these BMPs are implemented and maintained.

3.4 SITE MAP

The Berth 161 Facility is located on a sixteen-acre parcel, which is situated at the north terminus of Slip 1 within the Port of Los Angeles, in the Community of Wilmington, California. The

ED_004566_00003778-00015

adjacent waters of the Los Angeles Harbor are the only surface water bodies in the area. The Facility location is presented on Figure 1.

The Facility consists of both "ready" shops for various craft groups, as well as working shops performing activities including vessel, vehicle, and maintenance and repair, painting, welding, and fire extinguisher servicing. There is also a warehouse with a materials storage yard, a vehicle wash area, a fueling area, office buildings, assigned parking areas for Facility equipment and vehicles, parking lots for employee and visitor's vehicles, and a hazardous waste storage area. The Facility is mostly paved/covered with some minimal landscaping present, which is considered negligible compared to the total paved/covered acreage.

Harbor Department-owned and maintained storm water and sanitary sewer systems are present at the Facility. The storm water drainage system consists of catch basins located throughout the Facility connecting to outfalls that discharge directly to the ocean. The Facility is isolated from potential adjacent property storm water run-on by divider walls, curbs, and elevation differences. There are no industrial storm water discharge treatment facilities on-site.

Figure 2 is a detailed map of the Facility. The map indicates the following:

- An outline of the Facility boundary
- Location and identification of buildings, sheds, containers, and other surface features of note
- Drainage areas at the Facility and direction of surface flow
- Nearby water bodies (harbor water)
- Location of storm water conveyance lines and drain inlets
- Location of sewer conveyance lines and outlets
- Location of impervious areas (paved areas, buildings, covered areas)

3.5 LIST OF SIGNIFICANT MATERIALS

Types of materials that are routinely handled and stored at the Facility and typical on-hand quantities of these materials are reflected on Figure 2. The information contained in Figure 2 was compiled from chemical questionnaires completed by Berth 161 personnel during preparation of the Business/Contingency Plan. Given the types of operations conducted at Berth 161, it is likely that the chemical materials used (both quantities, types, and general locations) will change over time and should be reevaluated on a periodic basis. At a minimum, per the Order, the site inventory will be updated at least once during the 5-year term of the Order.

3.6 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

Table 3 below describes potential pollutant sources at the Facility.

ED_004566_00003778-00016

Table 3 - Potential Pollutant Sources		
Activity/Location/Description	**Pollutant Source**	**Pollutant**
Activity: Vehicle, Sea Vessel, & Equipment Fueling Location: Underground Storage Tanks (UST) Area (275-99) and Fuel Island (275901). Description: The USTs consist of one (1) 12,000-gallon gasoline and one (1) 6,000-gallon diesel tank. The fuel island is directly east of the USTs within a covered and bermed concrete secondary containment pad. A trench drain is located at the center of the concrete pad and liquids flow from the trench drain to a sump fitted with a manual valve that is left in a closed position. A Mobile Fuel Truck used by the Port to fuel and service boats and equipment is stored within the covered and bermed concrete pad at the fuel island (275901) or the Heavy Equipment Repair Canopy area (276-73) or in the equipment and material storage areas. The fuel truck has a 750-gallon gasoline AST, a 750-gallon diesel AST.	Spills and leaks during fueling Rain running onto and off of UST area	Gasoline, Diesel & Other Vehicle Fluids
Activity: Vehicle & Equipment Maintenance Location: Heavy Equipment Repair Building (290-13) and Canopy (276-73), Garage (275-03), Grease Rack (275-06) Building, Garage Canopy, and Tire Area. Description: Equipment and vehicle servicing/maintenance including fluid changes, vehicle and equipment repairs. Replacement of empty 55-gallon drums and/or smaller containers with new 55-gallon drums and/or smaller container of materials (oils, transmission fluid, etc.). Maintenance of fluid levels in hydraulic oil hoist reservoir AST and waste oil ASTs.	Spills or leaks during vehicle and equipment maintenance Container spills or leaks Draining of used oil filters into 55-gallon drums	Gasoline, diesel, other vehicle fluids, solvents, degreasers, hydraulic oil
Activity: Vehicle & Equipment Washing. Location: Wash Rack area (276-13) located north of Old C&M Administrative Building (275-84). Description: Washing is done over a covered concrete area that slopes to a sump/clarifier system. Solids are settled out in the clarifier and periodically pumped and	Washing particulates and debris off vehicles and equipment	Sediment, metals, vehicle fluids

ED_004566_00003778-00017

Table 3 - Potential Pollutant Sources		
Activity/Location/Description	**Pollutant Source**	**Pollutant**
disposed off-site. The clarifier does not discharge to the storm drain system.		
Activity: Diesel Fuel Storage Location: Diesel Generator Storage Tank Area west of C&M Administration Building (275-02). Description: The generator is used to supply electricity at the C&M Administration Building during emergencies. The generator and its main diesel fuel AST are located on adjoining concrete bermed secondary containment pads. Additional containment of the main AST is provided by a steel secondary tank constructed around the AST. The generator also has small onboard day storage AST.	Spills and leaks during deliveries Rain running onto and off of filling area	Diesel
Activity: Sea Vessel Maintenance Location: Boat Slips, Marine Ways southwest of Wench House (275-33) and Boat Shop Canopy southwest of the Boat Shop (275-87). Description: Vessel maintenance fueling from mobile truck (see mobile fuel truck), mechanical repairs, pumping of sanitary holding tanks, and pumping of bilge waste.	Vessel spills and leaks, spills and solid debris resulting from mechanical and physical maintenance activities	Fuel, oils, engine fluids, paints, solvents, solid debris, dust
Bilge water is pumped directly into a mobile waste truck by a contractor and is transported off-site for disposal.	Spills during pumping of bilge and sanitary waste	Oils and other engine fluids, bilge and sanitary waste
Sanding, grinding, painting, and engine maintenance of small vessels is performed within an asphalt bermed area at the Boat Slip Canopy area. Sanding, grinding, painting, and engine maintenance of larger sea vessels is performed at the Marine Ways.	Solid debris from sanding and painting	Paints and thinners, dust

ED_004566_00003778-00018

Table 3 - Potential Pollutant Sources		
Activity/Location/Description	**Pollutant Source**	**Pollutant**
Activity: Employee and Visitor Parking Location: Paved parking lots located around and throughout the facility.	Spills and leaks from vehicles	Oils, gasoline, antifreeze, and other vehicle related fluids
Activity: Chemical Storage & Distribution Location: Chemical storage occurs throughout the Facility and at various shops. Product is received at the Warehouse (290-12) for storage and is then distributed to shop areas. Most storage areas are covered and have secondary containment. Types of chemicals and the areas where they are typically used and/or stored are reflected on Figure 2.	Container spills and leaks	Antifreeze, oils, lubricants, engine fluids, cleaning solvents, paints and thinners
	Spills from loading, unloading, delivery, and distribution throughout the Facility	Antifreeze, oils, lubricants, engine fluids, cleaning solvents, paints and thinners
Activity: Material & Equipment Storage Areas Primary Locations: Material & Equipment Storage Areas: 1. a paved area west of the Garage Canopy, 2. a paved area between the Harbor Waters and the Heavy Equipment Repair Building (290-13) and Warehouse (290-12) Buildings, 3. a paved area west of the Hazardous Waste Storage Area (275-93), and 4. The Annex area located at the south end of the Facility. Description: Stored material and equipment include wood for carpentry, metal piping, fittings, and plumbing appurtenances, miscellaneous items for traffic control, fuel powered equipment and vehicles and any other materials needed maintain Port facilities. In addition, rock and sand stockpiles are located on asphalt south of the Materials Warehouse (290-12) within an uncovered enclosure. Periodically, topsoil stockpiles are stored on a paved uncovered berm area located at the Gardening Division at the Facility.	Vehicle and equipment fluid leaks, and associated dirt/debris. Rainfall onto stored materials washing off debris and particulates	Sediment, metals, gasoline, diesel fuel, vehicle and equipment fluids/oils

ED_004566_00003778-00019

Table 3 - Potential Pollutant Sources		
Activity/Location/Description	**Pollutant Source**	**Pollutant**
Activity: Wood and Metal Recycling & Storage Location: Wood Bin in Parking Area east of Guard Building (2759001), Metal Bin in parking area at south end of facility (north of Annex Area) Description: Untreated wood and discarded metal is dismantled into smaller pieces and placed into uncovered bins.	Solid debris from wood and metal	Wood and metal
Activity: Hazardous Waste Storage Location: Temporary Hazardous Waste Storage Area (275-93) Description: Temporary storage of 55-gallon drums of waste oils and other hazardous liquids accumulated form various locations at the Facility. The storage area is enclosed, covered, gated, and bermed.	Spills or leaks from drums	Waste oils and other toxic liquids
Activity: General Construction Location: Throughout the Facility Description: Occasionally, improvements to the Facility occur and general construction activities could include installation of underground utilities, concrete work, structural framing, painting, and other related activities.	Spills or leaks from construction materials. Solids from construction materials, debris, and stockpiled soils.	Liquids, solids, and general debris
Activity: Wood Dock Repairs and Piling Replacement Location: Docks and Slips Description: Wooden docks and slips are located at the Facility and do require maintenance by means of wood cutting and stripping. Timber piles also require occasional replacement by pile driving activities.	Wood shavings, creosote treated wood, and grease and oil from cutting and pile driving equipment	Solids, creosote, grease, oil

ED_004566_00003778-00020

Table 3 - Potential Pollutant Sources		
Activity/Location/Description	**Pollutant Source**	**Pollutant**
Activity: Solid Waste Storage Location: Throughout the Facility Description: Solid waste bins are located throughout the Facility. Their locations are generally consistent but can vary due to changing operations and activities at the Facility. These solid waste bins are equipped with covers and used for municipal solid waste.	Spills or leaks from solid waste containers	Municipal garbage and debris
Activity: Storm Drain System Location: See Figure 2 Description: A Harbor maintained storm drain system is located at the Facility. The system functions to collect and convey runoff to receiving waters during storm events to prevent flooding.	Non-storm water discharges	Non-storm water discharges
Activity: Sewage System Location: See Figure 2 Description: A Harbor maintained sewer system is located at the Facility. The system functions to receive and convey Facility sewage and clarified wash water from the vehicle maintenance area to the main sewer system and ultimately, a City sewage plant.	Cracked/deteriorated pipes, leaking joints or seals, system blockage, overflowing, and cross-connections to storm drain system	Sewage and wash water

3.7 ASSESSMENT OF POTENTIAL POLLUTANT SOURCES

This section describes potential pollutant sources. The following section (Section 3.8) describes existing Storm Water Best Management Practices (BMPs).

3.7.1 Vehicle, Sea Vessel and Equipment Fueling

Vehicle, sea vessel and equipment fueling is a potential source of storm water pollution at the Facility. Fueling locations are summarized below.

3.7.1.1 UST Area & Fuel Island (275-99)

Two (2) USTs and two fuel dispensers are located east of the Heavy Equipment Repair Building (290-13). The USTs consist of one (1) 12,000-gallon gasoline and one (1) 6,000-gallon diesel

ED_004566_00003778-00021

tank. Both USTs are double-walled and the entire UST system is connected to a leak detection system.

Fuel is dispensed at the fuel islands located east of the USTs. The fuel islands are within a covered concrete bermed secondary containment structure. A trench drain is located at the center of the containment pad. This drain collects liquids and conveys them to an in ground concrete sump fitted with a filter and manual valve. The filter is designed to capture fuel and solid debris. The valve is left in a closed position and only opened to drain rainwater to the storm system. Rainwater containing vehicle fluids and fuel are not drained to the storm system. Sump monitoring and draining procedures are provided in the Facility's SPCC plan. A labeled spill kit with absorbent materials is on-hand at both locations to contain and clean up minor spills.

3.7.1.2 Mobile Fuel Truck (290-13)

A mobile fuel truck with a 750-gallon gasoline AST and a 750-gallon diesel AST is primarily used to fuel Port vehicles and equipment at off-site locations. On occasion, it is necessary to fuel a sea vessel at dockside. Also, during emergency situations the mobile truck is used to fuel vehicles and other equipment at Berth 161. The fuel truck is within the covered and bermed concrete pad at the fuel island (275901) or the Heavy Equipment Repair Canopy area (276-73) or in the equipment and material storage areas when not being used (primarily nights and weekends).

Absorbent materials are kept with the truck to respond and contain minor spills during fueling operations. Additional absorbent materials are also available at the fuel pump island.

3.7.2 Vehicle & Equipment Maintenance (Heavy Equipment Repair Building [290-13] and Canopy (376-73), Garage [275-03]/Grease Rack [275-06] Building, Garage Canopy, and Tire Area)

Fluid associated with this maintenance is confined to 1) the service bays inside the shop areas where maintenance occurs, 2) within the enclosed raw material storage areas located within or adjacent to shops, and 3) the three ASTs for temporary storage of waste oil. Raw material and wastes are stored in 55-gallon drums or aboveground storage tanks ASTs that are enclosed and protected from rainwater. Secondary containment is provided for each drum and AST. Washing down the floors in the service bay area and raw material and waste material storage areas could result in the fluids flowing into a nearby storm drain inlet. Therefore, dry sweeping of the floors is encouraged.

3.7.3 Vehicle & Equipment Washing (276-13)

A dedicated paved vehicle and equipment wash area, referred to as the "Vehicle Wash Rack (276-13)", is located between the Old Administrative Building (275-84) and the Grease Rack Building (275-06). This area is covered by a roof and the concrete surface is sloped to a collection sump. Vehicles and equipment are cleaned over the sump that drains to a covered three-stage clarifier where contaminants, particulates, and oils are separated. Clarifier solids and oil are disposed off-site pursuant to applicable regulations. Water is discharged to the sanitary sewer system under Industrial Wastewater Discharge Permit No. W-351336, Department of

ED_004566_00003778-00022

Public Works, Bureau of Sanitation. Equipment and vehicle washing is not permitted when it is raining. When not in use, the clarifier is sealed using a watertight steel plate, preventing rainwater from entering the clarifier.

3.7.4 Diesel Generator Storage Tank Area (275-02)

The generator and its main diesel AST are located on adjoining concrete bermed secondary containment pads. The main diesel AST consists of a primary metal tank and a secondary metal box constructed around the primary tank. The generator also has an onboard day storage AST that has a capacity of 40 gallons. It is also located within a bermed containment area.

The concrete containment pad is drained using a manual valve that is maintained in the closed position. Pursuant to the Facility's SPCC Plan, draining of rainwater with diesel fuel is prohibited. Procedures for draining the containment area are provided in the Facility's SPCC Plan.

Diesel fuel could leak from hoses or the truck connection located outside the containment area during tank filling. A large spill or leak that occurred outside of containment area during filling of the AST could flow to a nearby storm drain inlet and into the harbor waters.

3.7.5 Sea Vessel Maintenance

Sea vessel maintenance has a high potential for storm water pollution due to the proximity of maintenance activities to the harbor waters. This maintenance (hull and topside) includes engine repairs, mechanical repairs, sanding, grinding, painting, paint and marine growth removal, and pumping of bilge and sanitary wastes. These activities occur in work slips on the water, on the Marine Ways southwest of the Wench House (275-33), and in the bermed dry dock area (Boat Slip Canopy southwest of the Boat Shop 275-87). Bilge and sanitary waste is pumped directly into drums and transferred to the AST or the drums are stored at the Hazardous Waste Storage Area (275-93). For larger vessels, bilge and sanitary waste are pumped directly into a mobile waste truck by a contractor and is transported off-site for disposal.

Painting and marine growth removal conducted in the dry dock area is done so within an asphalt berm.

Pollutants can enter the harbor by:

- Spills from water-side mechanical and physical maintenance activities
- Spills during contaminated bilge waste pumping
- Rainwater washing fluids from land-side sea vessel maintenance areas into the harbor

3.7.6 Employee & Visitor Parking

The primary employee and visitor parking lot is located around the C&M Administration Building (275-02) and the parking area at the southwest portion of the facility. Additionally, there is limited employee and visitor parking north of the Hazardous Waste Storage Area (275-93). The parking lots are a potential source of oils, grease, and other vehicle fluids leaking onto the asphalt surface and being washed into the storm drain by rainwater.

ED_004566_00003778-00023

3.7.7 Chemical Storage and Distribution

Chemical handling at the Facility is associated with routine receipt and distribution of raw products necessary for daily operations at the various shops. Smaller containers of chemicals are primarily stored within chemical cabinets located inside various shops. Bulk products, such as lubricating oils and engine fluids, are stored both inside and outside at various locations throughout the Facility. These products are generally stored in 55-gallon drums or ASTs with secondary containment and protected from precipitation by a cover or enclosure.

Other chemicals and/or raw products, such as paints and thinners, roofing materials, herbicides, pesticides and fertilizers are stored in enclosures or covered in secured areas and are protected to minimize the potential for storm water pollution.

3.7.8 Material & Equipment Storage Areas

Material & Equipment Storage Areas include 1) a paved area west of the Garage Canopy, 2) a paved area between the Harbor Waters and the Heavy Equipment Repair Building (290-13) and Warehouse (290-12) Buildings, 3) a paved area west of the Hazardous Waste Storage Area (275-93), and 4) "The Annex" area located at the south end of the Facility. Rainfall at these areas has the potential to wash leaked equipment fluids and associated sediment and debris into the nearby storm drain system.

Materials such as wood for carpentry, metal piping, fittings, and plumbing appurtenances, and miscellaneous items for traffic control, fuel powered equipment and vehicles are stored outdoors at a number of locations throughout the Facility. Debris, and sediment could be washed into the storm drain system by rainwater flowing over the paved areas.

A Mobile Fuel Truck used by the Port to fuel and service boats and equipment is sometimes stored in the equipment and material storage areas. The fuel truck has a 750-gallon gasoline AST, a 750-gallon diesel AST. Debris and material originating from the mobile fuel truck could be washed into the storm drain system by rainwater flowing over the paved areas.

Rock and sand stockpiles used for preparing sandbags are located on an uncovered asphalt area south of the Materials Warehouse (290-12). The area is enclosed on three sides and the ground surface is sloped toward the enclosure so that rock and sand cannot enter the storm drain system during a rain event.

Periodically, topsoil stockpiles are stored on a paved uncovered bermed area within the Gardening Division at Berth 161. Poor housekeeping during bulk deliveries and handling of this material could result in material breaching the berm and being washed into the nearby storm drain system during a rain event or cleaning of the immediate area.

3.7.9 Wood and Metal Recycling and Storage

Untreated wood recycling and storage is conducted east of the Guard Building (2759001). Untreated wood is scrapped by removing metal and cutting/ripping wood into pieces small enough to store in bins. One bin is used for wood that has not been painted and a separate bin is used for painted wood. Metal recycling and storage is conducted in the southern parking area

ED_004566_00003778-00024

(east of the Temporary Hazardous Waste Storage are (275-93). Wood chips and metal remaining on the asphalt surface can be washed into a nearby storm drain during a rain event.

3.7.10 Hazardous Waste Storage Area (275-93)

A temporary hazardous waste storage area is located at the southeast corner of the Facility. This area is used as an accumulation area for hazardous waste prior to off-site disposal. On average, approximately twenty (20) 55-gallon drums of oil are stored at this location prior to off-site disposal as hazardous waste.

The hazardous waste storage area is a covered containment structure designed to prevent spills and leaks from entering the storm drain system and is considered a minimal potential source of storm water pollution. The containment structure is a three-sided metal structure. The metal roof and walls prevent rainwater from entering the containment area. The floor is concrete with a 2-inch berm. The structure has the capacity to contain up to 1,500 gallons of spilled oil. A small sump is located near the center of the structure. Spills drain toward the sump, where they can easily be pumped during cleanup. The containment area or sump does not have an outlet and absorbent materials are also kept on hand at this location to contain minor spills. Scheduled inspections and specific procedures for draining the containment area of liquids are included in the Facility's SPCC Plan.

3.7.11 General Construction

Throughout the Facility general construction and maintenance can occur. General construction and maintenance could include, but not limited to, installation and repair of underground utilities, installation and repair of asphalt and concrete surfaces and walkways, construction of small structures to support a shop, and other general construction or maintenance activities. These activities can result in the generation and temporary storage of excavated soil, concrete and asphalt stockpiles. Numerous other products and materials needed for construction and maintenance work could also be used and stored. Construction and maintenance activities are a potential source for storm water contamination by solids/sediment and debris.

3.7.12 Wood Dock Repair and Piling Replacement

Wood docks are maintained by the Carpenter Shop. Periodically, decking planks require replacement involving the cutting of wood. This work is done on the dock over Harbor waters and could result in sawdust and wood particles entering the water.

Wharf pilings include fender piles and structural piles and are maintained by the Pile Driving Shop. When a pile needs replacement, the pile barge is towed over to the area and the damaged pile is removed using a crane on the pile barge. If necessary, a diver will be sent to cut off the pile above the mud/bottom. The removed pile is placed on the barge where it is transferred to Berth 194 for temporary storage pending disposal.

ED_004566_00003778-00025

3.7.13 Solid Waste Storage

Solid waste bins are located throughout the Facility. Their locations are fixed but can vary due to changing operations and activities at the Facility. These solid waste bins are equipped with covers and used for municipal solid waste. These bins are a potential source for storm water contamination if left uncovered allowing rainwater to filter through the solid waste and leak onto the ground, flowing into a storm drain inlet.

3.7.14 Storm Drain System

The Port maintained storm drain system functions to collect and convey runoff to receiving waters during storm events in order to prevent flooding. Trash, debris and non-storm water discharges have the potential to enter the storm drain system and discharge to the harbor waters.

3.7.15 Sewage System

The Port owned and maintained sewage system functions to convey Facility sewage to the main sewer system and onto a City owned and operated treatment plant. This sewage system is considered a minimal potential source of storm water pollution.

3.8 STORMWATER BEST MANAGEMENT PRACTICES (BMPS)

Implementation of this SWPPP began in September 1999. Initial BMPs identified for the Facility were, for the most part, completed by July 2000. The SWPPP was revised in April 2001, February 2005, March 2007, April 2007, April 2008, April 2014, and August 2017. Each of these revisions identified existing BMPs being implemented at the Facility and proposed BMPs to be implemented at the Facility, pending allocation and availability of funds and personnel.

3.8.1 Existing BMPs

Berth 161 has developed a procedure entitled "Preventing & Responding to Spills" (Operational Control EMS07-GEN-06). The purpose of this procedure is to outline the correct process to prevent and respond to spills with minimum impact to the environment. A copy of the operational control procedure is located at each of C&M's Environmental Management Systems (EMS) Information Centers which are noted on Figure 2. Attachment B is the Facility's SWPPP Annual Refresher Training Program.

3.8.1.1 Training

Training is a common BMP to all activities and operations subject to SWPPP requirements. Employee and contractor training is a method to implement BMPs by educating employees as to the importance of storm water pollution prevention while instilling in employees the environmental benefits of preventing storm water pollution. Subsequent to an orientation program, follow-up training at regular intervals, as determined by the SWPPP Coordinator (see Table 2), is also necessary to assure adequate understanding of training goals and objectives. Training elements include the following:

ED_004566_00003778-00026

- Training of all personnel classifications that plan, supervise and/or perform activities that could negatively impact storm water quality.
- Training programs establish a relationship between general storm water program requirements and BMPs for each activity and focus on the potential for storm water pollution and the associated impacts on receiving waters.
- Emergency response procedures, as contained in the most recent port wide Emergency Response Plan, and spill reporting are included in SWPPP training.
- Handout materials, including checklists, manuals, or other documentation that can be used as reference information are provided.
- Employee feedback is integrated into training and BMPs implementation.

Training will be performed annually before June 30. Table 4 presents existing BMPs that are currently being implemented at the Facility.

Table 4 - Applicable Best Management Practices

Area/ Activity	Pollutant Source	Pollutant	BMP
Vehicle, Vessel & Equipment Fueling • UST Area (275-99) & Fuel Island (275901) • Mobile Fuel Truck)	Spills & leaks during deliveries Spills and leaks during vehicle and equipment servicing Rain running onto & off of fueling area	Gasoline, diesel & other vehicle fluids	• Train employees in proper fueling and cleanup procedures (see Attachment C for EMS07-142-01). • The capacity of the fuel tank shall be marked on the tank. The volume of liquid being transferred shall be measured with a metering device that is accurate and compatible with the liquid. Use of a meter avoids overfilling the tank and records total gallons delivered to the tank. Maintain labeled spill kits readily available and within a reasonable distance. • The hose from the tank vehicle to the tank fill pipe shall be connected and all connections must be correct and secure and the hose must appear in good condition. • As the tank is filled, it shall be monitored to verify the transfer is occurring smoothly with no spillage or leaks. Transfer of fuel shall cease immediately if there are any leaks in the transfer equipment. The fuel-dispensing nozzle shall have an automatic shut off. • Tank monitor shall be read to verify quantity of fuel in tank. • Discourage topping off of fuel tanks • Maintain shut-off valves on fueling nozzles. • Use adsorbent materials on spills as opposed to hosing down.

ED_004566_00003778-00027

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
			• Install and maintain covered spill kits next to fueling areas. • Vehicle fueling area is covered and bermed. Surrounding area has been graded to divert rainwater around fueling area. • Conduct inspections to confirm adherence to these BMPs.
Vehicle & Equipment Maintenance (Heavy Equipment Repair [290-13] and Canopy (276-73), Garage [275-03]/Grease Rack [275-06] Building, Garage Canopy, and Tire Area)	Vehicle spills and leaks Container spills and leaks	Gasoline, diesel, other vehicle fluids, solvents, degreasers, hydraulic oil	• Train employees in proper cleanup procedures of spills and leaks. Maintain labeled spill kits readily available and within a reasonable distance. • Keep equipment clean, disallowing excessive grease/oil buildup. • Use drip pans for any leaking vehicle or equipment. • Complete all maintenance in proper location. • Refraining, to the extent possible, from performing maintenance outside of garage or service bay. • If vehicle maintenance must be performed outdoors, deploy spill kits and drip pans, conduct work during non-storm events, cover area when possible, and clean area after use. • Maintain an organized inventory of materials, secure all materials in a proper storage area when not in use, and keep all containers closed and free of residue. • Store used/new batteries securely to prevent breakage and acid spills. • Cover stored material prior to rain event. • Ensure all materials stored outdoors are elevated. • Use vacuum to collect brake dust and bag worn brake pads and dispose of both properly. • Inspect for leaks. • Promptly transfer used fluids to proper containers. • Promptly disposing of non-recyclable products. • Recycle waste oil, hydraulic fluids, cleaning solvents, and anti-freeze. • Maintain readily available spill kits and cleanup spills immediately.

ED_004566_00003778-00028

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
			• Employee dry sweeping of shop floor and outdoor areas frequently. • Conduct inspections to confirm adherence to these BMPs.
Vehicle & Equipment Washing (Wash Rack area [276-13] north of Old C&M Administrative Building [275-84])	Washing particulates and debris off vehicles and equipment	Sediment, metals, vehicle fluids	• Train employees in proper cleanup procedures of spills and leaks. Maintain labeled spill kits readily available and within a reasonable distance. • Conduct washing only at the Wash Rack Cleaning area where the area is covered and the surface sloped to sump and clarifier. • Daily inspect the clarifier rainwater bypass valve to ensure it is not engaged. • Inspect clarifier frequently and properly remove and dispose of sludge as needed. • Adhere to the industrial waste discharge permit requirements for the clarifier. • Maintain water tight cover on clarifier when not in use. • Conduct inspections to confirm adherence to these BMPs.
Diesel Generator Storage Tank Area (west of the C&M Administration Building [275-02])	Spills & leaks during deliveries Rain running onto & off of fueling area	Diesel fuel	• Train employees in proper fueling of diesel tank and cleanup procedures (see Attachment C). Maintain labeled spill kits readily available and within a reasonable distance. • The capacity of the tank shall be marked on the tank. The volume of liquid being transferred shall be measured with a metering device that is accurate and compatible with the liquid. Use of a meter avoids overfilling the tank and records total gallons delivered. • The hose from the tank vehicle to the tank fill pipe shall be connected and all connections must be correct and secure and the hose must appear in good condition. • Where possible use drip pans or buckets under connections to capture minor spills. • As the tank is filled, it shall be monitored to verify the transfer is occurring smoothly with no spillage or leaks. Transfer of fuel shall cease immediately if there are any leaks in the transfer equipment. The fuel-dispensing nozzle shall have an automatic shut off.

ED_004566_00003778-00029

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
			• Tank monitor shall be read to verify quantity of fuel in tank. • Discourage topping off of tanks. • Use adsorbent materials on spills as opposed to hosing down. • Install and maintain covered spill kits next to generator/diesel tanks area. • Conduct inspections to confirm adherence to these BMPs.
Sea Vessel Maintenance (Boat Slips, Marine Ways, & Dry Dock)	Vessel spills & leaks, spills and solid debris from mechanical and physical maintenance activities (sanding, grinding, painting). Spills during pumping of sanitary waste and bilge waste	Fuel, oils, engine fluids, paints, solvents, solid debris, wood and fiberglass dust, sanitary waste, bilge waste, metals	• Train employees in proper cleanup procedures of spills and leaks. Maintain labeled spill kits readily available and within a reasonable distance. • Properly dispose of all maintenance generated residues. • Maintain an organized inventory of materials used in the Boat Shop. • Careful collection and proper disposal of sanitary wastes and oily bilge water. Adhere to bilge waste handling procedures described in the Facility's SPCC Plan. • At Marine Way pull vessel as far from receiving water as possible. • Prepare surface area under vessel at Marine Ways and dry dock by placing a tarp or heavy plastic under the blocked vessel. • Enclose, cover, shroud areas while performing abrasive blasting, sanding, grinding, and painting at boat slips, Marine Ways and dry dock, or other areas where materials may reach the water or storm system. • If the size and shape of the vessel makes it impracticable for pollutant containment, then other methods should be deployed, such as dust suppression or when the wind direction prevents discharging to the receiving water. • When possible, use dust collecting bag sanders. • Cover storm drains to prevent material from reaching the water or storm system. • Prohibit sanding, grinding, and painting when windy conditions render containment ineffective.

ED_004566_00003778-00030

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
			• Dry dock maintenance only conducted within the bermed dry dock area. • Inspect and clean bilge before starting work that opens or penetrates the hull. • Deploy oil-absorbing pads in bilges. • Use only water for hull cleaning and water blasting. • Minimize over-water hull surface maintenance sanding and minor painting. • Mix paints and solvents only in designated areas away from surface waters. • Use ground cloths when painting boats. • Use secondary containment on paint cans. • Frequent sweeping and vacuuming of vessel maintenance areas. • Maintain ground and deck surfaces free of obstructions which can hinder the cleanup of these surfaces. • Conduct inspections to confirm adherence to this BMP.
Employee and Visitor Parking located throughout the facility	Spills and Leaks from Vehicles	Oils, gasoline, antifreeze, and other vehicle related fluids	• Train employees in proper cleanup procedures of spills and leaks. • Conduct inspections to confirm adherence to these BMPs.
Chemical Storage and Distribution (throughout Facility)	Spills from loading/ unloading/ delivery and distribution throughout the Facility Containers spills and leaks	Antifreeze, oils lubricants, engine fluids, cleaning solvents, paints and thinners	• Train employees in proper cleanup procedures of spills and leaks • Ensure all forklift operators are trained in the proper handling of hazardous materials. • Maintain spill kits at all storage and distributions areas. • Frequently inspect chemical storage and distribution areas. • Maintain existing secondary containment systems in working order. • Ensure drums and containers are properly labeled. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00031

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Material & Equipment Storage Areas Primary Locations • Material & Equipment Storage Areas • Paved Area west of Garage Canopy • Paved Area Between Harbor Waters and Heavy Equipment Repair Building (290-13) and the Warehouse (290-12) • Paved area west of the Hazardous Waste Storage Area (275-93) • Paved area at the Annex location at the south end of the Facility • Rock and sand stockpiles located south of Materials	Rainfall onto stored materials and equipment, washing debris and particulates into storm drain	Vehicle and equipment fluids, and associated debris, sediment, and sand	• Train employees in proper cleanup procedures of spills and leaks. • Use drip pans or buckets beneath leaking vehicles and equipment. • Frequently sweep or vacuum storage areas. • Frequently inspect for leaks and sediment buildup. • Collect debris as necessary. • Cover stored material prior to rain event. • Ensure all materials stored outdoors are elevated. • Provide spill kits for quick response to a leak. • Maintain berms around rock and sand stockpile storage areas. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00032

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Warehouse (290-12)			
Wood and Metal Recycling and Storage • Bin in parking area east of Guard Building (2759001) • Bin in parking area at south end of facility (north of Annex Area)	Solid debris from wood and metal	Wood and metal chips	• Train employees in proper cleanup procedures of spills and leaks. • Post signage that identifies the area and what is permissible to store. • Prohibit treated wood recycling and storage. • Dry sweep prior to each storm event. • Avoid storage of wood and other materials directly on the ground or in volumes that are not easily covered. • Cover all stored materials prior to rain event and make sure they are elevated. • Do not conduct recycling activities during rain event or in windy conditions that render pollutant containment ineffective. • Keep storage bins covered during rain events. • Conduct inspections to confirm adherence to these BMPs.
Temporary Hazardous Waste Storage Area (275-93)	Spills or leaks from drums	Waste oils and other toxic liquids	• Train employees in proper cleanup procedures of spills and leaks. • Maintain spill kits at waste storage area. • Maintain covered storage area. • Ensure drums and containers are properly labeled and stored away from traffic areas. • Frequently inspect storage area as deemed necessary by the SWPPP coordinator. • Adhere to the Facility's SPCC Plan as it relates to the hazardous waste storage area. • Maintain storage containers and drums in good condition. • Regularly sweep in and around storage area. • Conduct inspections to confirm adherence to these BMPs.
General Construction Activities (throughout Facility)	Solids from construction materials, debris, and stockpiled soils.	Liquids, solids, and general debris	• Train employees in proper cleanup procedures of spills and leaks. • Make sure public contractors doing construction work at the Facility are aware of BMPs for their activities and inspect their area frequently to assure compliance. • Stockpiled soil, sand, gravel, concrete, asphalt, etc. must be covered with plastic

ED_004566_00003778-00033

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
			sheeting during rain events and at the end of a shift to prevent uncontrolled storm water runoff from the stockpiles. • Stockpiles should be staged at areas protective of storm drains. • Where necessary employ other industry standard construction BMPs to prevent pollutants from reaching the storm water system or receiving water. Examples include but are not limited to dust control, barriers, fiber rolls, filter berms, sand bags, and straw bales. • Prohibit work when wind conditions render controls ineffective at preventing the release of pollutants to the storm system or receiving water. • Prohibit concrete washouts at the Facility, or if not possible, collect and retain concrete washout water and solids in a leak proof container for off-site disposal or recycling. • Construction material should be stored off the ground and covered when not being used. • Where necessary employ heavy equipment rumble strips at ingress and egress of construction site to prevent tracking of dirt and sediment elsewhere at the Facility. Collect and contain dirt and debris at rumble strips on a daily basis. • Conduct daily sweeping or vacuuming of the construction area. • Conduct inspections to confirm adherence to these BMPs.
Wood Dock Repairs	Wood pieces and shavings, creosote treated wood, and grease and oil from cutting and pile driving equipment	Solids and creosote	• Train employees in proper cleanup procedures of spills and leaks. • Place plastic sheeting under area to be removed or and where cutting is performed to catch wood pieces and sawdust (refer to Operational Control EMS07-Gen_04). • Enclose, cover, or shroud area if wind conditions can carry sawdust to drift over harbor water. • Prohibit work when windy conditions render containment ineffective.

ED_004566_00003778-00034

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
			• Where practical replace removed planks with an environmentally safe material. • Store support material on plastic or plywood placed over the deck. • Maintain deck surface free of obstructions which can hinder cleanup. • Where applicable, use dust collecting bag sanding and other equipment. • Sweep or vacuum deck area and collect debris and sawdust for proper disposal. • Conduct inspections to confirm adherence to these BMPs.
Pile Removal & Replacement	Wood pieces and shavings, creosote treated wood,	Solids and creosote	• Train employees in proper cleanup procedures of spills and leaks. • Consider replacing removed treated piles with materials that will not leach chemicals into the water and are more resistant to degradation, such as engineered wood, reinforced concrete, coated steel, recycled plastic, plastic reinforced with fiberglass, and fiberglass wrapped treated timber pilings. • Contain shavings when field cutting pilings. • Have emergency spill kits and cleanup materials readily available during pile removal and replacement or anytime working near or on the water. • All equipment is to be maintained in good operating order to prevent leaking or spilling of hydraulic fluid, diesel, gasoline, and other liquids and products. • Pile cut-offs, waste or any other miscellaneous materials will be immediately recovered for disposal and/or placement in the wood recycling area for processing. • Inspect equipment every day at startup and repair equipment as needed. Recheck equipment at shift changes or at the end of the day. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00035

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Solid Waste Storage	Spills or leaks from solid waste containers	Garbage and debris	• Train employees in proper cleanup procedures of spills and leaks. • Provide solid waste containers in convenient locations. • Provide covers for all solid waste containers and keep closed at all times. • Frequently inspect solid waste containers and surrounding area. • Frequently sweep areas around solid waste containers. • Maintain a service schedule for the emptying of containers that is frequent enough to ensure that overflow does not occur. • Conduct inspections to confirm adherence to these BMPs.

Storm Drain System	Washing and/or collection of trash, debris, and non-storm water discharges	Trash, debris, and non-storm water discharges	• Train employees in proper inspection, protection, and cleaning of the storm drain system.
			• Maintain an inventory of all catch basins and inlets to the storm drain system.
			• Prioritize and map catch basin as follows:
			  • Priority A – Catch basins that are designated as consistently generating high volumes of trash and/or debris.
			  • Priority B – Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.
			  • Priority C – Catch basins that are designated as consistently generating low volumes of trash and/or debris.
			• Inspect catch basins according to the following schedule:
			  • Priority A – A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.
			  • Priority B – A minimum of once during the wet season and once during the dry season every year.
			  • Priority C – A minimum of once per year.
			• Label/stencil storm drains with a legible "no dumping" message. Inspect for legibility

ED_004566_00003778-00036

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
			prior to the wet season each year. Illegible stencils will be re-stenciled or re-labeled within 180-days of inspection. • Inspect and clean catch basins as necessary of litter and debris on the basis of inspection. At a minimum, catch basins determined to be 25% full of trash shall be cleaned out. • Record all catch basins cleaned, including locations of catch basins, dates inspected and cleaned on existing "Port of L.A. Storm water Catch Basin Inspection" Form. Responsibility for completing this form belongs to Mr. Frank Albers at Berth 161. • Ensure that all material removed does not reenter the system. • Properly dispose of waste collected from catch basins. • Avoid, to the extent possible, maintenance activities during windy or rainy weather so as to minimize waste potentially material transported to receiving waters. • Maintain sufficient waste collection bins on-site. • Place solid waste/garbage in bins and dispose of waste at a licensed sanitary landfill or recycling facility. • Conduct inspections to confirm adherence to these BMPs.
Sewage System	Cracked/ deteriorated pipes, leaking joints or seals, system blockage, overflowing, and cross connections to storm drain system	Sewage	• Train employees in proper inspection and cleaning of the sewage system. • Dispatching appropriate personnel when a spill, leak, or overflow occurs to: (1) deploy sandbags, inflatable dams, etc.; (2) cover or block storm drain inlets and catch basins; and (3) contain or divert sewage away from open channels to prevent sewage from entering storm drain. • Collect sewage spillage using vacuum equipment or use other measures to divert it back to the sanitary sewer system. • Make every effort to ensure that, when disinfecting a sewage contaminated area, disinfectant and/or sewage treated with

ED_004566_00003778-00037

Table 4 - Applicable Best Management Practices			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
			disinfectant is not discharged to storm drain or receiving waters by blocking drains and catch basins and using vacuum equipment to collect material. • Record information regarding spills/leaks. • Investigate as necessary to determine the cause of incident and initiate steps to prevent similar occurrence in the future. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00038

4.0 COMPLETED INSPECTION FORMS

This section includes copies of all completed inspection and cleaning forms (including the portion of the existing "Port of L.A. Storm water Catch Basin Inspection" form applicable to Berth 161). These forms are to be kept and maintained in this SWPPP and are the responsibility of the SWPPP coordinator.

ED_004566_00003778-00039

5.0 RUNOFF SAMPLING

The Watershed Protection Division (WPD) of the City of Los Angeles Bureau of Sanitation is the lead office for the City's Storm water Management Program. Runoff sampling is performed as needed at the request of the WPD. Currently, the WPD does not include Berth 161 in their runoff sampling location. Copies of any future sampling events are to be kept and maintained in this SWPPP and are the responsibility of the SWPPP coordinator.

ED_004566_00003778-00040

6.0 SWPPP TRAINING

6.1 EMPLOYEE TRAINING

Employee training is a method to implement BMPs by educating employees as to the importance of storm water pollution prevention while instilling in employees the environmental benefit of preventing storm water pollution. Subsequent to an orientation program, follow-up training at regular intervals is also necessary to assure adequate understanding of the training goals and objectives presented below.

- Programs should establish a relationship between general storm water program requirements and BMPs for each activity and focus on the potential for storm water pollution and the associated impacts on the receiving waters.
- Emergency response procedures, as contained in the most recent port wide Emergency Response Plan, and spill reporting should also be included in storm water pollution prevention training.
- Employee feedback should be integrated into training and BMP implementation.

Training should include all classifications that plan, supervise, and/or perform activities that could negatively impact storm water quality. The SWPPP Coordinator or his designee is responsible for the employee training program, its implementation, and ensuring that employees 'requiring this training have received it. Follow-up employee refresher training will be determined by the SWPPP Coordinator but should be on an annual basis or more often if necessary.

At a minimum, initial employee training topics must include the following (see Attachment B, Training Program). The Training Program should also be evaluated by the SWPPP Coordinator or his designee for its effectiveness and when necessary improvements made:

- Vehicle, Sea Vessel & Equipment Fueling
- Vehicle, Sea Vessel & Equipment Maintenance
- Vehicle & Equipment Washing
- Parking Lots and Equipment Storage Areas
- Chemical and Waste Storage Areas
- Drainage Systems

6.2 TRAINING RECORDS

Records of initial and follow-up employee training are to be maintained by the SWPPP Coordinator or his designee. These records should be kept on file with a copy of the SWPPP.

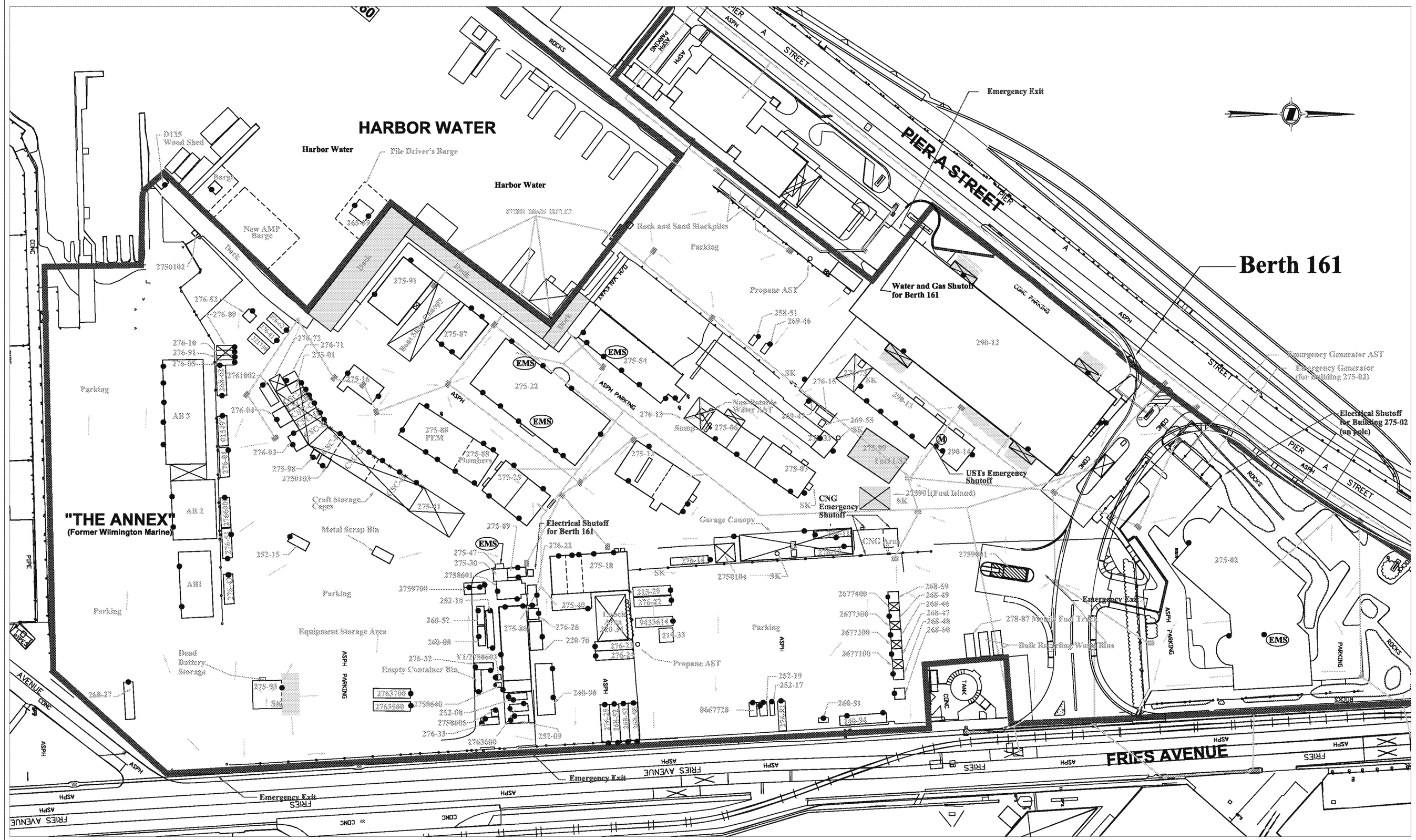
ED_004566_00003778-00041

Figures

ED_004566_00003778-00042

Page intentionally left blank

FIGURE 1 - SITE LOCATION MAP



Reference: Base Map provided by City of Los Angeles Harbor Department (February 25, 2015)

BUILDING/STRUCTURE IDENTIFICATION LEGEND

215-29	Container Tree Trimming (Gardeners)
219-33	Container Hazmat Storage (Gardeners)
220-34	Canopy Lunch Area
220-70	Shed (Gardeners)
240-94	Trailer (Roofers)
240-98	Trailer (Gardener's Office)
252-08	Water Base Locker (Painters)
252-09	Oil Base Locker (Painters)
252-10	Container (Painters)
252-15	Container
252-17	Container
252-19	Container (Electricians)
258-51	Container
260-08	Trailer (Painters)
260-51	Trailer (Painters)
260-52	Trailer (Painters)
265-39	Barge (Pile Drivers)
268-27	Container (Laborers)
268-46	Container B (Roofers)
268-47	Container C (Roofers)
268-48	Container D (Roofers)
268-49	Container A (Roofers)
268-50	Container 4 (Gardeners)
268-51	Container 5 (Gardeners)
268-52	Container 3 (Gardeners)
268-59	Container E (Roofers)
268-60	Container F (Roofers)
268-62	Container (Homeland Security)
269-46	Container (Boat Shop)
269-55	Shed
269-47	Container (Boat Shop)
275-01	Compound (Roofers)
275-02	C&M Administration Building (new)
275-03	Garage Building (Garage)
275-06	Grease Rack Building (Garage)
275-12	HVAC Systems Shop
275-16	Backflow Unit Shop (Plumbers)
275-18	Carpenter Shop/Rigger Loft
275-22	Consolidated Shops
275-25	Blacksmith & Welding Shop
275-30	Sandblaster Booth
275-33	Winch House
275-40	Emergency Preparedness Kitchen Facility
275-41	Cabana (Welders)
275-47	EMS Station
275-84	C&M Administration Building (old)
275-86	Paint Shop
275-87	Boat Shop
275-88	PEM Shop/Plumbers Storage
275-89	Air Compressor Shelter
275-91	Multi-Purpose Bldg.
275-93	Temp. Hazardous Waste Storage Area
275-98	Ice Machine Shed
275-99	Fuel USTs (Garage)
276-01	Container
276-04	Shed (Carpenters)
276-05	Container (Carpenters)
276-09	Container (Carpenters)
276-10	Container (Carpenters)
276-11	Container (Garage)
276-12	Container (Garage)
276-13	Wash Rack Canopy (Laborers)
276-14	Container (Garage Tire Workshop)
276-15	Container (Garage)
276-21	Shed (Gardeners)
276-22	Container (Gardeners)
276-23	Container (Gardeners)
276-24	Container (Gardeners)
276-25	Container (Gardeners)
276-26	Restroom (Gardeners)
276-32	Container (Painters)
276-33	Colored Latex Locker (Painters)
276-43	Container (Plumbers)
276-51	Container (Pile Drivers)
276-52	Shed (Pile Drivers)
276-61	Container (HVAC)
276-62	Container (HVAC)
276-71	Shed (Paving)
276-72	Shed
276-73	Heavy Equipment Canopy (Garage)
276-91	Shed (Carpenters)
276-92	Shed (Carpenters)
290-12	Materials Warehouse (Purchasing)
290-13	Heavy Equip. Repair Shop (Garage)
290-14	Wrap Shack (Pile Drivers)
015497	Container
0667728	Container (Gardeners)
221739	Container (Plumbers)
275901	Fuel Island Canopy (Garage)
2677100	Canopy (Roofers)
2677200	Canopy (Roofers)
2677300	Canopy (Roofers)
2677400	Canopy (Roofers)
2750102	Shed (Pile Drivers)
2750103	Shed
2750104	Canopy (Garage)
2758601	Brush/Rolling Shed (Painters)
2758603	(Y1) Paint Locker (Painters)
2758605	(Y4) Cleaner Locker (Painters)
2758640	Hazardous Waste Storage Cage
2759001	Guard Building
2759700	Spray Booth (Painters)
2761002	Container (Painters)
2763500	Container (Painters)
2763600	Container (Painters)
2763700	Container (Painters)
2766000	Container
9433614	Container
AB1	Annex Building 1
AB2	Annex Building 2
AB3	Annex Building 3
D135	Shed

Craft Storage Cages

CSC-A (Roofers)
CSC-B
CSC-C
CSC-D
CSC-E (Laborer)
CSC-F (PEM)
CSC-G (Painters/Machine)
CSC-H (PEM)

GENERAL LEGEND

= Structure Information

= Storm Drain

= Canopy Area

= Hazardous Materials Loading / Unloading

(M) = UST Monitoring Panel

(EMS) = Environmental Management System Information Centers

Note: Location of storm drain and sanitary sewer are approximate

PACIFIC EDGE ENGINEERING, INC.

PORT OF LOS ANGELES - BERTH 161
500 PIER "A" STREET
WILMINGTON, CALIFORNIA

FIGURE 2
BERTH 161
SITE MAP
SWPPP - AUGUST 2017

Date:	AUG 2017	Scale:	N.T.S.
Drawn By:	TWB	Sheet:	1 of 1
Checked By:	TWB	ADP#	090324-751H

ED_004566_00003778-00045

Attachment A

LARWQCB Order No. R4-2012-0175, as Amended by R4-2012-0175-A01 (less attachments)

- **Note: The following attachments can be located at** http://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/index.shtml.
- Attachment A – Definitions
- Attachment B – Watershed Management Area Maps
- Attachment C – MS4 Maps by Watershed Management Area
- Attachment D – Standard Provisions
- Attachment E – Monitoring and Reporting Program
- Attachment F – Fact Sheet
- Attachment G – Non-Storm Water Action Levels
- Attachment H – Bioretention / Biofiltration Design Criteria
- Attachment I – Developer Technical Information and Guidelines
- Attachment J – Determination of Erosion Potential
- Attachment K – Permittees and TMDLs Matrix
- Attachment L – TMDL Provisions for Santa Clara River Watershed Management Area
- Attachment M – TMDL Provisions for Santa Monica Bay Watershed Management Area (including Malibu Creek, Ballona Creek, and Marina del Rey Subwatersheds)
- Attachment N – TMDL Provisions for Dominguez Channel and Greater Harbor Waters Watershed Management Area (including Machado Lake Subwatershed)
- Attachment O – TMDL Provisions for Los Angeles River Watershed Management Area
- Attachment P – TMDL Provisions for San Gabriel River Watershed Management Area
- Attachment Q – TMDL Provisions for Los Cerritos Channel and Alamitos Bay Watershed Management Area
- Attachment R – TMDL Provisions for Middle Santa Ana River Watershed Management Area

Page intentionally left blank

Attachment B

SWPPP Training Program

PACIFIC EDGE ENGINEERING
(949) 470-1937; (949) 470-0943 (FAX)

Page intentionally left blank

Construction and Maintenance Division
Inter-Office Memorandum

Date: (to be inserted)

To: All Construction and Maintenance Division Supervisors

From: Director of Port Construction and Maintenance

Subject: STORMWATER POLLUTION PREVENTION TRAINING

Storm water becomes contaminated when rainfall and runoff comes in contact with pollutants on exposed surfaces and then travels to receiving waters. City of Los Angeles Departments which operate facilities (i.e. Berth 161) which have the potential to discharge pollutants into the storm water runoff system are required to develop and implement a Storm water Pollution Prevention Plan (SWPPP). Best Management Practices (BMPs) have been identified which provide guidance to employees to assist in reducing the amount of pollutants contained in storm water runoff.

Employee training is a method to implement BMPs by educating employees as to how they can prevent storm water pollution and instilling in the employee's the environmental benefit of preventing pollution of the receiving waters.

Attached is this month's Storm water Pollution Prevention Tailgate Safety Meeting Topic. Please make copies and distribute to each of your employees, remind them of the Storm water Pollution Prevention Program, and discuss the BMPs with them. Document training in your tailgate safety meeting synopsis report. Employee feedback, positive or negative, should be reported through the chain-of-command.

Page intentionally left blank

SWPPP Training: Vehicle, Sea Vessel, & Equipment Fueling			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Vehicle, Vessel, & Equipment Fueling • UST Area (east of the Lumber & Steel Warehouse [290-13]) • Mobile Fuel Truck (north end of the Garage [275-03]/Grease Rack [275-04] Building • Diesel Generator AST (west of 275-02) • Hydraulic Oil Reservoir AST (west side of 275-03/06)	Spills & leaks during deliveries Spills and leaks during vehicle and equipment servicing Rain running onto & off of fueling area	Gasoline, diesel & other vehicle fluids	• Train employees in proper fueling and cleanup procedures (see Attachment C). Maintain labeled spill kits readily available and within a reasonable distance. • The capacity of the tank shall be marked on the tank. The volume of liquid being transferred shall be measured with a metering device that is accurate and compatible with the liquid. Use of a meter avoids overfilling the tank and records total gallons delivered to the tank. • The hose from the tank vehicle to the tank fill pipe shall be connected and all connections must be correct and secure and the hose must appear in good condition. • Where possible use drip pans or buckets under connections to capture minor spills. • As the tank is filled, it shall be monitored to verify the transfer is occurring smoothly with no spillage or leaks. Transfer of fuel shall cease immediately if there are any leaks in the transfer equipment. The fuel-dispensing nozzle shall have an automatic shutoff. • Tank monitor shall be read to verify quantity of fuel in tank. • Discourage topping off of fuel tanks • Maintain shut-off valves on fueling nozzles. • Use adsorbent materials on spills as opposed to hosing down. • Vehicle fueling area is covered and bermed. Surrounding area has been graded to divert rainwater around fueling area. • Conduct inspections to confirm adherence to these BMPs.

SWPPP Training: Vehicle & Equipment Maintenance			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Vehicle & Equipment Maintenance (Heavy Equipment Repair Building [290-13] and Canopy [276-73], Garage [275-03] /Grease Rack [275-06] Building, Garage Canopy, and Tire Area)	Vehicle spills and leaks Container spills and leaks	Gasoline, diesel, other vehicle fluids, solvents, degreasers, hydraulic oil	• Train employees in proper cleanup procedures of spills and leaks. Maintain labeled spill kits readily available and within a reasonable distance. • Keep equipment clean, disallowing excessive grease/oil buildup. • Use drip pans for any leaking vehicle or equipment. • Complete all maintenance in proper location. • Refraining, to the extent possible, from performing maintenance outside of garage or service bay. • If vehicle maintenance must be performed outdoors, deploy spill kits and drip pans, conduct work during non-storm events, cover area when possible, and clean area after use. • Maintain an organized inventory of materials, secure all materials in a proper storage area when not in use, and keep all containers closed and free of residue. • Store used/new batteries securely to prevent breakage and acid spills. • Cover stored material prior to rain event. • Ensure all materials stored outdoors are elevated. • Use vacuum to collect brake dust and bag worn brake pads and dispose of both properly. • Inspect for leaks. • Promptly transfer used fluids to proper containers. • Promptly disposing of non-recyclable products. • Recycle waste oil, hydraulic fluids, cleaning solvents, and anti-freeze. • Maintain readily available spill kits and cleanup spills immediately. • Employee dry sweeping of shop floor and outdoor areas frequently.

			• Conduct inspections to confirm adherence to these BMPs.

SWPPP Training: Vehicle & Equipment Washing			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Vehicle & Equipment Washing (Wash Rack Area [276-13] located north of Old C&M Administration Building [275-84])	Washing particulates and debris off vehicles and equipment	Sediment, metals, vehicle fluids	• Train employees in proper cleanup procedures of spills and leaks. Maintain labeled spill kits readily available and within a reasonable distance. • Conduct washing only at the Land & Water Cleaning area where the area is covered and the surface sloped to sump and clarifier. • Daily inspect the clarifier rainwater bypass valve to ensure it is not engaged. • Inspect clarifier frequently and properly remove and dispose of sludge as needed. • Adhere to the industrial waste discharge permit requirements for the clarifier. • Maintain watertight cover on clarifier when not in use. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00055

SWPPP Training: Sea Vessel Maintenance

Area/ Activity	Pollutant Source	Pollutant	BMP
Sea Vessel Maintenance (Boat Slips, Marine Ways southwest of Wench House [275-33] and Boat Shop Canopy (southwest of Boat Shop [275-87].	Vessel spills & leaks, spills and solid debris from mechanical and physical maintenance activities. Spills during pumping of sanitary waste and bilge waste	Fuel, oils, engine fluids, paints, solvents, solid debris, dust, sanitary waste, bilge waste	• Train employees in proper cleanup procedures of spills and leaks. Maintain labeled spill kits readily available and within a reasonable distance. • Properly dispose of all maintenance generated residues. • Maintain an organized inventory of materials used in the Boat Shop. • Careful collection and proper disposal of sanitary wastes and oily bilge water. Adhere to bilge waste handling procedures described in the Facility's SPCC Plan. • At Marine Way, pull vessel as far from receiving water as possible. • Prepare surface area under vessel at Marine Ways and dry dock by placing a tarp or heavy plastic under the blocked vessel. • Enclose, cover, shroud areas while performing abrasive blasting, sanding, grinding, and painting at boat slips, Marine Ways and dry dock, or other areas where materials may reach the water or storm system. • If the size and shape of the vessel makes it impracticable for pollutant containment, then other methods should be deployed, such as dust suppression or when the wind direction prevents discharging to the receiving water. • When possible, use dust collecting bag sanders. • Cover storm drains to prevent material from reaching the water or storm system. • Prohibit sanding, grinding, and painting when windy conditions render containment ineffective. • Dry dock maintenance only conducted within the bermed dry dock area. • Inspect and clean bilge before starting work that opens or penetrates the hull.

ED_004566_00003778-00056

			• Deploy oil absorbing pads in bilges. • Use only water for hull cleaning and water blasting. • Minimize over-water hull surface maintenance sanding and minor painting. • Mix paints and solvents only in designated areas away from surface waters. • Use ground cloths when painting boats. • Use secondary containment on paint cans. • Frequent sweeping of vessel maintenance areas. • Maintain ground and deck surfaces free of obstructions which can hinder the cleanup of these surfaces. • Conduct inspections to confirm adherence to these BMPs.

SWPPP Training: Parking Lots and Equipment Storage Areas			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
C&M Employee Vehicle Parking Lots	Spills and leaks from vehicles	Oils, gasoline, antifreeze, and other vehicle related fluids	• Train employees in proper cleanup procedures of spills and leaks. • Parking lots shall be kept clear of debris and excessive oil buildup and cleaned no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a parking lot be cleaned less than once a month. • Immediately contain and clean up spills and leaks. • Post signage to inform users of pollution prevention techniques and that littering or dumping is prohibited. • Stencil storm drains. • Provide conveniently located trash containers and regularly service them. • Conduct inspections to confirm adherence to these BMPs.
Vehicle & Equipment Parking/Storage	Vehicle and equipment leaks, and associated dirt/debris	Sediment, metals, gasoline, diesel, vehicle and equipment fluids/oil	• Train employees in proper cleanup procedures of spills and leaks. • Use drip pans beneath leaking vehicles and equipment. • Frequently sweep or vacuum storage areas. • Parking lots shall be kept clear of debris and excessive oil buildup and cleaned no less than 2 times per month and/or inspected no less than 2 times per month to determine if cleaning is necessary. In no case shall a parking lot be cleaned less than once a month. • Collect debris as necessary. • Cover stored material prior to rain event. • Ensure all materials stored outdoors are elevated. • Provide spill kits for quick response to a leak. • Conduct inspections to confirm adherence to these BMP.

Material & Equipment Storage Areas •	Rainfall onto stored materials, washing debris and particulates into storm drain	Sediment, sand, and creosote	• Maintain berms around bulk material storage areas. • Cover stored material prior to rain event. • Ensure all materials stored outdoors are elevated. • Regularly sweep or vacuum surfaces around bulk material storage areas. • Frequently inspect bulk material storage areas. • Conduct inspections to confirm adherence to these BMPs.

SWPPP Training: Chemical and Waste Storage Areas			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Chemical Storage and Distribution (throughout Facility)	Spills from loading/ unloading/ delivery and distribution throughout the Facility Containers spills and leaks	Antifreeze, oils lubricants, engine fluids, cleaning solvents, paints and thinners	• Train employees in proper cleanup procedures of spills and leaks. • Ensure all fork lift operators are trained in the proper handling of hazardous materials. • Maintain spill kits at all storage and distributions areas. • Frequently inspect chemical storage and distribution areas. • Maintain existing secondary containment systems. • Ensure drums and containers are properly labeled. • Conduct inspections to confirm adherence to these BMPs.
Solid Waste Storage (throughout Facility)	Spills or leaks from solid waste containers	Garbage and debris	• Train employees in proper cleanup procedures of spills and leaks. • Provide solid waste containers in convenient locations. • Provide covers for all solid waste containers and keep closed at all times. • Frequently inspect solid waste containers and surrounding area. • Frequently sweep areas around solid waste containers. • Maintain a service schedule for the emptying of containers that is frequent enough to ensure that overflow does not occur. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00060

Temporary Hazardous Waste Storage Area (275-93)	Spills or leaks from drums	Waste oils and other toxic liquids	• Train employees in proper cleanup procedures of spills and leaks. • Maintain spill kits at hazardous waste storage area. • Maintain covered storage area. • Ensure drums and containers are properly labeled and stored away from traffic areas. • Frequently inspect storage area as deemed necessary by the SWPPP coordinator. • Adhere to the Facility's SPCC Plan as it relates to the hazardous waste storage area. • Maintain storage containers and drums in good condition. • Regularly sweep in and around storage area. • Conduct inspections to confirm adherence to these BMPs.

SWPPP Training: Drainage Systems			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**

Storm Drain System	Washing and/or collection of trash, debris, and non-storm water discharges	Trash, debris, and non-storm water discharges	• Train employees in proper inspection, protection, and cleaning of the storm drain system.
			• Maintain an inventory of all catch basins and inlets to the storm drain system.
			• Prioritize and map catch basin as follows:
			  • Priority A – Catch basins that are designated as consistently generating high volumes of trash and/or debris.
			  • Priority B – Catch basins that are designated as consistently generating moderate volumes of trash and/or debris.
			  • Priority C – Catch basins that are designated as consistently generating low volumes of trash and/or debris.
			• Inspect catch basins according to the following schedule:
			  • Priority A – A minimum of 3 times during the wet season (October 1 through April 15) and once during the dry season every year.
			  • Priority B – A minimum of once during the wet season and once during the dry season every year.
			  • Priority C – A minimum of once per year.
			• Label/stencil storm drains with a legible "no dumping" message. Inspect for legibility prior to the wet season each year. Illegible stencils will be re-stenciled or re-labeled within 180-days of inspection.
			• Inspect and clean catch basins as necessary of litter and debris on the basis of inspection. At a minimum, catch basins determined to be 25% full of trash shall be cleaned out.
			• Record all catch basins cleaned, including locations of catch basins, dates inspected and cleaned on existing "Port of L.A.

			Storm water Catch Basin Inspection" Form. Responsibility for completing this form belongs to Mr. Frank Albers at Berth 161. • Ensure that all material removed does not reenter the system. • Properly dispose of waste collected from catch basins. • Avoid, to the extent possible, maintenance activities during windy or rainy weather so as to minimize waste potentially material transported to receiving waters. • Maintain sufficient waste collection bins on-site. • Place solid waste/garbage in bins and dispose of waste at a licensed sanitary landfill or recycling facility. • Conduct inspections to confirm adherence to these BMPs.

SWPPP Training: Drainage Systems			
Sewage System	Cracked/ deteriorated pipes, leaking joints or seals, system blockage, overflowing, and cross connections to storm drain system	Sewage	• Train employees in proper inspection and cleaning of the sewage system. • Dispatching appropriate personnel when a spill, leak, or overflow occurs to: (1) deploy sandbags, inflatable dams, etc.; (2) cover or block storm drain inlets and catch basins; and (3) contain or divert sewage away from open channels to prevent sewage from entering storm drain. • Collect sewage spillage using vacuum equipment or use other measures to divert it back to the sanitary sewer system. • Make every effort to ensure that, when disinfecting a sewage contaminated area, disinfectant and/or sewage treated with disinfectant is not discharged to storm drain or receiving waters by blocking drains and catch basins and using vacuum equipment to collect material. • Record information regarding spills/leaks. • Investigate as necessary to determine the cause of incident and initiate steps to prevent similar occurrence in the future. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00064

SWPPP Training: Wood Recycling and Storage			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Wood Recycling and Storage	Solid debris from wood and metals	Wood chips, creosote, metals	• Train employees in proper cleanup procedures of spills and leaks. • Post signage that identifies the area and what is permissible to store. • Dry sweep prior to each storm event. • Avoid storage of wood and other materials directly on the ground or in volumes that are not easily covered. • Cover all stored materials prior to rain event and make sure they are elevated. • Do not conduct recycling activities during rain event or in windy conditions that render pollutant containment ineffective. • Keep storage bins covered during rain events. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00065

SWPPP Training: Wood Dock Repairs and Pile Removal/Replacement			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
Wood Dock Repairs	Wood pieces and shavings, creosote treated wood, and grease and oil from equipment	Solids and creosote	• Train employees in proper cleanup procedures of spills and leaks. • Place plastic sheeting under area to be removed or and where cutting is performed to catch wood pieces and sawdust (refer to Operational Control EMS07-Gen_04). • Enclose, cover, or shroud area if wind conditions can carry sawdust to drift over harbor water. • Prohibit work when windy conditions render containment ineffective. • Where practical replace removed planks with an environmentally safe material. • Store support material on plastic or plywood placed over the deck. • Maintain deck surface free of obstructions which can hinder cleanup. • Where applicable, use dust collecting bag sanding and other equipment. • Sweep or vacuum deck area and collect debris and sawdust for proper disposal. • Conduct inspections to confirm adherence to these BMPs.
Pile Removal & Replacement	Wood pieces and shavings, creosote treated wood	Solids and creosote	• Train employees in proper cleanup procedures of spills and leaks. • Consider replacing removed treated piles with materials that will not leach chemicals into the water and are more resistant to degradation, such as engineered wood, reinforced concrete, coated steel, recycled plastic, plastic reinforced with fiberglass, and fiberglass wrapped treated timber pilings. • Contain shavings when field cutting pilings. • Have emergency spill kits and cleanup materials readily available during pile

ED_004566_00003778-00066

SWPPP Training: Wood Dock Repairs and Pile Removal/Replacement			
			removal and replacement or anytime working near or on the water. • All equipment is to be maintained in good operating order to prevent leaking or spilling of hydraulic fluid, diesel, gasoline, and other liquids and products. • Pile cut-offs, waste or any other miscellaneous materials will be immediately recovered and transferred to Berth 194 for processing. • Inspect equipment every day at startup and repair equipment as needed. Recheck equipment at shift changes or at the end of the day. • Conduct inspections to confirm adherence to these BMPs.

ED_004566_00003778-00067

SWPPP Training: General Construction Activities			
Area/ Activity	**Pollutant Source**	**Pollutant**	**BMP**
General Construction Activities (throughout Facility)	Solid from construction materials, debris, and stockpiled soils.	Liquids, solids, general debris	• Train employees in proper cleanup procedures of spills and leaks. • Make sure public contractors doing construction work at the Facility are aware of BMPs for their activities and inspect their area frequently to assure compliance. • Stockpiled soil, sand, gravel, concrete, asphalt, etc. must be covered with plastic sheeting during rain events and at the end of a shift to prevent uncontrolled storm water runoff from the stockpiles. • Stockpiles should be staged at areas protective of storm drains. • Where necessary employ other industry standard construction BMPs to prevent pollutants from reaching the storm water system or receiving water. Examples include but are not limited to dust control, barriers, fiber rolls, filter berms, sand bags, and straw bales. • Prohibit work when wind conditions render controls ineffective at preventing the release of pollutants to the storm system or receiving water. • Prohibit concrete washouts at the Facility, or if not possible, collect and retain concrete washout water and solids in a leak proof container for off-site disposal or recycling. • Construction material should be stored off the ground and covered when not being used. • Where necessary employ heavy equipment rumble strips at ingress and egress of construction site to prevent tracking of dirt and sediment elsewhere at the Facility. Collect and contain dirt and debris at rumble strips on a daily basis. • Conduct daily sweeping or vacuuming of the construction area. • Conduct inspections to confirm adherence to these BMPs.

Page intentionally left blank

Attachment C

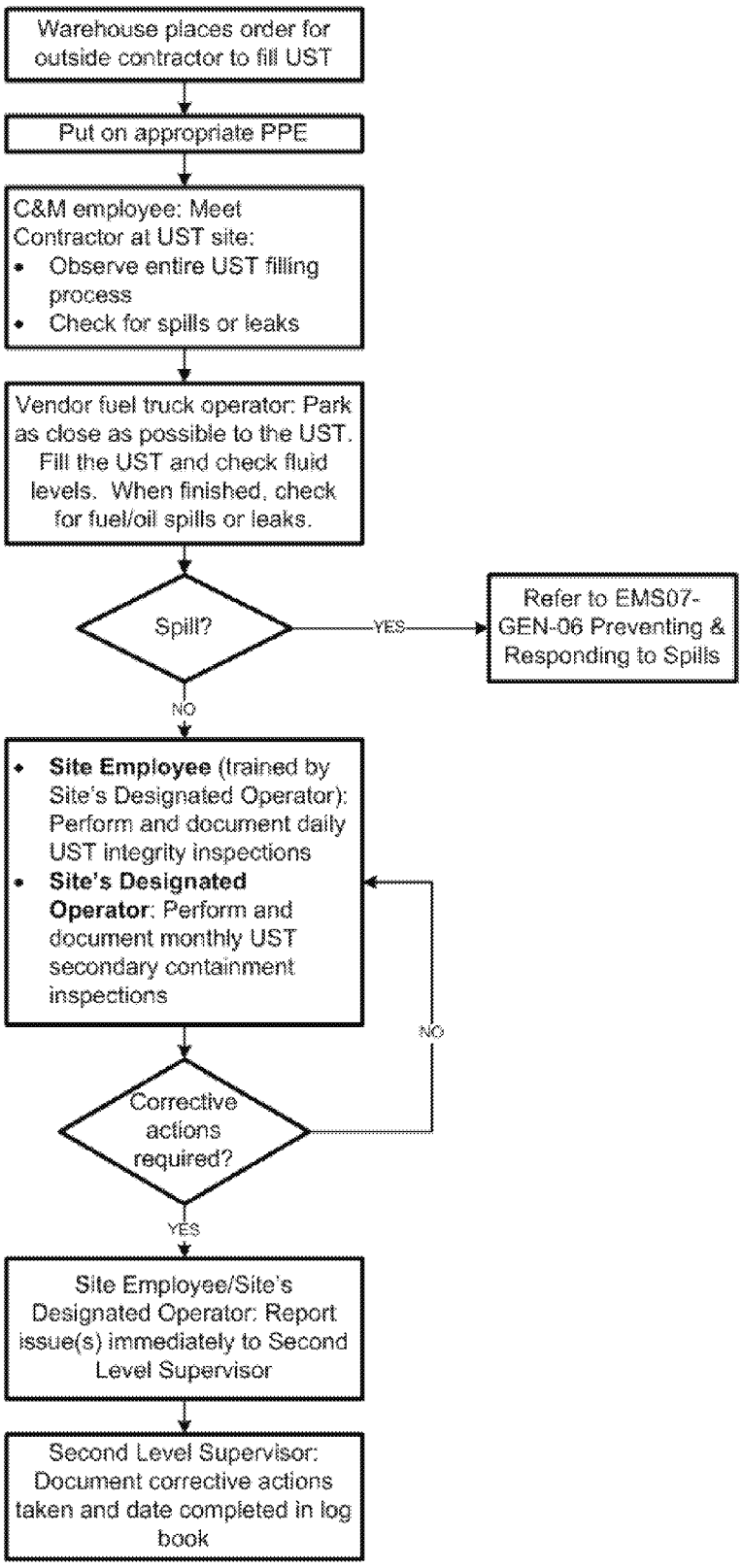
Operational Control EMS07-142-01 for Filling and Maintaining USTs

Page intentionally left blank

A CLEANER PORT.
A BRIGHTER
FUTURE

Filling and Maintaining Underground Storage Tanks (UST) Operational Control

Effective Date: 7/29/2010
Revision: 3
Page 1 of 2



Filling and Maintaining Underground Storage Tanks (UST) Operational Control

PURPOSE

The purpose of this procedure is to outline the correct process to fill and maintain the underground storage tank (UST) with minimal impact to the environment.

SCOPE

This procedure applies to the Construction and Maintenance (C&M) Equipment Repair Section, Division 142 at the Port of Los Angeles (POLA).

SAFETY

Wear safety goggles, gloves and steel-toed boots.

PROCEDURE

Please see the flowchart on Page 1.

REFERENCES

EMS07 – Operational Control Procedure
ISO 14001:2004 Standard
CCR Title 23, Div. 3, Ch. 16.
40 CFR Part 280, Subpart H addressed in SPCC Plan.

OWNER

The owner of this Operational Control Procedure is the Equipment Repair Supervisor.

APPROVAL:

C&M Division Director	Operational Control Owner

REVISION HISTORY

REVISION #	DATE	SECTIONS AFFECTED
0	3/26/2007	All
1	7/18/2007	Updated flowchart to replace RMD with EMD (new phone number). Updated to notify C&M Security.
2	3/13/2008	Updated flowchart to modify ordering of fuel and secondary containment inspection process.
3	7/29/2010	Updated to include regulatory reference.

ED_004566_00003778-00073