

Section B

Illicit Discharge Detection and Elimination

Stormwater Management Plan
Honolulu Harbor
and Kalaeloa Barbers Point Harbor



Prepared for:
State of Hawaii
Department of Transportation
Harbors Division

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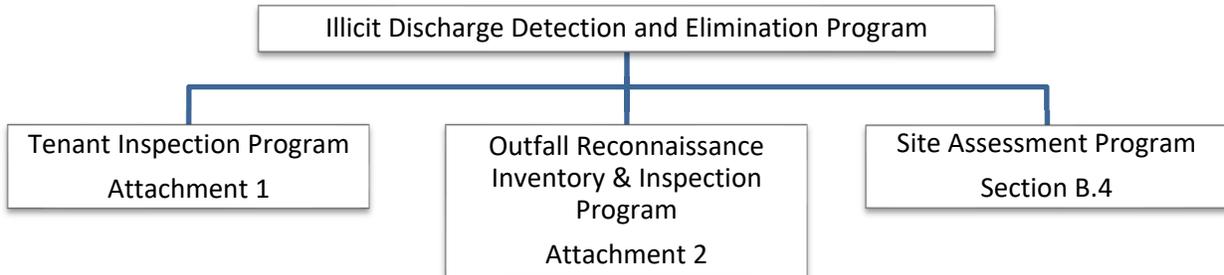
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1.0 INTRODUCTION

The Harbors IDDE Program is comprised of three major components: the TIP, the ORIIP, and Site Assessment Program, which are shown in Figure 1-1. The three programs shown below are three approaches to preventing and reducing potential pollutants from entering waters at Honolulu Harbor and KBPH.

Figure 1-1 IDDE Program Organization



The TIP is described in the TIM, included as Attachment 1. The ORIIP is included as Attachment 2. The description of the Site Assessment Program is contained herein as Section B.4.

1.1 IMPROVED DEFINITION OF ILLICIT DISCHARGE

Following the corresponding guidance, Harbors has developed an improved definition of an illicit discharge and a list of examples of illicit discharges that are considered to be significant contributors of pollutants.

For the purposes of education and outreach, an illicit discharge is defined as: *any non-stormwater discharge that poses a risk to the environment*. Examples of illicit discharges that are considered to be significant contributors of pollutants are provided in Table 1-1. In addition, non-storm water discharges authorized by the general permit, provided that they do not cause or contribute to any violation of water quality standards are also provided in Table 1-1.

Table 1-1 Examples of Illicit Discharge and List of Conditionally Authorized Discharges

Examples of Illicit Discharge	Conditionally Authorized Discharges ¹
<ul style="list-style-type: none"> • Fuel spills; • Leaking vehicles or equipment where a sheen is visible on the ground; • Washing water from hand washing or vehicle washing activities that is not contained; • Paint chips from sanding and grinding operations that are not contained; • Materials stored improperly outdoors; • Leaking trash bins; and • Sediment-laden water from construction activities that is not contained. 	<ul style="list-style-type: none"> • Water line flushing; • Landscape irrigation; • Diverted stream flows; • Rising ground waters; • Uncontaminated ground water infiltration (as defined in Title 40, Code of Federal Regulations (40 CFR) 35.2005 (20)); • Uncontaminated pumped ground water; • Discharges from potable water sources and foundation drains; • Air conditioning condensate; • Irrigation water; • Springs; • Water from crawl space pumps and footing drains; • Lawn watering runoff; • Water from individual residential car washing; • Flows from riparian habitats and wetlands; • Dechlorinated swimming pool discharges • Residual street wash water; and • Discharges or flows from fire-fighting activities.

1 – Source: NGPC, NPDES, Honolulu Harbor Small MS4, Honolulu, Oahu, Hawaii, File No. HI 03KB482 and KBPH Small MS4, File No. HI 03KB488

2.0 TENANT INSPECTION PROGRAM

Harbors has developed a TIM to assist Harbors personnel tasked with the responsibility of environmental compliance. The TIM contains the policies and procedures of the TIP created for the purpose of improved allocation of environmental oversight to those areas of harbor operations where environmental impacts are highest, as well as to provide an objective assessment of tenant activities at their facilities. The TIM applies to tenants at Honolulu Harbor and KBPH. HAR-EE is responsible for the implementation of this program.

Please see Attachment 1 for the Tenant Inspection Manual.

3.0 OUTFALL RECONNAISSANCE INVENTORY AND INSPECTION PROGRAM

The ORIIP consists of maintaining an outfall inventory and conducting dry and wet weather inspections at Harbors stormwater discharge points as well as source tracking and elimination of potential illicit discharges. The goals of the ORIIP are to identify illicit discharges, assess BMP performance, and assess system integrity. By tracking illicit discharges upstream, Harbors is able to identify any upstream BMP in need of improvement.

The results of relevant program inspections will be used to eliminate polluted discharges and to help guide future outfall reconnaissance and pollution prevention efforts. This program covers Honolulu Harbor and KBPH and is overseen by HAR-EE. The program is fully described in the ORIIP. Outfalls at Honolulu Harbor and KBPH are maintained in Cityworks® powered AMS.

**Please see Attachment 2 for the Outfall Reconnaissance
Inventory and Inspection Program.**

4.0 SITE ASSESSMENT

The third component of the IDDE program is Site Assessment (i.e., harbor patrol), which will be carried out by MCSs and Harbor Police, which are part of HAR-O, and HAR-EE when follow-up is necessary. High risk areas will be inspected in accordance with the TIP or ORIIP in order to identify active or potential illicit discharges, to increase the field presence of Harbors personnel and thus deter illicit discharges, and to identify areas that would benefit from the installation of signs. If violations are identified during Site Assessments, Harbors will initiate enforcement in accordance with the appropriate enforcement process included in the ERP (see Attachment 3), as necessary.

Harbors will also provide outreach activities during Site Assessments such as distributing BMP fliers, a schedule of upcoming trainings, and other SWMP-related materials.

5.0 ENFORCEMENT

The primary objectives of Harbors environmental enforcement program are to: ensure tenants comply with the environmental regulations, lease agreements, and TRPs; correct any violation(s); and require tenants to operate their facilities in accordance with Harbors environmental policy and applicable BMPs.

The enforcement options available to Harbors range from verbal and written warning to administration actions. The full scope of Harbors enforcement program is described in the ERP.

Please see Attachment 3 for the Enforcement Response Plan.

5.1 MEMORANDUM OF AGREEMENT WITH HDOH

Harbors has entered into a MOA with HDOH CWB for the purpose of referring violations for escalated enforcement back in 2015. The agreement details the obligations of both departments with respect to HDOT's pursuit of enforcement actions for the protection of water quality within Harbors jurisdiction. The arrangement will enable the coordinated issuance of enforcement notices against violators in regards to relevant laws and rules.

6.0 EMPLOYEE TRAINING

6.1 ANNUAL EMPLOYEE STORMWATER AWARENESS TRAINING AND OUTREACH

Harbors will require all Harbors employees with IDDE responsibilities (Marine Cargo Specialists, Harbor Police, and Grounds Supervisors) to attend an annual IDDE Training to provide each employee a fundamental understanding of IDDE program and related responsibility. The training will contain information about Harbors stormwater management program, including:

- ✓ An explanation of Harbors organizational structure including the responsibilities of Harbor employees regarding stormwater pollution prevention;
- ✓ Harbors endorsed minimum BMPs; and
- ✓ A concise and readily understandable definition of illicit discharges, as well as procedures for reporting illicit discharges via Harbor Traffic Control Unit (aka the Aloha Tower) and Harbors Environmental Hotline.

Harbors will use posters, mailings, group emails, workshops, or other prevailing platform(s) to convey stormwater pollution prevention information to all Harbors employees, such as the Employee Fact Sheets (Attachment 4) and the annual departmental outreach and briefing. Additionally, all Harbors employees will be surveyed by questionnaire to assess their knowledge regarding stormwater awareness and pollution prevention. A sample of the survey is included in Attachment 5. The results of the survey will be used to update the annual employee outreach and informational briefings.

6.2 TENANT INSPECTION TRAINING

All inspectors responsible for implementation of the TIP must read and be familiar with the TIM. New inspectors are required to complete no less than 24 hours of on-the-job training with experienced inspectors. Tenant inspection training materials are found in the TIM (Attachment 1) and includes:

- ✓ Types of Inspections;
- ✓ Risk rankings based on Compliance, BMP and Pollution Prevention information; and
- ✓ Tenant Environmental Asset Inventory.

6.3 ORIIP TRAINING

All personnel responsible for conducting outfall reconnaissance will be made aware of the process and safety precautions required during the inspections through training. This training also will include a pre-mobilization meeting where photos, documents, and schedules are reviewed. The pre-mobilization meeting will include:

- ✓ Procedures to be used when observing outfalls;
- ✓ Procedures to be used to track non-stormwater discharges to their source; and
- ✓ Harbors illicit discharge definition.

In addition to attending the pre-mobilization meeting, new inspectors will gain inspection experience by spending at least one work day on the job conducting outfall reconnaissance with experienced inspectors.

Attendance at the pre-mobilization meeting will be documented using the Site-Specific Health and Safety Plan signature sheet found in the ORIIP (Attachment 2). On the job training will be documented using the ORIIP Form located in the ORIIP during the outfall inspections by listing both the experienced mentor and the trainee in the “Investigators” section of the form.

ATTACHMENT 1
TENANT INSPECTION MANUAL

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Final

Tenant Inspection Manual



**State of Hawaii
Department of Transportation
Harbors Division
79 South Nimitz Highway
Honolulu Hawaii 96813-5898**



September 2021

Version 10.0

Final

Tenant Inspection Manual

**State of Hawaii
Department of Transportation
Harbors Division
79 South Nimitz Highway
Honolulu, Hawaii 96813-4898**



“Mālama I Ke Awa Kai”

Protect Our Ocean Water

September 2021

Version 10.0

Record of Revision

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7.0	April 2014	Seventh Revision	2.0 and 5.0
8.0	May 2014	Eighth Revision	2.0, 4.0, and 5.0
9.0	August 2014	Ninth Revision	1.0
10.0	September 2021	Tenth Revision	All

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2	HDOT Harbors Rules and Regulations and Examples of Tenant Lease Agreement and Revocable Permit
3	Best Management Practices
4	Tenant Stormwater Compliance Inspection Form
5	Low-Risk Tenant Reconnaissance Inspection Form
6	Suspected Illicit Discharge Reporting Form
7	Permit to Discharge into HDOT Harbors Division Small MS4
8	Permit for Connection to HDOT Harbors Division Small MS4
9	List of Alternative Products for Cleaning
10	List of Major Environmental Regulations
11	Training Materials for Inspector
12	New Tenant Information Package
13	Summary of VGP Requirement on Incidental Discharges from Vessels
14	HDOT Harbors Division Wash Application Review Checklist

List of Acronyms

ACR	Annual Compliance Report
AFFF	Aqueous Film Forming Foam
AMS	Cityworks® Powered Asset Management System
AST	Aboveground Storage Tank
BMP	Best Management Practice
CCH	City and County of Honolulu
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWB	Clean Water Branch
DLNR	Department of Land and Natural Resource
ECO	Environmental Compliance Officer
EHS	Extremely Hazardous Substance
EMS	Environmental Management System
EPCRA	Emergency Planning and Community Right-to-Know Act
ERP	Enforcement Response Plan
°F	Degree of Fahrenheit
FWPCA	Federal Water Pollution Control Act
HAR	Hawaii Administrative Rules
HAZCOM	Hazard Communication
HCDA	Hawaii Community Development Authority
HDOH	State of Hawaii, Department of Health
HDOT	State of Hawaii, Department of Transportation
HEPCRA	Hawaii Emergency Planning and Community Right-to-Know Act
HERL	Hawaii Environmental Response Law
HRS	Hawaii Revised Statutes
HSERC	Hawaii Emergency Response Commission
IDDE	Illicit Discharge Detection and Elimination
LEPC	Local Emergency Planning Committees
LQG	Large Quantity Generator
MS4	Municipal Separate Storm Sewer System
MSDS	Material Safety Data Sheet
NAICS	North American Industrial Classification System
NAV	Notice of Apparent Violation
NCP	National Contingency Plan
NFVO	Notice and Finding of Violation Order
NGPC	Notice of General Permit Coverage
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRC	National Response Center
OSC	On-Scene Coordinator

OSHA	Occupational Safety and Health Administration
OWS	Oil/Water Separator
P2	Pollution Prevention
PCB	Polycyclic Chlorinated Biphenyls
psi	pound-force per square inch
RCRA	Resource Conservation and Recovery Act
SIDR	Suspected Illicit Discharge Reporting
SARA	Superfund Amendments and Reauthorization Act
SCP	State Contingency Plan
SHWB	Solid and Hazardous Waste Branch
SIC	Standard Industrial Code
SMA	Special Management Area
SPCC	Spill Prevention, Control, and Countermeasure
SQG	Small Quantity Generator
sVGP	Small Vessel General Permit
SWDA	Solid Waste Disposal Act
SWMP	Stormwater Management Plan
SWMPP	Stormwater Management Program Plan
SWPCP	Stormwater Pollution Control Plan
SWPPP	Stormwater Pollution Prevention Plan
TIM	Tenant Inspection Manual
TIP	Tenant Inspection Program
TPQ	Threshold Planning Quantity
TSCA	Toxic Substance Control Act
USC	United States Code
USCG	United States Coast Guard
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VGP	Vessel General Permit
VIDA	Vessel Incidental Discharge Act
VSQG	Very Small Quantity Generator

1.0 INTRODUCTION

This Tenant Inspection Manual [TIM] is a component of the State of Hawaii Department of Transportation [HDOT], Harbors Division (hereinafter referred to as “Harbors”) Stormwater Management Program Plan [SWMPP]. Tenant activities have the potential to impact Harbors’ small Municipal Separate Storm Sewer System [MS4] and/or state waters. Therefore, this manual is prepared to guide Harbors Tenant Inspection Program [TIP], which is part of the greater Illicit Discharge Detection and Elimination [IDDE] Program under Harbors Stormwater Management Program [SWMP]. TIM also aids in reducing the discharge of potential pollutants from Harbors tenant facilities. Figure 1-1 illustrates the components of the IDDE Program, including the TIP.

This manual will be utilized by Harbors personnel or a designated consultant tasked with the responsibility of stormwater compliance. As part of the TIM, Harbors has implemented a stormwater risk ranking system for all Harbors tenants that allows for improved allocation of environmental oversight to those areas of tenant operations where environmental impacts are highest, as well as to provide an objective assessment of tenant activities at their facilities.

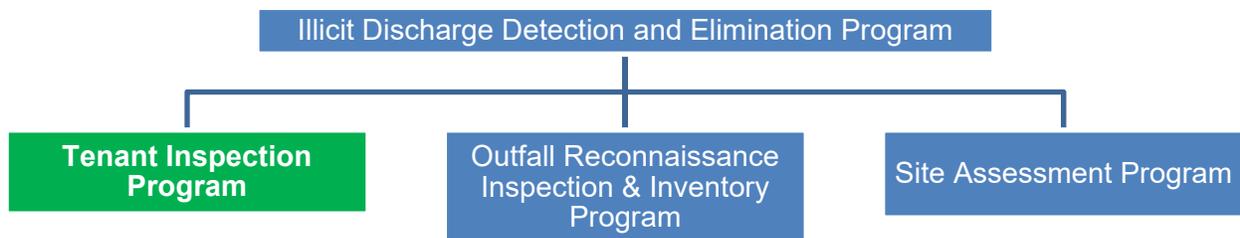


Figure 1-1 IDDE Structure Chart

“Tenant” shall mean a person, group, partnership, corporation, or any other entity that has an executed lease, revocable permit, or disposition instrument under chapter 171, Hawaii Revised Statutes [HRS] to use or occupy land, a building, structure, or other property managed or owned by Harbors. This term also includes Harbors approved sub-tenants and entities using container or terminal facilities. **Note that tenant areas, occupying or using subsurface or submerged land (e.g., easement holders), are excluded from this program.**

1.1 Roles and Responsibilities

The Harbors TIP is overseen by the Harbors Environmental Section, which is centralized within the Harbors Engineering Branch at the Hale Awa Ku Moku Building, located at 79 South Nimitz Highway, Honolulu, Hawaii 96813. This manual is for use by the Harbors Environmental Section and its designated consultant with the responsibility of implementing the TIP. The Environmental Section Supervisor reports to the Engineering Program Manager. The Engineering Program Manager reports to the Deputy Director, who in turn reports to the Director of Transportation. *HDOT Harbors Division Administrative Organizational Chart* is enclosed in Attachment 1 with the Environmental Section highlighted in green. Parties with major roles and responsibilities in the

Harbors Tenant Inspection Program are summarized in Table 1-1.

Table 1-1 Harbors Tenant Inspection Program Roles and Responsibilities

Party	Responsibilities
Harbors Environmental Section and its Consultant	<ul style="list-style-type: none"> • Provide program oversight • Track and analyze program data • Review discharge and washing permit applications • Conduct tenant inspections and enforcements, when necessary • Recordkeeping • Provide/facilitate tenant training and educations
Harbors Property Management Staff	<ul style="list-style-type: none"> • Execute tenant lease agreements and revocable permits • Notify Environmental Section of new tenants • Notify Environmental Section of tenant lease and revocable permit termination • Facilitate tenant inspection, when necessary • Conduct tenant enforcements, when necessary • Distribute New Tenant Welcome Brochure
Tenant	<ul style="list-style-type: none"> • Implement proper Best Management Practices for site activities • Attend mandated Harbors Annual Stormwater Awareness Training • Obtain and maintain required/regulated permits • Coordinate with tenant inspections and correct deficiencies identified during the inspection on a timely basis • Conduct timely operation and maintenance of post-construction Best Management Practices • Compliance with Environmental Rules and Regulations

1.2 Applicability

Harbors implements this TIP at the following harbors:

- Honolulu Harbor (Oahu District)
- Kalaeloa Barbers Point Harbor (Oahu District)

These two harbors operate under small MS4 permits. The Permit File Numbers are **HI 03KB482** for Honolulu Harbor and **HI 03KB488** for Kalaeloa Barbers Point Harbor. This program applies to all active tenants on the Island of Oahu inventoried in the Cityworks® powered Asset Management System [AMS] and in-house databases. **Inspection and risk ranking criteria (covered in this manual) are related to tenant operations and activities conducted solely on-land.**

1.3 General Tenant Requirements

All Harbors tenant lease agreements and revocable permits include language stating that the

tenant is responsible for compliance with all environmental laws and regulations. For example, tenants conducting industrial activities within their exclusive areas must seek separate National Pollutant Discharge Elimination System [NPDES] permit coverage from the State of Hawaii Department of Health [HDOH], if required. United States Environmental Protection Agency [USEPA] regulated hazardous substances and marine pollutants are not allowed to be used, treated, stored, or disposed, unless they are incidental to the normal operations of the tenant's business.

All new tenant lease agreements and revocable permits require tenants to obtain Harbors consent prior to bringing any regulated hazardous substance or chemical on site. Details of the lease agreements and revocable permits are included in Attachment 2. Summaries of major pertinent environmental regulations are enclosed in Attachment 7.

Failure to comply with clauses specified in the lease agreement or revocable permit may result in civil/criminal penalties or termination of the lease or revocable permit. Severe environmental violations are to be reported to HDOH, USEPA, or other appropriate regulatory agency for escalated enforcement.

1.4 Tenant Site Improvement and Relevant Requirements

Tenants desiring to develop improvement projects on Harbors property must obtain approval from Harbors prior to initiation of the project. The tenants are responsible for obtaining permits from appropriate regulatory agencies and for furnishing proof to Harbors before commencing with construction activities. These permits include, but are not limited to, NPDES permits, building permits, grading permits, dredging permits, special management area permits, *Permit to Discharge into HDOT Harbors Division Small MS4* (in Attachment 7), and *Permit for Connection to HDOT Harbors Division Small MS4* (in Attachment 8).

For a project requiring an NPDES Notice of Intent [NOI] C permit during construction, a Stormwater Pollution Prevention Plan [SWPPP] must be prepared and implemented accordingly, to minimize the discharge of pollutants. Harbors will inspect the tenant construction project on a regular basis. Violations observed during inspections will be documented and enforcement actions will be taken following the procedures in Harbors Enforcement Response Plan [ERP] (Harbors, 2018b). Detailed requirements for a tenant construction project are documented in *Construction Site Runoff Control Program* (Harbors, 2018a).

1.5 Washing Activities Related Requirement

Harbors requires tenants to implement proper control measures for all washing activities to prevent potential pollutants from being discharged into adjacent harbor water directly or indirectly via Harbors small MS4s or other potential pathway. The following washing activities are regulated when conducted outdoors:

- Vehicle and Equipment Washing
- Building Power Washing
- Sidewalk and Walkway Power Washing

Best Management Practice [BMP] flyers related to the above-listed washing activities are enclosed in Attachment 3. On-site washing is allowed only after washing procedures are submitted to and approved by the Harbors. An internal *Wash Application Review Checklist* used by Harbors Engineering Branch Environmental Section is enclosed in Attachment 14.

1.6 Vessel Owners Responsibility

Harbors tenants owning, or operating vessel(s) are subject to requirements of the (Small) Vessel General Permit [VGP] regulated by USEPA. In addition, any vessel maintenance, repair, washing, and fueling activities must be conducted following regulations governed by United States Coast Guard [USCG] and any applicable state and local government. **Inspection and risk ranking criteria (covered in this manual) are related to vessel operations conducted solely on land or a dry dock subject to NPDES NOI-B permit requirements.** Details of the (Small) VGPs are included in Attachment 13. Small vessel is the one less than 79 feet in total length.

2.0 TENANT INSPECTIONS

2.1 Overview

Harbors conducts various types of inspections of their tenants to prevent the discharge of potential pollutants to the storm drain system and state waters. Types of tenant inspections covered in this manual are summarized in Table 2-1.

Table 2-1 Types of Tenant Inspections

Inspection Type	Description
Initial/New	Conducted within three months of new tenant occupancy, or completion of construction.
Routine	Conducted at frequencies based on a tenant's risk ranking.
Final	Conducted due to termination of lease agreement or revocable permit, and usually conducted upon termination of relevant permit, or notification received from Harbors Property Management Staff.
Investigation	Conducted when a suspected illicit discharge is observed.
Annual Reconnaissance	Conducted for low-risk tenants, annually.
Follow-up	Required when a suspected illicit discharge or potential violation is observed during any inspection and corrective actions must be confirmed.

To date, Harbors has inspected and risk-ranked each tenant and continues to inspect new tenants upon notification. Each tenant has been assigned a risk designation of high, medium, or low based on the results of the inspections and risk ranking procedures. The most up-to-date risk designation of each tenant determines the frequency of routine tenant inspections.

Harbors maintains the AMS and in-house databases that includes tenant information such as company name, location, contact information (primary and alternative if available), mailing address, email address if available, and NPDES permit number (if applicable), a description of the nature of business activity (including major operations conducted at the site), inspection results (e.g., inspection dates, materials stored on site, list of potential hazards), risk ranking, and enforcement actions (e.g., required corrective actions).

2.2 Inspection Types

2.2.1 Initial/New Tenant Inspection

The purpose of the new/initial tenant inspection is to identify any environmental asset, initiate and assign a risk ranking, and to convey the applicable environmental regulations in the Harbors SWMP. In addition, it can also help the new tenant identify applicable BMPs to minimize potential pollutants derived from their operations from discharging into Harbors small MS4 or adjacent state

waters. This type of inspection is documented using the Tenant Stormwater Compliance Inspection Form (enclosed in Attachment 4) or the corresponding custom-made form in AMS.

Harbors Property Management Staff and Environmental Section work together to coordinate site inspections of new tenant, which are usually triggered by notification of a new lease agreement or revocable permit. New tenant inspections do not apply to existing tenants upon renewal of their lease agreement (or revocable permit) or name-changing for administrative reasons, when there are no significant operational or exclusive use area changes.

If a potential violation is observed during the inspection, Harbors designated inspector will 1) document the potential violation in the inspection report, 2) disclose and explain the potential violation to the tenant and/or responsible party at the time of inspection, and 3) follow the steps described in *Section 5.0 – Enforcement*. The inspection report is usually completed within 14 calendar days following the inspection. If necessary, a follow-up inspection will be conducted (see Section 2.2.6 for further details).

2.2.2 Routine Tenant Inspection

The purpose of routine tenant inspection is to evaluate whether the facility causes or contributes to stormwater pollution and how facility operations comply with Harbors SWMP, major environmental laws, applicable BMPs, pollution prevention [P2], and relevant clauses contained within a lease agreement (or revocable permit). The Tenant Stormwater Compliance Inspection Form (enclosed in Attachment 4) or the corresponding custom-made form in AMS is utilized as a primary tool to document these inspections. The tenants are inspected and evaluated based on risk ranking criteria discussed in *Section 4.3 – Risk Ranking Criteria*. The frequency of routine tenant inspections is summarized in Table 2-2.

Table 2-2 Tenant Inspection Frequency

Ranking	Score	Inspection Frequency
Low	0 to 5	Every five years and annual reconnaissance
Medium	6 to 16	Annually
High	> 16, or a 5 in certain categories	Every six months or semiannually

Risk rankings for the tenants are maintained in the AMS. For tenants occupying more than one facility, inspection schedules for each facility may differ based on their physical locations, drainage area, on-site operations/activities, and risk ranking.

If a potential violation is observed during the inspection, Harbors designated inspector will 1) document the violation in the inspection report, 2) disclose and explain the violation to the tenant and/or responsible party at the time of inspection, and 3) follow the steps described in *Section 5.0 – Enforcement*. A copy of the inspection report will be provided to the tenant upon completion,

typically within 14 calendar days following the inspection. If necessary, a follow-up inspection will be conducted (see Section 2.2.6 for further details).

2.2.3 Reconnaissance for “Low Risk” Tenants

Tenants with “Low” risk ranking designations are subject to an annual reconnaissance. Reconnaissance is conducted to ensure that tenants have not changed their activities or operations to the extent a new risk assessment would be warranted. This type of inspection may involve driving a State-marked vehicle to observe low-risk rank tenants based on their previous evaluation. The Low-Risk Tenant Reconnaissance Inspection Form (enclosed in Attachment 5) or the corresponding custom-made form in AMS is utilized as a primary tool to document these inspections.

If a reconnaissance identifies a substantive change to a facility’s operation, size, or activities, Harbors will conduct a comprehensive stormwater compliance inspection within 30 calendar days of the reconnaissance to determine if the facility’s risk ranking needs to be adjusted.

If a potential violation is observed during the reconnaissance, Harbors designated inspector will 1) document the violation in the inspection report, 2) disclose and explain the violation to the tenant and/or responsible party at the time of inspection, and 3) follow the steps described in *Section 5.0 – Enforcement*. The inspection report is usually completed within 14 calendar days following the reconssaince. If necessary, a follow-up inspection will be conducted (see Section 2.2.6 for further details).

2.2.4 Final Site Inspection

Final inspections are necessary to identify potential environmental issues that must be resolved upon termination of a lease agreement or revocable permit. The Tenant Stormwater Compliance Inspection Form (enclosed in Attachment 4) or the corresponding custom-made form in AMS will be utilized as a primary tool to document these inspections. Since this is a final site visit, a risk ranking assessment is usually not conducted as part of the inspection.

Examples of potential environmental issues include environmental site assessments related to an Underground Storage Tank [UST] closure, disposal of solid and hazardous wastes, and removal of contaminated materials. In addition, tenants can be required to conduct appropriate environmental investigations, assessments, and remediation to ascertain the presence and extent of environmental contamination resulting from their operations.

If a potential violation is observed during the inspection, Harbors designated inspector will 1) document the violation in the inspection report, 2) disclose and explain the violation to the tenant and/or responsible party at the time of inspection, and 3) follow-up in accordance with the steps described in *Section 5.0 – Enforcement*, and the inspection report is usually completed within 14 days following the inspection. If necessary, a follow-up inspection will be conducted (see Section

2.2.6 for further details).

2.2.5 Investigation Inspection

Whenever a suspected illicit discharge is observed at a tenant facility and/or a complaint is reported to Harbors, a formal investigation inspection, if necessary, will be conducted by the next working day. The investigation will be documented using Suspected Illicit Discharge Reporting Form (enclosed in Attachment 6) and tracked inside the AMS. The inspector will verify whether or not an illicit discharge has occurred. If an illicit discharge has occurred, the source of the pollutant(s) will be identified and a verbal and/or written warning (e.g., *Notice of Apparent Violation*) shall be issued to the responsible party.

If a potential violation is observed during the inspection, Harbors designated inspector will 1) document the violation in the inspection report, 2) disclose and explain the violation to the tenant and/or responsible party at the time of inspection, and 3) follow the steps described in *Section 5.0 – Enforcement*. The inspection report is usually completed within 14 calendar days following the investigation. A follow-up inspection will be conducted (see Section 2.2.6 for further details) when necessary.

2.2.6 Follow-up Inspection

When a suspected illicit discharge or potential violation is discovered at a tenant facility, a follow-up inspection will be conducted. The follow-up inspection will be scheduled corresponding to the dates outlined in the enforcement letter issued to the responsible party to ensure that proper corrective actions are taken. (See *Section 5.0 – Enforcement* for a description of the enforcement letter.) This type of inspection will be conducted utilizing the applicable sections of the Tenant Stormwater Compliance Inspection Form (enclosed in Attachment 4) or corresponding custom-made form in AMS.

A follow-up inspection report is usually completed within 14 calendar days after the inspection or investigation. Uncorrected violations identified in the inspection will be further followed through according to the steps described in *Section 5.0 – Enforcement*.

3.0 TRAINING

Inspector and tenant trainings are designed to ensure that TIP requirements and responsibilities are clearly shared and understood to aid in stormwater pollution prevention at Harbors.

3.1 Harbors Inspector Training

All inspectors responsible for TIP implementation must read and be familiar with this manual. In addition, new inspectors are required to complete no less than 24 hours of on-the-job training with the experienced inspectors, which will be tracked in the AMS or through other means. During the inspections, the new inspectors will shadow experienced inspectors and will conduct their own inspections with assistance from the experienced inspectors. New inspectors will continue to have frequent interactions with the experienced inspectors to discuss inspection issues as they arise. Additional training materials for the Inspector are enclosed in Attachment 11.

3.2 Harbors Tenant Training

Annual Tenant Stormwater Pollution Prevention Awareness Training will be provided to Harbors tenants. This annual training will discuss topics related to regulatory background, NPDES permit requirements, general permit allowable discharges, common sources of stormwater pollution, the IDDE program, construction site run-off control measures, storm drainage system protection, fueling activities, waste management, spill prevention and response, recommended best management practices, common operations causing potential illicit discharges, low impact development, pollution prevention and good housekeeping, tenant inspections, the ERP, and other environmental requirements and regulations.

New tenants will be provided with a *New Tenant Information Package* (enclosed in Attachment 12) along with their lease agreement and/or revocable permit so that they are aware of the environmental requirements and responsibilities prior to their tenancy with Harbors. The *New Tenant Information Package* will include educational materials describing the responsibilities of the tenant and resources for obtaining additional information regarding stormwater pollution (e.g., stormwater awareness message, information on pollution prevention and good housekeeping). This package provides guidance to new tenants on the stormwater requirements at Harbors, appropriate BMPs based on activities to be conducted on the premises and how to identify and report suspected illicit discharges.

Harbors will provide a questionnaire annually, to all tenants to assess their knowledge regarding stormwater awareness and pollution prevention. Additionally, Harbors will provide tenants educational materials at least twice per calendar year to educate them on stormwater awareness issues and the terms and conditions of their lease or revocable permit related to stormwater management.

4.0 FIELD IMPLEMENTATION

Harbors Engineering Branch Environmental Section will be responsible for overseeing, implementing, and updating the TIM. Status, results, and summaries from the TIM will be reported in the regulatory required Annual Compliance Report [ACR].

4.1 Inspection Basics

Tenant inspections are scheduled with tenant representatives. The inspections cover the general areas of interest encompassed by the first three pages of the *Tenant Stormwater Compliance Inspection Form* (enclosed in Attachment 4). Inspectors responsible for TIP implementation are to be trained in accordance with Section 3 of this manual. Inspectors must familiarize themselves with inspection procedures, allowable non-stormwater discharges, prohibited stormwater discharges, risk ranking categories, and implementation of stormwater BMPs. Inspection reports are usually drafted and finalized within 14 calendar days of the tenant inspection, unless a different schedule is followed as described in this manual. Corrective actions to the deficiencies observed during the inspection could be incorporated into the report prior to its finalization.

4.2 Allowable non-Stormwater Discharges

The overall inspection objective of this TIP is to eliminate potential illicit discharges to the stormwater drainage system and state waters. The following non-stormwater discharges may be discharged into Harbors stormwater drainage system, provided that such discharges do not contain pollutants in amounts that will cause or contribute to a violation of an applicable water quality standard.

- Water line flushing;
- Landscape irrigation;
- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration;
- Uncontaminated pumped ground water;
- Discharges from potable water sources and foundation drains;
- Air conditioning condensate;
- Irrigation water;
- Springs;
- Water from crawl space pumps and footing drains;
- Lawn watering runoff;
- Water from individual residential car washing;
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Residual street wash water; and
- Discharges or flows from firefighting activities.

4.3 Risk Ranking Criteria

Harbors tenant facilities will be ranked as high, medium, or low as determined by a cumulative score of the 14 individual risk criteria listed in this section. Harbors designated inspectors will assign individual risk scores for each of the 14 risk criteria based on visual observation, activity evaluation, the potential to discharge pollutants to Harbors small MS4 and state waters nearby, and applicability of necessary BMPs. Based on the observations and activity evaluation, the inspector will assign an evaluation score from zero to five in each category with the exception of one category (related to annual training attendance records) which ranges from negative two to four. Certain individual criteria include a trigger for automatic designation of high-risk ranking, regardless of the cumulative score. A description of each risk criterion is discussed in this section. Risk rankings are defined as follows:

- **Low:** Score ≤ 5
- **Medium:** $6 \leq \text{Score} \leq 16$
- **High:** Score > 16 or a 5 in certain individual criterion which is an automatic trigger to high risk designation

Subsequent confirmation or reclassification of the risk ranking will be conducted as part of the routine inspections and annual reconnaissance. Following inspections, Harbors designated inspectors will re-evaluate a tenant's facility based on the ranking criteria, determine if the current risk ranking classification is appropriate, and adjust, if necessary.

4.3.1 Vessel Maintenance and Repair

Tenant facilities are ranked based on the vessel maintenance and repair activities. Vessel maintenance and repair activities include parts replacement/repair, pressure washing, removing and/or replacement of fluids and greases, dismantling, sandblasting, sanding, and painting, which can release oil, grease, paint chips, paint liquid, detergent, toxic heavy metals, and other pollutants. It is preferred that vessel maintenance and repair be performed within a dry dock, slipway or haul-out facility with proper containment. The ranking criteria for vessel maintenance and repair are as follows:

- 0 Neither maintenance nor repair activities are conducted on-site.
- 1 Maintenance and repair activities on any size vessel are conducted entirely indoors or on a dry dock (with proper dust control BMPs and containment), with no or minimal potential for discharge of pollutants.
- 2 Minor maintenance and repair for small vessels is conducted (with proper dust control BMPs and containment) with minimal potential for discharge of pollutants.

- 3 Maintenance and repair activities on large vessels are conducted outdoors and out of the water (with proper dust control BMPs and containment), with minimal potential for discharge of pollutants.
- 4 Major maintenance and repair activities on any size vessel are conducted in a partially contained or uncontained area with moderate potential for discharge of pollutants.
- 5 **Maintenance and repair activities on any size vessel are conducted in an uncontained area or in an area with significant potential for discharge of pollutants (e.g., within 50 feet of nearest storm drain inlet or surface water). (Automatic trigger to high risk designation)**

4.3.2 Vessel Fueling

Tenant facilities are ranked based upon the type and method of vessel fueling. Vessel fueling includes transferring fuel between vessels as well as transferring fuel from a mobile fuel truck or a stationary aboveground storage tank to a vessel through hoses. Fueling activities need to be properly contained, with spill response materials readily available. The ranking criteria for vessel fueling are as follows:

- 0 No fuel transfer activities are conducted on-site.
- 1 Fueling of small vessel is conducted by a fueling company with proper spill containment and diversion.
- 2 Fueling of small vessel is conducted with spill containment and diversion.
- 3 Fueling of large vessel is conducted in designated area with spill containment and diversion.
- 4 Fueling of small vessel is conducted in areas WITHOUT spill containment and diversion.
- 5 **Fueling of large vessel is conducted in areas WITHOUT spill containment or diversion. (Automatic trigger to high risk designation)**

4.3.3 Vessel Rinsing

Tenant facilities are ranked based upon vessel rinsing activities. Vessel rinsing activities include the removal of salt, sediment, and sea life from the exterior of a vessel using water, detergent, and/or mechanical devices. Harbors permits vessel rinsing without any necessary containment, ONLY for the removal of salt from the exterior of the vessel using fresh water with low power (<100

pound-force per square inch [psi]). Other rinsing activities must be properly contained, and the rinse water must be properly disposed of in a shore-based sanitary sewer. The ranking criteria for vessel rinsing are as follows:

- 0 No vessel rinsing is conducted on-site.
- 1 Vessel rinsing is conducted in an area designed to contain wash water and debris, with no or minimal potential discharge of pollutants.
- 2 Vessel rinsing is uncontained but not conducted in an area adjacent to Harbors storm drainage system or state waters and has a minimal potential for discharge of pollutants.
- 3 Vessel rinsing is uncontained but not conducted in an area adjacent to Harbors storm drainage system or state waters and has a moderate potential for discharge of pollutants.
- 4 Vessel rinsing is uncontained and conducted in an area adjacent to Harbors storm drainage system or state waters and has a moderate potential for discharge of pollutants.
- 5 **Vessel rinsing is uncontained and conducted in an area adjacent to Harbors storm drainage system and has a significant potential for discharge of pollutants. (*Automatic trigger to high risk designation*)**

4.3.4 Equipment and/or Vehicle Maintenance and Repair

Tenant facilities are ranked based on equipment and/or vehicle maintenance and repair activities. Vehicle and/or equipment maintenance and repairs include activities including, but not limited to, parts replacement/repair, parts washing, removal and/or replacement of fluids or greases, dismantling, sandblasting, sanding, and painting. Maintenance and repair activities should be conducted at a designated area with proper containment and roof coverage in place. The ranking criteria for equipment and/or vehicle maintenance and repair are as follows:

- 0 No equipment/vehicle maintenance and/or repair activities are conducted on-site.
- 1 Maintenance/repair activities are conducted entirely indoors, on a small scale, with minimal potential for discharge of pollutants.
- 2 Maintenance/repair activities are conducted entirely indoors, on a large scale, with minimal potential for discharge of pollutants.
- 3 Maintenance/repair activities are conducted in a covered area with minimal to

moderate potential for discharge of pollutants.

- 4 Maintenance/repair activities are conducted outdoors within containment or in an area with moderate potential for discharge of pollutants.
- 5 **Maintenance/repair activities are conducted outdoors or in an area with significant potential for discharge of pollutants. (Automatic trigger to high risk designation)**

4.3.5 Equipment and/or Vehicle Fueling

Tenant facilities are ranked based on the amount of fueling and the containment and/or diversion structures available. Fueling refers to the fuel dispensing from a tank truck, aboveground storage tank [AST], UST, or portable container to equipment and vehicles, or the fueling from an AST loading rack. Small scale fueling is limited to less than 25 gallons per fueling. Fueling activities need to be properly contained, with spill response materials readily available. The ranking criteria for equipment and/or vehicle fueling are as follows:

- 0 No equipment/vehicle fueling activities are conducted on-site.
- 1 Equipment/vehicle fueling is conducted by a fueling company with spill containment and diversion.
- 2 Equipment/vehicle fueling is conducted on a small scale (i.e., less than 25 gallons per fueling) in areas with spill containment and diversion.
- 3 Equipment/vehicle fueling is conducted on a large scale in areas with spill containment and diversion.
- 4 Equipment/vehicle fueling is conducted on a small scale in areas WITHOUT spill containment and diversion, but not in areas adjacent to Harbors storm drainage system and state waters.
- 5 **Equipment and/or vehicle fueling is conducted on a large scale in areas WITHOUT spill containment and diversion, or on any scale in areas adjacent to Harbors storm drainage system or state waters WITHOUT spill containment and diversion. (Automatic trigger to high risk designation)**

4.3.6 Equipment and/or Vehicle Washing

Tenant facilities are ranked based on the methods used for equipment and/or vehicle washing. **All washing activities must obtain consent from Harbors and take place in approved and designated areas.** This category applies to washing of service equipment, maintenance

equipment, company vehicles, and rental cars. The ranking criteria for equipment and/or vehicle washing are as follows:

- 0 No equipment/vehicle washing is conducted on-site.
- 1 Equipment/vehicle washing is conducted with Harbors consent and in a covered wash area following an approved method, with no or minimal potential discharge of pollutants.
- 2 Equipment/vehicle washing is conducted with Harbors consent and in an uncovered wash area following an approved method, with minimal potential discharge of pollutants.
- 3 Equipment/vehicle washing is conducted with Harbors consent and in an uncovered wash area following an approved method with moderate potential discharge of pollutants (e.g., adjacent to Harbors storm drainage system or state waters).
- 4 Equipment/vehicle washing is not consented by the Harbors but fully contained.
- 5 Equipment/vehicle washing is not consented by the Harbors and not contained. (Automatic trigger to high risk designation)**

4.3.7 Aboveground Oil Storage (size of container \geq 55 gallons ONLY)

According to 40 Code of Federal Regulations [CFR] 112, oil is defined as “oil of any kind of in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oil, including oils from seeds, nuts, fruits, or kernels; and other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.” These oils are commonly stored in ASTs and 55-gallon drums. Oil stored in containers with capacity less than 55 gallons are evaluated under Section 4.2.8 – Container Storage. **Note that tenants shall not install an AST without first obtaining written consent from the Harbors.**

The term “properly stored” indicates that ASTs and drums meet the Spill Prevention, Control, and Countermeasure [SPCC] requirements for secondary containment, including: containers are clearly labeled; container material and construction are compatible with the stored material; secondary containment is sufficient to contain the entire capacity of the largest single container plus sufficient freeboard to contain precipitation; the bypass valve is sealed and retained stormwater is properly managed; container integrity is appropriately tested; and drums are in good condition, neatly organized, and sealed when not in use.

Tenant facilities are ranked based on the oil storage protocols employed at the facilities. The ranking criteria for AST storage are as follows:

- 0 No oil product is stored on-site.
- 1 Less than 1,320 gallons of oil is properly stored in a covered area and has no or minimal potential for discharge of pollutants.
- 2 Less than 1,320 gallons of oil is properly stored in an uncovered area and has minimal potential for discharge of pollutants.
- 3 More than 1,320 gallons of oil is properly stored with minimal potential for discharge of pollutants, and the facility has an SPCC Plan.
- 4 More than 1,320 gallons of oil is properly stored with minimal to moderate potential for discharge of pollutants, but the facility does not have a SPCC Plan.
- 5 Oil is improperly stored and/or managed and has a significant potential for discharge of pollutants. (*Automatic trigger to high risk designation*)**

4.3.8 Container Storage (size of container < 55 gallons ONLY)

Tenant facilities are ranked based on the container storage methods employed and the toxicity of materials stored. This category includes materials such as chemical products, new oil, and used oil stored in containers with capacity less than 55 gallons.

Storage methods are evaluated to ensure that materials are properly stored and managed. The term “properly stored” indicates that containers are correctly labeled, have not passed their expiration date, are in good condition, sealed when not in use, neatly organized, and compatible with other materials stored in the same area. The ranking criteria for container storage are as follows:

- 0 No containers are stored on-site.
- 1 All containers are properly managed and stored entirely indoors and have no or minimal potential for discharge of pollutants.
- 2 All containers are properly managed and stored under the cover and have minimal potential for discharge of pollutants.
- 3 Containers are properly managed and stored outdoors with minimal potential for discharge of pollutants (e.g., distance from site to the nearest storm drain inlet or surface water is greater than 100 feet or 30 meters).
- 4 Containers are improperly managed but stored indoors or under the cover with

moderate potential for discharge of pollutants.

- 5 Containers are improperly managed and stored outdoors with significant potential for discharge of pollutants. (*Automatic trigger to high risk designation*)**

4.3.9 Waste Handling and Disposal (excluding Used Oil)

Tenant facilities are ranked based on municipal, solid, or hazardous waste handling and disposal. Waste handling may include making a hazardous waste determination and proper management. If the waste is characterized as a hazardous waste, the accumulation start date shall be added to the labeling. Additionally, the facility shall ensure that the waste is properly disposed of within the regulated accumulation time, which depends upon the facility waste classification detailed in 40 CFR 262. The ranking criteria for waste handling and disposal are as follows:

- 0 No waste is stored on-site.
- 1 All wastes are non-hazardous and stored indoors or outdoors in covered areas and have no or minimal potential for discharge of pollutants.
- 2 All wastes are non-hazardous and stored outdoors uncovered and have moderate potential for discharge of pollutants.
- 3 Hazardous wastes are generated, and tenant is classified as a Very Small Quantity Generator [VSQG]¹. Hazardous wastes are properly managed, stored, and disposed of. Storage areas have no or minimal potential for discharge of pollutants.
¹ Please refer to Attachment 10 (3. Waste Management Regulations, Item B).
- 4 Hazardous wastes are generated, and the tenant is classified as a SQG² or LQG³. Hazardous wastes are properly managed, stored and/or disposed of. Storage areas have no or minimal potential for discharge of pollutants.
² Please refer to Attachment 10 (3. Waste Management Regulations, Item B).
³ Please refer to Attachment 10 (3. Waste Management Regulations, Item B).
- 5 Hazardous wastes are generated, and the tenant is classified as a VSQG, SQG, or LQG. Hazardous wastes are improperly managed, stored, and/or disposed of. Storage areas have significant potential for discharge of pollutants. (*Automatic trigger to high risk designation*)**

4.3.10 Spill History

Tenant facilities are ranked based on past oil and/or chemical spills at their facilities. The ranking criteria for spill history are as follows:

- 0 No history of oil/chemical spills on-site.
- 1 One to three non-reportable oil/chemical spills in minimal quantity (e.g., less than five gallons for oil) in the past three years.
- 2 One to three non-reportable oil/chemical spills in moderate quantity (e.g., oil spill of 5 gallons or greater but less than 25 gallons; for all other chemicals, refer to 40 CFR 302.4) in the past three years.
- 3 One to three reportable oil/chemical spills (see 40 CFR 302.4) in the past three years and spill kit is onsite.
- 4 One to three reportable oil/chemical spills (see 40 CFR 302.4) in the past three years and no spill kit is onsite.
- 5 Two or more oil/chemical spills entered into Harbors storm drainage system. Or more than three reportable oil/chemical spills in one calendar year. (Automatic trigger to high risk designation)**

4.3.11 Enforcement History

Tenants are ranked based on the history of past compliance with environmental regulations (including federal, state, and local), and the corresponding response actions taken by the tenant following a Notice of Apparent Violation [NAV], any verbal warning, or inspection. Class II violations include deficiencies and/or potential violations identified during any type of inspection (e.g., not following applicable BMPs during operations). Class I violations include violations of environmental law or regulations and HDOT Harbors rules that results in a NAV. Further details of Class I and Class II violations are provided in *Section 5.0 – Enforcement*. A tenant is considered “immediately taking corrective action” to the warnings/violations if responding to a Class II violation within 20 calendar days, a Class I violation within 7 calendar days, or within the specified compliance timeline set by the corresponding regulatory agencies. The ranking criteria for enforcement history are as follows:

- 0 No verbal or written warnings were issued in the past two years.
- 1 Class II violations (such as verbal/written warnings and potential violations identified in an inspection report) were issued in the past two years and corrective actions were immediately taken by the tenant.
- 2 Class I violations (identified in an inspection report and/or documented in a NAV) were issued in the past two years and corrective actions were taken by the tenant.

- 3 Class II violations were issued in the past two years, but corrective actions were NOT immediately taken by the tenant.
- 4 Class I violations were issued in the past two years, but corrective actions were NOT immediately taken by the tenant.
- 5 **Civil penalties or administrative actions were assessed for non-compliance in the past two years. (Automatic trigger to high risk designation)**

4.3.12 Training Attendance History

Tenants are ranked based on their past training attendance. Harbors requires tenants to reduce the discharge of pollutants to the maximum extent practicable and prohibit unauthorized non-stormwater discharges into Harbors stormwater drainage system and state waters. In order to achieve these goals, Harbors has been providing *Annual Stormwater Pollution Prevention Awareness Training* to tenants, with the topics focusing on stormwater management, pollution prevention, good housekeeping, and commonly recommended BMPs. This annual training is one of the measures pertinent to the Public Education and Outreach Program. The ranking criteria for training attendance history are as follows:

- 2 The tenant has attended all annual trainings during its tenancy.
- 1 The tenant has attended the most recent training.
- 2 The tenant has not attended the most recent training.
- 4 The tenant has never attended the training

4.3.13 Site Condition and General Housekeeping

Tenants are ranked based on the physical condition where on-site activities take place (i.e., indoors or outdoors), the general housekeeping condition, and implementation of BMPs to minimize the discharge of pollutants and to prevent soil and debris from entering Harbors small MS4 and State waters. The term “indoors” refers to operations conducted in the interior of a building or in a covered area. The ranking criteria for site condition and general housekeeping are as follows:

- 0 All activities are conducted indoors and have no or minimal potential for discharge of pollutants. General housekeeping is in good condition.
- 1 All activities are conducted indoors and have minimal potential for discharge of pollutants. General housekeeping is in average or fair condition.

- 2 Activities are conducted indoors and outdoors, and general housekeeping is in good condition (e.g., sources of pollutants are properly managed).
- 3 Activities are conducted indoors and/or outdoors and have minimal to moderate potential for discharge of pollutants. General housekeeping is in fair and above average condition.
- 4 Activities are conducted outdoors and have moderate potential for discharge of pollutants. General housekeeping is in fair condition.
- 5 Activities are conducted outdoors and pose a significant threat to the environment. (*Automatic trigger to high risk designation*)**

4.3.14 Lease Agreement and/or Revocable Permit Requirements

Tenants are ranked based on the history of past compliance with their lease agreement and/or revocable permit and the corresponding response actions taken by the tenant following an inspection, action letter, and verbal warning. Examples of the tenant *Lease Agreement* and *Revocable Permit* are included in Attachment 2. A tenant is usually considered “immediately taking corrective action” to the warnings/violations if responding to a Class II violation within 20 calendar days, or a Class I violation within 7 calendar days, or within the specified compliance timeline set by the corresponding regulatory agencies.

Violations of any environmentally related provision, including but not limited to the ones listed below, will **automatically place a tenant under high risk category**, as described in the tenant Lease Agreement and/or Revocable Permit.

- The tenant agrees, at its sole expense and cost, to comply with all environmental laws that apply to the premises during the term of the Revocable Permit (or Lease Agreement).
- The tenant shall not use, store, treat, dispose, discharge, release, generate, create, or otherwise handle any hazardous substance, or allow the same by any third person, on the premises without first obtaining the written consent of Harbors.
- The tenant shall not conduct illegal activities at the premises.
- The tenant shall not conduct any act which results or may result in the creation, commission or maintenance of a nuisance on the premises.
- The tenant shall not conduct permanent lodging or sleeping quarters at the premises. However, a rest area for the comfort and convenience of employees during working hours is allowed.
- The tenant shall not install an UST/AST without first obtaining the written consent of Harbors.
- Except for materials that are lawfully sold in the ordinary course of the tenant’s business and for which the tenant has obtained all required authorizations from appropriate

authorities including the prior written permission of Harbors, the tenant shall cause any hazardous substances to be removed from the premises for disposal.

- The tenant shall maintain the premises in a strictly clean, neat, safe, orderly and sanitary condition, free of waste, rubbish and debris and shall provide for the safe and sanitary handling and disposal of all trash, garbage and other refuse from the premises.
- The tenant shall not sell, transfer, assign, lease, mortgage, and sublease premises whatsoever.
- Consumption of any intoxicating beverage, unless under an operation licensed by appropriate government agencies, is not allowed in the premises.
- In the event that any hazardous substance is used, stored, treated, disposed on the premises, handled, discharged, released, or determined to be present on the premises, or to have migrated from the premises, the tenant shall, at its sole expense and cost, remediate the premises, or any location off the premises to which it is determined that the hazardous substance has migrated, of any hazardous substances.
- The tenant shall keep Harbors fully informed at all times regarding all environmental law related matters affecting the tenant or the premises.
- The tenant shall obtain an NPDES permit from HDOH, if applicable.
- The tenant shall comply with Clean Water Act and Harbors SWMP. No pollutant is allowed to be discharged directly or indirectly through the Harbors storm drainage system (also known as small MS4) or other potential pathway into adjacent state waters.
- The tenant shall implement and maintain the BMP that are described in the Harbors Stormwater website as applicable to its construction projects and its business activities.
- The tenant shall attend mandatory Annual Stormwater Awareness Training hosted by the Harbors.

4.4 Tenant Risk Ranking System Re-evaluation

Tenant risk ranking system is re-evaluated during tenant routine inspection and reconnaissance results as applicable. In addition, information gathered during tenant outreach and through survey and training process will be utilized to re-evaluate the tenant risk ranking system.

When a (potential) violation is observed or reported, and if the source is traced to a tenant, the tenant's risk ranking will be re-evaluated following the investigation. Harbors Engineering Branch Environmental Section will prepare an inspection schedule based on the results of the risk ranking re-evaluation. The inspection schedules are maintained and updated regularly.

5.0 ENFORCEMENT

The primary objectives of the Harbors ERP are to: a) ensure tenants comply with the environmental regulations, lease agreements, and/or revocable permits; b) correct any violation(s); c) motivate tenants to voluntarily comply with environmental laws, rules, regulations, and Harbors environmental policy; and d) encourage tenants apply proper BMPs during daily operations.

5.1 Scope of Authority

The enforcement options available to Harbors range from administrative actions (including verbal/written warnings, eviction notices, and penalties) to the issuance of citations and a district court verdict of a misdemeanor or fine. Three general areas of the environmental enforcement are enclosed in Attachment 2 as follows:

- HRS Title 15 Chapter 266 authorizes Harbors to issue citations and summons for violations of its rules and have its actions enforced through the district courts by verdict of a misdemeanor or fine.
- HAR Title 19 Chapters 41 to 44 establishes uniform safety measures, operational standards and requirements, and the conduct for all tenants at State of Hawaii harbors.
- The tenant lease agreement or revocable permit that provides Harbors with the right of entry to conduct inspection and authority to terminate the permit or lease.

For suspected illicit discharges and pollution concern, which need immediate response, the inspector will call the Harbors Traffic Control at (808) 587-2076 upon discovery. However, individual inspectors (such as Environmental Section personnel or their designees) may not have the authority to pursue all areas of enforcement and would follow the ERP for appropriate actions (e.g., refer cases to the appropriate individuals or agencies when necessary).

There are two types of violations – Class I Violation and Class II Violation, which are based on the potential to discharge or cause environmental harm, magnitude of the violation (e.g., failure to apply for Industrial General Permit Coverage), duration of the violation, and violator's compliance history.

- Class I Violations: violations that are related to submittal of permit applications, BMP failure due to lack of maintenance, ongoing or imminent discharges of pollutants, other activities capable of causing imminent impact to the environment, or where the violator has a previous history of non-compliance.
- Class II Violations: violations that pose no significant impact on the environment which are easily preventable, or administrative in nature. Class II violations include record keeping, reporting, BMP maintenance or installation problems, or other activities when there is ample time for correction prior to the discharge of pollutants, and where the violator has not had a previous history of non-compliance.

5.2 Enforcement Actions and Documentation

The levels of enforcement actions to be utilized by inspectors, in order of increasing severity, are as follows:

- Verbal Warning
- Written Warning (e.g., Tenant Inspection Report or Letter with Tenant Inspection Report)
- Notice of Apparent Violation [NAV]
- Notice and Finding of Violation Order ([NFVO], see ERP for detailed description)
- Stop Work Order [SWO]
- Termination of Lease or Revocable Permit (or other occupancy agreement)

Brief descriptions of each level of enforcement action and procedures for implementation can be found in Section 5 of Harbors ERP.

6.0 REFERENCES

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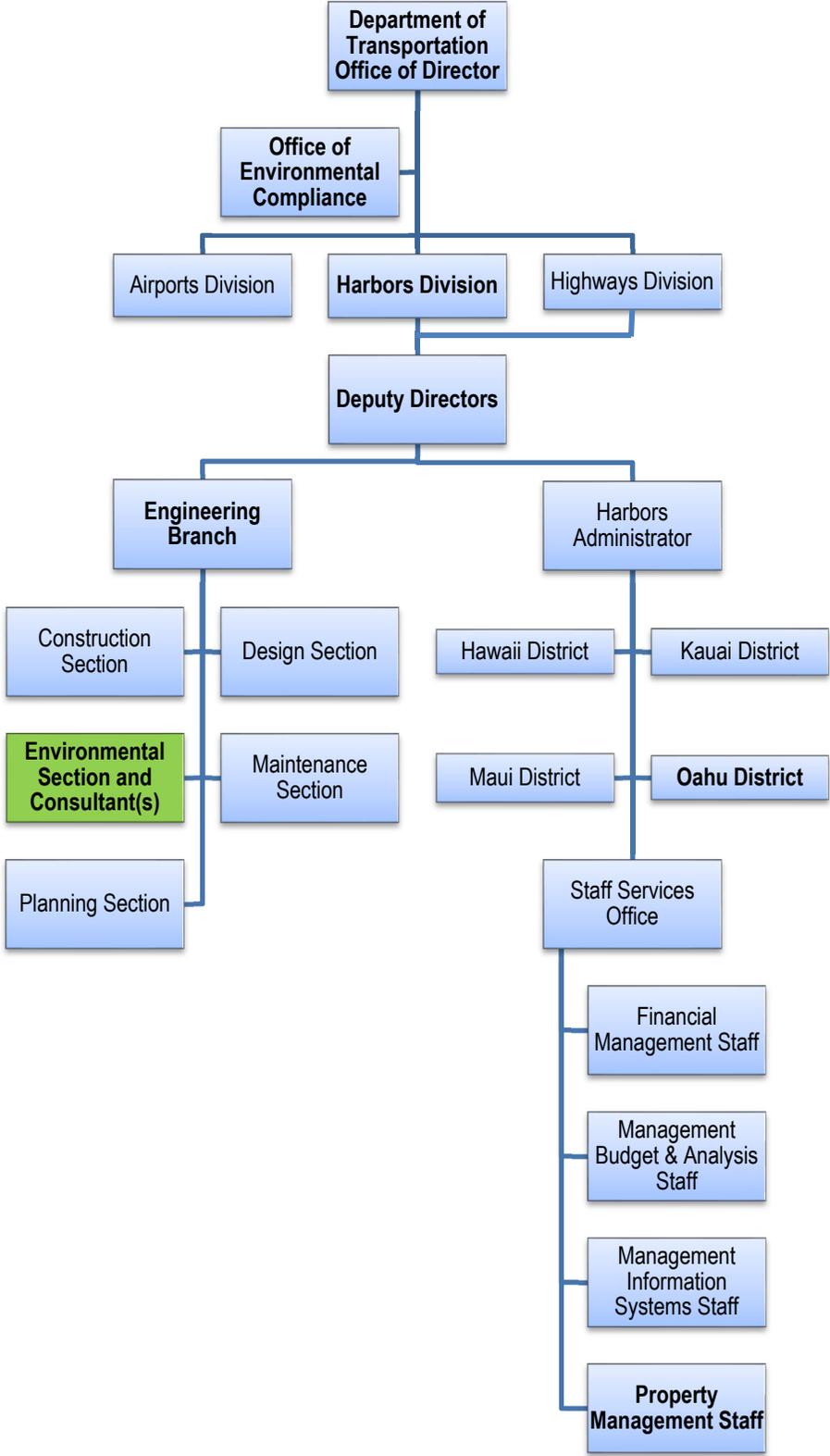
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USEPA 2000, *Stormwater Phase II Final Rule*: United States Environmental Protection Agency, USEPA 833-F-00-001, Fact Sheet 1.0 (revised December 2005), January 2000.

Attachment 1

HDOT Harbors Division Administrative Organizational Chart

State of Hawaii Department of Transportation, Harbors Division Administrative Organizational Chart



Attachment 2

HDOT Harbors Rules and Regulations and Examples of Tenant Lease Agreement and Revocable Permit

HARBORS RULES AND REGULATIONS FOR ENVIRONMENTAL COMPLIANCE

The Harbors environmental inspectors have been given enforcement actions that include verbal warnings, written citations, and potential tenant eviction.

Hawaii Revised Statutes Title 15 Chapter 266

HRS 266-2 describes the powers and duties of the State of Hawaii Department of Transportation Harbors Division. **HRS 266-3** establishes the Director of Transportation authority to establish and enforce rules to control and manage all commercial harbors and roadsteads, all commercial harbor improvements, and all vessels and shipping within the commercial harbors and roadsteads. The Harbors then relies on **HRS 266-24**, which permits the Director of Transportation the authority to designate persons to enforce Chapter 266 and all rules and orders issued pursuant thereto and of all other laws of the state.

Such officers, employee's agents, and representatives of Harbors have police powers to serve and execute warrants and arrest offenders, and the power to serve notices and orders. When arresting or issuing a citation to a purported violator of any provision of Chapter 266, the Director of Transportation's designee, hereinafter referred to as "enforcement officer" can issue a summons or citation (similar to a traffic ticket) warning or directing the violator to appear and answer the charge before a district judge, or take the purported violator without delay before a district judge.

Penalties for violating the provision of Chapter 266 or rules or orders issued pursuant to Chapter 266 are issued by the district court and includes a finding or guilty or not guilty verdict of a misdemeanor and a fine. Fines arising from environmental protection violations include reimbursing the HDOT for the entire amount of the HDOH or USEPA fine under **HRS §266-28** and can include an additional amount of not more than \$10,000 for each day of violation under **HRS §266-25**.

Hawaii Administrative Rules Title 19 Chapters 41 to 44

HDOT adopted these chapters to regulate operations at the state harbors. **Chapter 42-126 and 42-127** specifically apply to environmental regulation. These rules require that no litter be left within a state harbor, except in properly marked bins. In addition, oil, oily refuse, sludge, chemicals, or other hydrocarbons should only be deposited in designated collection points. Specifically, Chapter 42-127 can be applied to activities such as maintenance or washing that has the potential to generate pollutants to be discharged into state waters. Below is an excerpt from Chapter 42-127:

"No person shall place, throw, deposit, or discharge, or cause to be placed, thrown, deposited, or discharged into the waters of any harbor, river or shore waters of the State any litter, or other gaseous, liquid or solid materials which render the water unsightly, noxious or otherwise unwholesome so as to be detrimental to the public health and welfare or a navigational hazard. No person shall discharge oil sludge, oil refuse, fuel oil or

molasses either directly or indirectly, or pump bilges or ballast tanks containing other than clean water into the waters of any harbor, river or into any shore waters in the State.”

In addition, Chapter 42 contains language on storage, usage, and/or handling requirements for hazardous materials or other regulated potential pollutants or hazardous substances. These chapters detail specific environmental practices where enforcement is implemented through arrest or citation and presented before the district judge. The major components of Chapter 42, related to enforcement, inspection, safety, cleanliness, use of facilities, and construction, are summarized below.

Chapter 42-15 – Compliance with Federal, State, and County Laws, Ordinances and Rules

- Use of state harbors and harbors facilities is subject to compliance with all applicable federal, state, and county laws, ordinances, rules and regulations. Particular attention is directed to:
 - Rules of the United States Public Health Service and of the state department of health, relating to the use of rat guards and other measures to prevent rodents from leaving the vessel.
 - Rules of the state department of health pertaining to air and water pollution.
 - Rules of the fire department of each county.

Chapter 42-16 – Citation for Violation

- Citations issued, pursuant to HRS 266-24.1, to a commercial firm for violation of this part may be issued to any agent, officer, or manager of the firm.

Chapter 42-50 – Inspection

All small craft and smaller commercial vessels moored or berthed at a state-owned or controlled pier, wharf, quay, bulkhead, landing dolphin, anchorage, mooring, or other facilities located in the shore waters, navigable streams, harbors, ports, and roadsteads of the State shall be subject to inspection by the department or any peace officer of the State or its political subdivisions at any time where necessary and proper for the purpose of enforcing these rules.

Chapter 42-52 - Small Craft and Smaller Commercial Vessel Repairs, Reconstruction or Major Modification

- Minor repairs to small craft and smaller commercial vessels may be made at the assigned berth and shall be completed within thirty days.
- If repairs are estimated to, or actually do, require that the vessel be out of service for more than thirty days, prior approval shall be sought from the department to initiate or complete the repairs in the harbor.
- Prior approval shall be sought from the department for any repairs requiring the use of cranes, lifts, and any similar devices within the harbor.
- Repair, reconstruction or major modification that would interfere with the free flow of other vessels, pedestrian, or vehicle traffic shall only be accomplished in an area designated by

the department. Failure to seek approval as required by this section shall be grounds for the revocation of the use permit.

Chapter 42-103 Vessel Loaded with Explosives

- No vessel containing more than five hundred pounds of Class A, one ton of Class B, and/or ten tons of Class C explosives (net explosive content) shall enter or be loaded in any harbor in the State except on prior written permission of the harbor master of the district concerned, or the director.
- No Class A explosives, as defined by the United States Coast Guard in its regulations in existence as of June 1, 1993, will be admitted in any harbor in quantities in excess of the limitations established by the USCG for the various harbors unless otherwise authorized by the director in writing. Other cargoes may not be moved concurrently with Class A explosive cargo.

Chapter 42-104 Handing of Explosives

- All handling and loading or unloading of explosives shall be done in a safe and careful manner and shall be in accordance with the federal regulations pertinent thereto in force at the time. Explosives shall be off-loaded prior to the off-loading of any other cargo.

Chapter 42-105 Hauling of Explosives

- All hauling of explosives away from or to the pier shall be done in a safe and careful manner and shall be in accordance with rules of the state department of labor and industrial relations.

Chapter 42-106 – Containers for Flammable Liquids

- No empty containers which have been used to hold flammable liquids shall be delivered onto any wharf or structure under control of the department unless the same are securely closed with metal screw plugs.
- Any such containers shall be delivered onto a wharf or structure only at such times as a carrier is prepared to take immediate delivery.

Chapter 42-107 – Nitrate of Soda, Nitrate of Ammonia, Sulfur, and Other Similar Materials

- No nitrate of soda, nitrate of ammonia, sulfur, or other similar material shall be stored or left upon any wharf for more than four hours unless packed in sound and non-leaking containers. Such material shall be under the continuous care of a competent guard satisfactory to the harbor master until removed.
- Masters, owners, or agents of vessels or consignees of cargoes of nitrate of soda, sulfur, or other similar materials during the process of loading, unloading, and removing such cargoes, must at all times keep the wharf swept clean and free of such materials.
- If loose nitrate of soda, sulfur, or other similar material is to be discharged onto or loaded from any wharf or structure at any harbor, it shall be placed directly into the carrier and immediately removed. A protective device approved by the harbor master shall be used

during the period of loading or unloading to prevent the material being handled from falling upon the wharf structure.

- During the process of handling nitrate of soda, sulfur, or other similar material on any wharf at any harbor under control of the department, it shall be obligatory on the part of the master, owners, or agents of a vessel to provide containers of not less than 50 gallons capacity filled with a solution of nitrate of soda and water at distances of not more than 50 feet apart, with suitable buckets placed alongside each container, for the purpose of fighting any fire which may occur in such cargo.

Chapter 42-108 – Dangerous Acids; Electric Storage Batteries

- Acids of a dangerous character such as sulfuric, muriatic, and nitric acids shall be removed from the wharf immediately upon discharge from any vessel and no such acid shall be put upon a wharf under control of the department for shipment until the carrier is ready to receive it. Prior permission of the harbor master shall be secured in the event it becomes necessary to handle such cargo at other times.
- Electric storage batteries containing electrolyte or corrosive battery fluid of non-spillable type, protected against short circuits and completely and securely boxed, shall be exempt from this provision.

Chapter 42-109 – Flammable Substances; Leaky Containers

- No gasoline, distillate, kerosene, benzene, naphtha, turpentine, paints, oils, or other flammable substances in leaky containers shall be delivered onto any wharf under control of the department for shipment.
- All such substances unloaded from any vessel in leaky containers shall be removed immediately.

Chapter 42-110 – Heating Combustibles on Vessels

- No combustible material such as pitch, tar resin, or oil shall be flame heated on board any vessel within the harbors or streams of the State without the permission of a harbor master.

Chapter 42-111 – Fumigation of Vessel

- No vessel shall be fumigated or smoked at any wharf under control of the department without the prior permission in writing from the director, the chief, or the harbor master.
- If fumigation is to be with cyanogen products or hydrocyanic acid gas in any form, however generated, the applicant or applicant's agent shall be in possession of a permit as required by HDOH rules and shall have a guard on duty so long as any danger exists, in order that no one, unless properly entitled to do so, be allowed to board such vessel.

Chapter 42-112 – Use of Fuel Burning Steam Generating Appliances

- All fuel burning steam generating appliances when used on any wharf under control of the department or on any scow, pile driver, or other vessel working alongside or near any

wharf under control of the department shall be equipped with spark arresters satisfactory to the harbor master.

- At the close of each day's work, all ashes, cinders, waste, or other deposits caused by such appliances upon any wharf shall be promptly removed and shall not be disposed of in or upon any waters of the harbor.

Chapter 42-113 – Repair, Manufacturing, Construction, or Maintenance Work on Wharf

- No person shall make any repair or do any kind of manufacturing, construction, or maintenance work on any wharf without the permission of the harbor master.

Chapter 42-114 – Smoking Prohibited

- Smoking is positively prohibited at all times within any cargo shed, or upon any wharf apron, and during the time cargo is being loaded, unloaded, or stored on any unshedded pier under control of the department, and no person shall enter into, stand in, or under, or pass through any such wharf or structure with a lighted pipe, cigar, cigarette, match, fire, or any flame of whatever nature, excepting only within those areas designated by the harbor master and plainly marked "Smoking Area."
- No smoking or lighting of a match or any other fire-creating device shall be permitted within 50 feet of any fueling operation.

Chapter 42-115 – Use of Explosives

- The use of explosives on land, on any wharf, or in a shed or other structure under control of the department, or in the water in the immediate vicinity of the same, without the written approval of the harbor master is strictly prohibited.

Chapter 42-116 – Keeping Wharf in Sanitary Condition and Clear of Fire Hazard

- Vessel owners, charterers, agents, or private terminal operators utilizing wharves and sheds under the control of the department for the handling of merchandise shall keep such wharves and sheds in a clean and sanitary condition, clear of materials which create a fire hazard and shall ensure that passageways and established fire lanes are not obstructed.

Chapter 42-117 – Standards of Cleanliness

- All vessels moored at a state-owned mooring or berthing facility shall be kept, at all times, in a condition of reasonable cleanliness and sanitation so as not to constitute a common nuisance or potential source of danger to public health.

Chapter 42-118 – Charges for Cleaning Wharves

- In cases where the department takes over the cleaning of wharves the charge therefore shall be assessed against the vessel which is responsible for the necessary of cleaning.

Chapter 42-119 – Identification of Mobile Equipment

- All mobile equipment used on any property under the control of the department in connection with the handling of cargo or shipping containers, such as folk lifts, cranes, tractors, and straddle trucks, shall be clearly identified as to the owner thereof.

Chapter 42-121 – Fowl, Animal, or Livestock

- No fowl, animal, or livestock of any kind shall be allowed to remain on any wharf under control of the department for a period longer than six hours without being properly fed and watered. After any fowl, animal, or livestock unloaded on a state wharf, it shall be removed from the same wharf within twenty-four hours.
- No shipment of such fowl, animal, or livestock subject to quarantine shall be unloaded on a state wharf by any shipping company or its agents unless first passed by the state department of agriculture or unless arrangement have been made of acceptance of quarantine. All such fowl, animal, or livestock requiring quarantine shall be removed from the wharf within eighteen hours.
- All expenses incurred in the care and maintenance of such fowl, animal, or livestock while on a state wharf shall be paid by the consignee thereof and shall constitute a lien upon the same until such charges are paid.

Chapter 42-122 – Private Use of State Harbor Property or Facilities; Business Activities; Signs

- No regular or extensive use of any state harbor property or facility for private gain or purpose shall be permitted without corresponding and reasonable benefits and returns to the public.
- No person shall engage in any business or commercial activity at any state harbor without the prior written approval of the department. Without limiting its generality, the term “engage in any business or commercial activity” as used in this section includes (1) solicitation, and (2) distribution of advertisement or circulars, intended for private gain or purpose.
- No person shall post or display any signs at any state harbor without the prior written approval of the department, except that approval will not be required for the posting or displaying of any sign on a vessel which relates solely to the sale of such vessel if the maximum dimension of such sign does not exceed three feet.

Chapter 42-123 – Placement of Goods and Equipment

- Any person handling goods or using equipment on a wharf or within a shed under control of the department or bringing goods whereon or therein for shipment, shall place, store, or stack such goods or equipment in such a way as not to be an impediment to the approaches to same nor an obstacle to the removal of other goods, not to cause damage to the shed or wharf.
- No goods shall be so placed as to restrict or prevent the use of mooring bitts, cleats, or any other device used for mooring purposes.
- No goods shall be so placed as to restrict or prevent the use of tracks, water connections, fire hydrants, gutters, liquid connections or drains, telephone or electric connections.

Chapter 42-124 – Closing of Wharves for Safety Reasons

- The harbor master may close the wharves or any portion thereof and regulate and control the use of the same whenever in the harbor master's opinion it is advisable to do so for reasons of safety, fire prevention, or probable interference with cargo handling or vessel operations.
- No person shall enter upon any wharf so closed without the permission of the harbor master.

Chapter 42-125 – Liability for Damage to or Loss of Merchandise and Cargo

- The department shall not be liable for any damage to or loss of merchandise or other property on any wharf under its control.
- It shall be the responsibility of shipping concerns or their agents to exert every effort to protect cargo from the effect of weather conditions while same is stored on state wharves. This responsibility shall include the proper closing of all openings such as outside doors and windows, and the placing of cargo on pallets or dunnage so that it will not be damaged by moisture from the shed floors. Unless the above precautions are taken and unless carelessness on the part of department employees can be shown, no claim for damaged cargo due to inclement weather shall be considered.

Chapter 42-126 – Littering or Polluting Land Areas Prohibited

- No person shall throw, place, leave, deposit, abandon, or cause or permit to be thrown, placed, left, deposited or abandoned any litter within a state harbor, except in receptacles designated by the department for the disposal of such materials. "Litter" as used in this section includes any and all types of debris and substances, whether liquid or solid, and materials such as garbage, refuse, rubbish, glass, cans, bottles, paper, wrappings, fish or animal carcasses or any other substances which render harbor lands or facilities unsightly, noxious or otherwise unwholesome to the detriment of the public health and welfare and effective and safe operation of the harbor.
- No person shall deposit oil, oily refuse, sludge, chemicals, or other hydrocarbons on state property except in specially designated collection points. These items may not be left in or near standard refuse containers or anywhere else on harbors property. Penalties, including but not limited to the revocation of mooring permits and the right to use the facilities, may be invoked.

Chapter 42-127 – Littering or Polluting of Water Prohibited

- No person shall place, throw, deposit, or discharge, or cause to be place, thrown, deposited, or discharges into the waters of any harbor, river or shore waters of the State any litter, or other gaseous, liquid or solid materials which render the water unsightly, noxious or otherwise unwholesome so as to be detrimental to the public health and welfare or a navigational hazard.
- No person shall discharge oil sludge, oil refuse, fuel oil, or molasses either directly or indirectly, or pump bilges or ballast tanks containing other than clean water into the waters of any harbor, river or into any shore waters in the State.

Chapter 42-128 – Disposal of Salvage of Derelict Craft

- When any owner, agent, or individual contemplates or plans the disposal or salvage of a derelict craft, vessel or other object of any size, type or description, by transporting across, within or on navigable waters, whether a part or whole craft or whether a floating or suspended object of any sort which might, if sunk, lost or abandoned in the harbors, channels or shore waters, become a hazard to navigation, to dredging or to other operation of state or federal government, or the public in those waters, that person shall obtain the written permission of the harbor master before taking such action.

Chapter 42-129 – Duty of Persons Who Lose, Drop, or Abandon Any Floating or Sinking Object

- Should any owner, operator, charter, agent, or individual, without permission of the harbor master, lose, sink, drop, or abandon any floating or sinking object in or on the navigable waters and shore waters of the State, that person shall immediately notify the harbor master and shall immediately take such action as is necessary for removal of the object.
- Upon failure on the part of the owner, operator, charterer, agent or individual to remove such object the department will take such actions through federal or commercial channels as are necessary for such removal and will charge all costs incurred by the department in effecting the necessary removal to the owner. The harbor master may require the posting of a bond to assure payment.

Chapter 42-130 – Approved Backflow Prevention Device Required for Water Supply System

- No person shall connect a vessel's water supply system, siphon or other water water-operated device, equipment or mechanism connected to the water supply system or operate any water-operated device, equipment or mechanism connected to the water supply system, unless an approved backflow prevention device has been installed at the faucet or other point of connection. An "approved backflow prevention device" means a backflow prevention device that meets the requirements contained in Standard 1001, American Society of Sanitary Engineers as it existed on June 1, 1993, or the Uniform Plumbing Code adopted by the International Association of Plumbing and Mechanical Officials.

Chapter 42-131 – Dumping of Materials at Sea

- When any owner, agent or individual contemplates the dumping of sinkable materials at sea by hauling across, within or on the navigable and/or shore waters of the State that person shall notify and obtain the permission of the department as specified in §19-42-161 and §19-42-162 prior to movement and shall not fail to perform any duty imposed thereby. All dumping at sea of sinkable objects or materials shall be done in the areas designated by the Secretary of the Army for such disposal and in accordance with the Corps of Engineers requirements and applicable state agency requirements.
- The dumping of floating objects is strictly prohibited.

Chapter 42-132 – Waste Outlets; Permit Required

- Notwithstanding the issuance of a permit pursuant to §19-42-161, no person shall do any of the following within a state commercial harbor without first having obtained a permit from the HDOH (not applicable to vessels):
 - Discharge any wastes from shore into the waters of a state commercial harbor so as to reduce the quality of the water below the standards of water quality adopted for such waters by the HDOH.
 - Construct, install, modify, alter, or operate any treatment works or part thereof or any extension of addition thereto which discharges from shore into the waters of a state commercial harbor.
 - Construct or use new outlet for the discharge of any wastes from shore into the waters of a state commercial harbor.

Chapter 42-133 – Loading or Unloading Flammable Liquids

- Loading or unloading of flammable liquids shall be in strict accordance with applicable federal laws and regulations.

Chapter 42-134 – Appliances and Electrical Wiring

- All cooking or heating appliances or any other machinery, equipment, utensils, or apparatus which are used by small craft or smaller commercial vessels at a state commercial harbor and could be the cause of fire shall be so constructed, installed, wired, situated, maintained, and used so as not to constitute a potential fire hazard. The failure to conform to any statute, rule, regulation, standard, or ordinance affecting fire safety may be considered by the department in determining any violation of this section.
- Particular attention is directed to the applicable provisions of the state boating rules of the Department of Land and Natural Resources. In addition, the approval of any machinery, equipment, utensils, or apparatus by Underwriter' Laboratories, Factory Mutual System, Marine Testing Institute, Inc., or any other nationally recognized electrical testing agency, may be considered by the department in determining compliance with this section.
- All electrical equipment must be properly grounded.

Chapter 42-135 – Fire Extinguishing Equipment for Small Craft

- Any small craft utilizing the waters of the state commercial harbor shall be provided with approved fire extinguishers as prescribed in the applicable provisions of the state boating rules of the DLNR. The fire extinguishers shall at all times be maintained in good and serviceable condition for immediate and effective use and shall be mounted on wall brackets so located as to be readily accessible. In addition, if any person is living aboard any small craft or contrivance, which is not a visiting small craft temporarily using the harbor, the small craft or contrivance shall be equipped with at least one approved hand portable fire extinguisher containing ten pounds of dry chemicals placed on each separate level or floor of habitable living space. Each extinguisher shall be mounted on a wall bracket so placed as to be readily accessible.

Chapter 42-136 – Fueling

- All fueling operations shall be done in compliance with the stricter of any applicable federal, state, or county rules. The fueling of vessels at a state commercial harbor where a marine fueling station has been established, or where authorized tank trucks or tank trailers are available shall be accomplished only at a station, or by tank trucks or tank trailers with a state permit. A permit shall be issued only if:
 - Proper application has been submitted;
 - Established fees have been paid to the department by the applicant;
 - There exists a comprehensive general liability insurance policy or policies, or a certificate of insurance in lieu thereof evidencing that a policy has been issued and is in force with a combined single limit of not less than \$500,000. The specification of limits contained in this section shall not be construed in any way to be a limitation on the liability of the permittee for any injury or damage proximately caused by it. The insurance shall (A) be issued by an insurance company or surety company authorized to do business in the State; (B) name the State as an additional insured; (C) provide that the department shall be notified at least thirty (30) days prior to any termination, cancellation, or material change in its insurance coverage; (D) cover all injuries, losses, or damages arising from, growing out of, or caused by any acts or omissions of the permittee, its officers, agents, employees, invitees, or licensees, in connection with the permittee's use or occupancy of the premises; and (E) be maintained and kept in effect at the permittee's own expense throughout the life of the permit. The permittee shall submit evidence to the department of renewals of other actions to indicate that the insurance policy remains in effect as prescribed in this section.
- Prior to fueling a vessel at a state commercial harbor, the operator shall:
 - Securely moor the vessel;
 - Stop all engines, motors, fans, and devices which could provide sparks;
 - Extinguish all fires;
 - Close all ports, windows, doors, and hatches; and
 - Clear the area of people not directly involved with the operation of the vessel or servicing of the vessel.
- Persons fueling a vessel at a state commercial harbor shall:
 - Refrain from smoking, striking matches, or throwing switches; and
 - Keep the nozzle of the fuel hose, or fuel can in continuous contact with fuel tank opening to guard against static sparks.
- After fueling is completed, the following action shall be taken:
 - Close fill openings;
 - Wipe up all spilled fuel;
 - Open all ports, windows, doors, and hatches;
 - Permit vessel to ventilate for at least five minutes; and
 - Check that there are no fuel fumes in the vessel's bilges or below deck spaces before starting machinery or lighting fires.
- Fueling a vessel from a fuel barge or tanker barge shall be allowed only when it is down in accordance with operational procedures approved by the USCG.

Chapter 42-137 – Fishing Prohibited

- Fishing, as defined in HRS 187A-1 is prohibited from all piers, wharves, and bulkhead walls in Kewalo Basin and Honolulu Harbor except Piers 5, 6, and 7; and all piers and wharves in Barbers Point Harbor. Casting of fishing lines beyond the shallow marginal reef and into the boat channel is prohibited from the Waikiki side of the Kewalo Basin entrance channel. Fishing with nets is prohibited in the basin and channel areas of Kewalo Basin, Barbers Point Harbor, and Honolulu Harbor except for the use of hand-held scoop nets for landing hooked fish at Piers 5, 6, and 7 in Honolulu Harbor and the shallow marginal reef at the Waikiki side of the Kewalo Basin entrance channel and as provided in these rules and HAR 188-34.

Chapter 42-138 – Lifesaving Equipment Required

- Any small craft and smaller commercial vessel utilizing the waters of a state commercial harbor shall be equipped with lifesaving equipment as required by and approved by the USCG. Wearable PFDs must be readily accessible and throwable devices must be immediately available for use
 - Boats 16 feet or over in length shall carry one Type I, II, or III (wearable) PFD for each person on board and one Type IV (throwable) PFD in each boat.
 - Boats less than 16 feet in length and all canoes and kayaks shall carry one Type I, II, III, or IV PFD for each person on board.

Chapter 42-139 – Fire Signal for Small Craft or Smaller Commercial Vessel in Harbor

- Five prolonged blasts on a vessel's whistle, horn or other sound producing device indicates (1) a fire on board small craft or smaller commercial vessel not under way or (2) a fire at any facility to which the small craft or smaller commercial vessel may be moored. The words "prolonged blasts" used in this section shall mean a blast from four to six seconds duration. The fire signal shall not be used for other purposes in any state harbor.

Chapter 42-140 – Liquor Prohibited on State Piers and Waterfront Properties without Permit

- No person shall consume any liquor as defined in HRS 281-1, on any state pier or waterfront property not under lease except by prior permission from the department for each occasion.

Chapter 42-141 – Responsibility for Vessel Gangplanks

- It shall be the responsibility of the vessel to provide a reliable and safe means of access and egress to and from the vessel and the pier for crew members, passengers, and visitors to the vessel.

Chapter 42-161 – Dredging, Filling, and Construction

- Any person, firm, or corporation desiring to perform any dredging, filling, or erecting of any construction within commercial harbors and entrance channels belonging to or controlled by the State, shall first obtain a permit therefore from the department.

- The application for any dredging, filling, or construction shall be in the form prescribed by the department, accompanied by maps and drawings which shall clearly show the location, scope, character, and details of the proposed work, and shall be further accompanied by a fee of \$50 to cover costs of the necessary investigation. This fee is not refundable whether or not a permit is granted.

Chapter 42-162 – Jurisdiction of Other Agencies

- The United States Army Corps of Engineers, the State Department of Health, and the Department of Land and Natural Resources may have certain jurisdiction over navigable waters.
- The approval of these agencies shall also be secured before performing work within their jurisdictions. When directed, the applicant shall notify the USCG of such work for publication of a “Notice to Mariners.”

Chapter 42-163 – Installation of Buoys

- Any person desiring to install mooring or anchorage buoys in any harbor under the jurisdiction of the department, shall apply to the department in writing for permission to install such buoys.
- Applications must be accompanied by comprehensive plans showing the exact proposed location of buoys and anchors, as well as plans and specifications of the type and size of buoy and anchoring equipment. The director may grant permission for the installation of moorings or buoys in any area under the department jurisdiction if, in the director’s judgment, it is advisable and will not be a menace to or interfere with navigation. The right is reserved by the director to revoke any license or permission for installation at any time, if the director’s opinion revocation is necessary or advisable. Upon revocation, the owner shall remove the moorings or buoys without delay.

Chapter 42-164 – Construction of Structures

- No buildings or structures of any nature shall be erected or constructed on state property, nor shall existing structures be modified, without obtaining the prior permission of the division and any other governmental agency as required by law. The division may require plans, specifications, and other pertinent data to accompany any request for construction or modification of state facilities. In General, approval shall be dependent on an agreement to return the property to its original state when vacating the property, if requested by the division.

Note: The majority of Chapter 42 deals with loading and unloading of hazardous materials and does not apply to storage of materials and waste that are used/stored at harbor tenant facilities or construction sites. In the case of improper use, manage, or storage of hazardous substances or wastes, Harbors will follow the terms and conditions contained in the tenant lease agreement or revocable permit, or construction contracts as stated below.

Enforcement Officers may issue penalties under HAR Title 19 for the following circumstances:

- A responsible party in violation of an environmental regulation, but where a Written Warning is not an effective tool.
- A responsible party in violation of a Harbors requirement, but not in violation of HDOH stormwater regulations.
- A transient vessel owner in violation of a Harbors requirement, BMP, or HDOH stormwater regulation, although not subject to a tenant lease agreement, revocable permit, construction contract.

Lease Agreement
Environmental Compliance – Lessee’s Duties

ARTICLE XIV. COMPLIANCE WITH LAWS

- A. In General. LESSEE and LESSEE’s officers, employees, agents, and Guests shall, at all times during and throughout the term of this Lease, and with respect to all phases of its performance under this Lease, fully and completely observe, comply with, and satisfy all applicable laws, statutes, codes, ordinances, orders, rules, and regulations of all governmental authorities, including, without limitation, the United States of America, the State, and the County, and any political subdivision, or agency, authority, or commission thereof, which may have jurisdiction to pass laws, statutes, codes, or ordinances, or make and enforce orders, rules, and regulations with respect to: (1) the Premises and the Harbor; (2) all phases of LESSEE’s conduct of its operations; (3) LESSEE’s maintenance and repair of the Premises; and (4) LESSEE’s performance under this Lease.

LESSEE shall also: (1) obtain and keep current all licenses and permits required by any governmental authority (whether federal, state, municipal, or county) for the conduct of LESSEE’s operations at, in, on, or over the Premises and at the Harbor; and (2) promptly pay when due, any and all required rentals and other fees and charges.

Notwithstanding the foregoing covenants, provisions, and requirements, LESSEE shall have the right, in its own name, to contest, in good faith, the validity or applicability of any law, statute, code, ordinance, order, decree, rule, or regulation of any governmental body or agency pertaining to the Premises, and LESSEE’s conduct of its operations thereon. The fact that LESSEE may, in connection with such contest, refrain from complying with such law, statute, code, ordinance, order, decree, rule, or regulation, shall not affect in any way LESSEE’s obligation to: (1) refrain from subjecting any part or portion of the Premises to forfeiture or loss; and (2) pay the required rentals and other fees and charges prescribed and set forth in Article V. (Rental) hereof.

- B. Compliance with Americans with Disabilities Act.

1. LESSEE’s Warranty. LESSEE agrees that it shall conduct its operations, and occupy or use the Premises in accordance with: (a) the Americans With Disabilities Act, 42 U.S.C.S. Section 12101 et seq. (hereinafter referred to collectively as the "ADA"), including, without limitation, modifying the LESSEE’s policies, practices, and procedures, and providing auxiliary aids and services to disabled persons; and (b) United States Access Board’s ADA Accessibility Guidelines for Buildings and Facilities, Transportation Facilities, and Transportation Vehicles (hereinafter referred to as the "ADAAG").
2. Accessible Services. LESSEE acknowledges that, pursuant to the ADA, programs, services, and other activities provided by a public entity, whether directly or through a contractor, must be accessible to the disabled public. LESSEE shall provide the services

or conduct its operations as specified in this Lease in a manner that complies with the ADA, and any and all other applicable Federal, State, and local disability rights legislation. LESSEE agrees not to discriminate against disabled persons in the provision of services, benefits, or activities provided under this Lease, and LESSEE further agrees that any violation of this prohibition on the part of LESSEE, and LESSEE's officers, employees, agents, guests, successors, and/or assigns shall constitute a material breach of this Lease.

3. LESSEE's Alterations. With respect to all work required to be performed by LESSEE in preparing the Premises for LESSEE's occupancy and use, including, without limitation, the construction, installation, renovation and/or refurbishment of any and all Leasehold Improvements at, in, on, over, or under the Premises, LESSEE agrees to complete such work in full compliance with the ADA and ADAAG. Upon LESSOR's request, LESSEE shall provide LESSOR with evidence reasonably satisfactory to LESSOR that all such work by LESSEE was completed in compliance with the ADA and ADAAG. LESSEE further agrees that any and all such future alterations, renovations, and/or improvements made by LESSEE to the Premises shall comply with the ADA and ADAAG.
4. Notice. LESSOR and LESSEE agree to promptly give written notice to the other (not to exceed three (3) consecutive, calendar days), of any and all notices which LESSOR or LESSEE receives alleging ADA violations.
5. LESSEE's Indemnification. LESSEE shall release, indemnify, defend (with counsel acceptable to LESSOR), keep, save, and hold LESSOR and LESSOR's successors and assigns, harmless from and against any and all actions, causes of action, claims, demands, lawsuits, judgments, liabilities, losses, damages, costs, and expenses, including any and all attorneys' fees and demands therefor, resulting or arising from LESSEE's failure or alleged failure to observe, comply with, and completely satisfy LESSEE's obligations hereunder with respect to the ADA.

C. Environmental Compliance – LESSEE's Duties.

1. Definitions. For purposes of this Lease, LESSEE agrees and understands that the following terms shall have the following meanings:
 - a. "Environmental Laws" shall mean and include all federal, state, and local laws of every nature including statutes, ordinances, rules, regulations, codes, notices, standards, directives of every kind, guidelines, permits, licenses, authorizations, approvals, interpretations of the foregoing by any court, legislative body, agency or official, judicial decisions, judicial and administrative orders, rulings or judgments, or rules of common law which currently are in effect or which may come into effect through enactment, issuance, promulgation, adoption or otherwise, which in any way pertain to, relate to, or have any relevance to the environment, health or safety. These Environmental Laws include, but are not

limited to, regulations and orders of the federal Environmental Protection Agency ("EPA"), and of the DOH.

- b. "Hazardous Substance" shall mean and include any chemical, substance; radioactive materials, organic or inorganic material, controlled substance, object, condition, waste, living organism, or combination thereof which is, may be, or has been determined by state or federal authority under any environmental law to be hazardous to human health or safety or detrimental to the environment. This term shall include, but not be limited to, petroleum hydrocarbons, asbestos, radon, polychlorinated biphenyls (PCBs), methane, fuels of any kind, and other materials or materials or substances that are, or may in the future be, regulated by state or federal authorities.

2. Inspection. LESSOR shall have the right to inspect the Premises, with reasonable notice to LESSEE, for compliance with Environmental Laws, including, but not limited to, LESSOR's storm water pollution prevention programs under Article XIV.C.3.n. (Storm Water Management).

3. LESSEE's Activities and Duties.

- a. Compliance with Environmental Laws. LESSEE's obligations under this Article XIV.C. (Environmental Compliance – LESSEE's Duties) shall commence on the effective date of this Lease.

LESSEE agrees, at its sole cost and expense, to comply with all Environmental Laws applicable to its occupancy, activities, operations, and use of the Premises. This duty shall survive the expiration or termination of this Lease, which means that LESSEE's duty to comply with Environmental Laws shall include complying with all Environmental Laws that may apply, or be determined to apply, to the occupancy and activities of LESSEE on the Premises after the expiration or termination of this Lease. Failure of LESSEE to comply with any and all Environmental Laws shall constitute a breach of this Lease for which LESSOR may, in its sole discretion, terminate this Lease, exercise its remedies under this Lease, including remediating any condition on behalf of LESSEE, at LESSEE's sole cost and expense, under Article XIV.C.3.h. (Environmental Investigations and Assessments) and Article XIV.C.3.k. (LESSEE's Cleanup and Restoration Obligation and Surrender of Premises), and take any other action at law or in equity it deems appropriate.

- b. Condition of Premises at Commencement of Lease. Upon the commencement of this Lease, LESSEE, at its sole cost and expense, shall commission and cause to be conducted a Phase 2 Environmental Site Assessment of the Premises to determine the presence of any Hazardous Substance at, in, on, under, or about the

Premises. LESSEE shall retain a competent, certified and qualified person or entity that is satisfactory to and approved by LESSOR, to conduct said Phase 2 Environmental Site Assessment, including investigations, assessments, testing and analyses incident thereto (hereinafter referred to as the "Initial Report"). LESSEE shall cause said person or entity conducting the Initial Report to provide LESSOR with the written results of all investigations, assessments, tests and analyses. LESSOR and LESSEE agree that the Initial Report shall be considered to have established certain baseline levels for the contamination described in the Initial Report (hereinafter referred to as the "Baseline Levels"). The Initial Report will establish a baseline from which to study, measure and assess the impact of the presence of Hazardous Substances at, on, in, over, or under the Premises and/or the escape, disposal, discharge, or release of Hazardous Substances therefrom during the term of this Lease that are caused or permitted by LESSEE.

- c. Immediate Response. If soils or other items are found or discovered on, within, or under the Premises during LESSEE's construction that LESSEE or LESSEE's contractors and subcontractors suspect contain Hazardous Substances or contaminants, LESSEE or its contractors and subcontractors shall immediately notify LESSOR. LESSOR shall thereafter respond immediately and send a qualified and authorized representative to the Premises to inspect such soil and other items. LESSOR shall have the right to inspect and test such soil and other items and may remediate any contaminants found or discovered within such soil and other items. LESSOR shall conduct its inspection, testing, and remediation in an expeditious manner, and complete LESSOR's obligations, if any. To the extent reasonably possible, LESSEE and its contractors and subcontractors agree to use best efforts to segregate these soils and other items from visually clean material, and stockpile such segregated materials on the Premises.

- d. LESSOR's Prior Approval Required. LESSEE shall not cause or permit the presence, escape, disposal, discharge or release of any Hazardous Substance except as permitted by law. LESSEE warrants and represents that LESSEE has not allowed the storage or use of such substance(s) in any manner not sanctioned by law or by the highest standards prevailing in the industry for the storage and use of such substance(s), nor has allowed to be brought onto the Premises any such substances, except to use, store and distribute in the ordinary course of LESSEE's business, and then only after written notice is given to LESSOR of the identity of such substance(s) and LESSOR's prior written approval is first obtained, which approval may be withheld at LESSOR's sole and absolute discretion. As used in this Article XIV.C.3.d. (LESSOR's Prior Approval Required), the "presence, escape, disposal, discharge or release of any Hazardous Substance" includes, but is not limited to, oil and fuel spillage or leakage, improper waste or used oil disposal, and pollution of the harbor waters, ground water, or soil attributable to:

(a) LESSEE's operations and activities on or connected with the Premises; or (b) LESSEE's occupancy and use of the Premises.

- e. Hazardous Substances. LESSEE shall not use, store, treat, dispose, discharge, release, generate, create, or otherwise handle any Hazardous Substance, or allow the same by any employee, agent, Guest, contractor or any third person, on the Premises without first obtaining the prior written consent of LESSOR, which consent may be withheld by LESSOR in its absolute discretion, and LESSEE shall comply with all Environmental Laws, including giving all required notices, reporting to, and obtaining permits from all appropriate authorities, and complying with all provisions of this Lease.

- f. LESSEE's Best Knowledge and Belief. If any lender or governmental agency shall ever require testing to ascertain whether or not LESSEE has caused or permitted the presence, escape, disposal, discharge or release of any Hazardous Substance by LESSEE, then LESSEE shall be responsible for the reasonable costs thereof. In addition, LESSEE shall execute affidavits, representations and the like from time to time at LESSOR's request concerning LESSEE's best knowledge and belief regarding the presence, escape, disposal, discharge or release of any Hazardous Substance at, on, in, over, under, through or from the Premises caused or permitted by LESSEE.

- g. Notice to LESSOR. LESSEE shall keep LESSOR fully informed at all times regarding all matters related to any Environmental Laws affecting LESSEE or the Premises. This duty shall include, but not be limited to, providing LESSOR with a current and complete list and accounting of all Hazardous Substances of every kind which are present on or about the Premises, together with evidence that LESSEE has in effect all required and appropriate permits, licenses, registrations, approvals and other consents that may be required by any federal, state, or county authority under any authority or Environmental Laws.

LESSEE shall provide said list and accounting at the commencement of this Lease, and shall update said list and accounting whenever any Hazardous Substance not accounted for by LESSEE is present on or about the Premises by any means. LESSEE shall also provide immediate written notice of any investigation, enforcement action, compliance order, or order of any type, or any other legal action, initiated, issued, or any indication of an intent to do so, communicated in any way to LESSEE by any federal, state or county authority or individual that relates in any way to any Environmental Law or to any Hazardous Substance. This written notice to LESSOR shall include copies of all written communications from any federal, state or county agency or authority, including copies of all correspondence, claims, complaints, warnings, reports, technical data and any other documents received or obtained by LESSEE.

At least thirty (30) days prior to termination of this Lease, or termination of the possession of the Premises by LESSEE, whichever occurs first, LESSEE shall provide LESSOR with written evidence satisfactory to LESSOR that LESSEE has fully complied with all Environmental Laws, including any orders issued by any governmental authority that relate to the Premises, and the results of all assessments and investigations that may be ordered by LESSOR pursuant to Article XIV.C.3.h. (Environmental Investigations and Assessments), or by any governmental agency responsible for enforcement of the Environmental Laws.

- h. Environmental Investigations and Assessments. LESSEE, at its sole cost and expense, shall cause to be conducted such investigations and assessments of the Premises to determine the presence of any Hazardous Substance at, in, on, under, or about the Premises as may be directed from time to time by LESSOR, in its sole discretion, or by any federal, state or county agency or authority. The extent and number of any environmental investigations and assessments, including testing and analyses incident thereto, shall be determined by LESSOR or the federal, state or county agency or authority directing said investigations and assessments to be conducted. LESSEE shall retain a competent, certified and qualified person or entity that is satisfactory to LESSOR, to conduct said investigations, assessments, testing and analyses incident thereto. LESSEE shall cause said person or entity conducting those assessments, investigations, tests and analyses to provide LESSOR and governmental authority with the written results of all assessments, investigations, tests and analyses.

LESSEE shall be solely responsible for all costs and expenses arising from or related to the preparation and submission of all Hazardous Substance reports, surveys, studies, assessments and characterizations required to be prepared and submitted to LESSOR pursuant to this Article XIV.C. (Environmental Compliance – LESSEE’s Duties), including without limitation, the Initial Report and the End Report (as defined in Article XIV.C.3.k. (LESSEE’s Clean-up and Restoration Obligation and Surrender of Premises) below).

- i. Disposal/Removal. Except as to the possession and handling of Hazardous Substances for which LESSEE is exempt, and those Hazardous Substances for which LESSEE has obtained all currently required permits to store or use on or about the Premises, including written permission from LESSOR, LESSEE shall cause any Hazardous Substances to be removed and transported from the Premises for disposal solely by duly licensed Hazardous Substances transporters to duly licensed facilities for final disposal, as required by all applicable Environmental Laws. LESSEE shall provide LESSOR with copies of documentary proof including manifests, receipts or bills of lading, which reflect that said Hazardous

Substances have been properly removed and disposed of in accordance with all Environmental Laws.

- j. Remediation. In the event that any Hazardous Substance is used, stored, treated, disposed on the Premises, handled, discharged, released, or determined to be present on or about the Premises, LESSEE shall, at its sole expense and cost, remediate the Premises of any Hazardous Substance, and dispose and remove said Hazardous Substance in accordance with Article XIV.C.3.i. (Disposal/Removal). This duty to remediate includes strict compliance with all Environmental Laws, as well as any directives by LESSOR to LESSEE to remediate Hazardous Substance. This duty to remediate shall include replacement of any materials, such as soils, so removed with material that is satisfactory to LESSOR and all appropriate governmental authorities and agencies, as the case may be.

LESSEE shall be responsible for remediation and restoration of the Premises to the extent it is necessary to clean, remediate and restore the Premises to the condition of the Premises and levels of any contamination or Hazardous Substances that existed on the Premises at the commencement of LESSEE'S occupancy or term of this Lease, which ever shall have first occurred, as shown by the Initial Report.

- k. LESSEE'S Clean-up and Restoration Obligation and Surrender of Premises. At or before the expiration or sooner termination of this Lease, LESSEE shall also have qualified firms and persons, acceptable to LESSOR, prepare and submit to LESSOR an environmental/hazardous substance report of the same scope and type as the Initial Report (such report is hereinafter referred to as the "End Report"). If the amount or quantity of Hazardous Substances and/or the extent, level or degree of Hazardous Substance contamination increases or intensifies over and above that shown by the Initial Report, LESSEE shall be solely responsible for the presence of any and all Hazardous Substances at, on, in, over, or under the Premises and/or the escape, disposal, discharge or release of Hazardous Substances therefrom caused or permitted by LESSEE; provided, however, that if LESSEE submits evidence reasonably satisfactory to LESSOR proving that LESSEE was not responsible for such increase or intensification in contamination, LESSEE will not be responsible for cleaning up and removing the Hazardous Substances.

Further, at or before the expiration or sooner termination of this Lease, LESSEE shall, at LESSEE'S sole cost and expense, cleanup and decontaminate the Premises and remove all Hazardous Substances exceeding the levels established in the Initial Report pursuant to Article XIV.C.3.b. (Condition of Premises at Commencement of Lease), and which are attributable to: (a) LESSEE'S operations and activities on or connected with the Premises; or (b) LESSEE'S occupancy and use of the Premises, which clean-up and decontamination shall include, but not be limited to

clean-up of harbor, surface and ground waters and making the soil free and clear of all contaminants and Hazardous Substances to the extent required under this Article XIV.C. (Environmental Compliance – LESSEE’s Duties).

LESSEE shall, at LESSEE’s sole cost and expense, have the burden of proving to LESSOR’s satisfaction that the Hazardous Substances at, in, on, over, under, through, or from the Premises is not attributable to: (a) LESSEE’s operations and activities on or connected with the Premises; or (b) LESSEE’s occupancy and use of the Premises.

LESSEE hereby agrees to timely surrender the Premises at the expiration or sooner termination of this Lease and, prior thereto, shall restore the Premises, including the soil, water, ground water and structures at, in, on, under, or about the Premises to the same condition as the Premises existed at the commencement of this Lease, as determined by LESSOR, reasonable wear and tear excepted. Said surrender and restoration shall be at the sole cost and expense of LESSEE.

This duty to restore the Premises includes remediation as described in the previous Article XIV.C.3.j. (Remediation). This duty also includes, but is not limited to, the removal of all pipes, pipelines, tanks and containers of any kind that LESSEE has installed or erected on the Premises. In the event LESSEE does not timely restore the Premises to a satisfactory condition, as determined by LESSOR, LESSEE understands and agrees that LESSOR may exercise its rights under Article XIV.C.3.o. (LESSOR’s Right to Act) and until such time as the restoration is complete to the satisfaction of LESSOR, LESSEE shall be liable for lease rent in the same manner and amount as if this Lease had continued in effect during the period of restoration, as well as any other damages and costs that LESSOR may have incurred, including penalties, fines and assessments related to the Premises which may be imposed on LESSOR or LESSEE by any governmental authority. This provision shall survive the expiration or the termination of this Lease.

1. Tanks, Pipelines; Inspections and Repairs. Unless LESSOR specifically agrees in writing prior to their installation, all pipes, pipelines, tanks, containers or conduits of any kind that may at any time have contained, or may have been intended to contain Hazardous Substances of any type (hereinafter referred to as a "Facility") that LESSEE intends to install on the Premises must be installed above ground level in such manner that allows for periodic inspection and maintenance of the Facility for purposes of determining the existence of leaks and discharges from, and deterioration of any kind to, and that allows repair of, the Facility. LESSEE shall provide LESSOR with prior notice of LESSEE’s intent to install a Facility to allow LESSOR ample time, as determined by LESSOR, to inspect the plans for installation of such a Facility. Said Facility shall not be installed unless and until the Facility, and its manner of installation, is approved by LESSOR. Within ninety

(90) calendar days of the commencement of this Lease, or commencement of possession of the Premises by LESSEE, whichever first occurs, LESSEE shall submit a contingency plan to control and remedy any spill, discharge or leak from any Facility on the Premises during the term of this Lease, which plan shall include the cleanup of all Hazardous Substances that may be spilled, discharged or leaked, which plan shall be reviewed and approved by LESSOR. LESSEE shall also submit to LESSOR a plan for LESSEE to conduct, or have conducted, regular inspections of all Facilities on or about the Premises for the purpose of prevention of any leak, discharge or spill from said Facilities. Said contingency plan and inspection plan are subject to the approval of LESSOR. LESSEE shall timely obtain and maintain in effect all required permits, licenses and approvals for such Facilities from any governmental authority. Failure to submit said plans, to comply with said plans, or obtain and maintain any required permits, licenses or approvals constitutes a breach of this Lease, giving LESSOR the right to immediately terminate this Lease, take possession of the Premises, and pursue any other remedy available to LESSOR.

m. Protection of Waters. LESSEE shall maintain and employ debris, pollution and contamination control measures, safeguards and techniques to prevent debris, pollution or contamination to the ocean waters, streams or waterways resulting from the activities or operations of LESSEE, and LESSEE's invitees and agents at, in, on, over, under, across, through, or connected with the Premises, and shall take immediate corrective action in the event of such pollution or contamination to immediately remove the cause of such pollution or contamination, and shall immediately clean the Premises and affected areas and surrounding waters of such pollutant or contaminant and restore to LESSOR's reasonable satisfaction the areas affected by such pollution or contamination, all at LESSEE's sole cost and expense.

n. Storm Water Management. LESSEE shall undertake and maintain storm water management practices as provided herein:

(1) LESSEE shall implement and maintain the Best Management Practices ("BMPs") that are described in the State of Hawai'i, Department of Transportation, Harbors Division ("Harbors Division") storm water website (<http://hidot.hawaii.gov/harbors/library/storm-water-management/>) as applicable to its construction projects and its business activities and any other new or existing requirements as may be needed for Harbors storm water compliance.

(2) LESSEE is required to attend "Tenant Storm Water Pollution Prevention Awareness Training" provided by LESSOR. LESSOR may provide to LESSEE a questionnaire to assess LESSEE's knowledge regarding storm

water awareness and pollution prevention. LESSEE is required to answer the questionnaire and return said questionnaire to LESSOR by its due date. Failure to attend the training or complete the questionnaire shall be considered a breach of the terms and conditions of this Lease which may result in the revocation of this Lease and termination of LESSEE's occupancy.

- (3) LESSOR may provide storm water management information to LESSEE including, but not limited to: (a) educational materials describing the responsibilities of harbor tenants and users regarding storm water pollution prevention; (b) fact sheets and/or brochures describing LESSOR endorsed pollution prevention and good housekeeping BMPs for posting at common areas; (c) all lease or use agreement obligations relating to storm water management; (d) the purpose, scope, and potential ramifications of LESSOR's recurring inspections and the availability of the Harbor inspection and enforcement plans; (e) a concise and readily understandable definition of illicit discharges as well as procedures for reporting illicit discharges via LESSOR's storm water hotline; and (f) resources for obtaining additional information regarding storm water pollution prevention. LESSEE shall review all documents provided to be aware of the storm water requirements in LESSOR's MS4 permit covering Honolulu Harbor, apply appropriate BMPs based on activities at the Premises and understand how to identify and report illicit discharges.
- (4) LESSEE shall allow LESSOR to conduct regular inspections of the Premises to ensure compliance with environmental regulations. LESSOR shall provide a written inspection report for each inspection and conduct any needed enforcement which may include criminal or civil penalties as provided by law.
- (5) If authorized non-storm water discharges are permitted within the Premises, LESSOR shall be allowed to inspect the Premises to verify that controls are in place. If LESSOR finds that an authorized non-storm water discharge lacks the proper controls, LESSOR shall conduct follow-up enforcement which may include criminal and civil penalties as provided by law.
- (6) If LESSEE engages in development and/or construction activities on the Premises, LESSEE shall comply with all construction related BMP requirements set forth by the Harbors Division *Construction Site Runoff Control Program* manual, and shall install Post-Construction BMPs, as required by the Harbors Division *Post-Construction Stormwater Management in New Development and Redevelopment, Honolulu and*

Kalaeloa Barbers Point Harbors manual. If such Post Construction BMPs are required and installed, LESSEE shall be responsible for and implement an operation and maintenance plan for said BMPs, conduct an annual inspection thereof, and submit annual reports to Harbors Division demonstrating proper operation and maintenance.

- o. LESSOR's Right to Act. In the event LESSEE fails for any reason to comply with any of its duties under this Lease or under any Environmental Laws within the time set for doing so, or within a reasonable time as determined by LESSOR, LESSOR shall have the right, but not the obligation, in its sole discretion, to perform those duties, or cause them to be performed. LESSEE hereby grants access to the Premises at all reasonable hours to LESSOR, its agents and anyone designated by LESSOR, in order to perform said acts and duties. Any cost, expense or liability of any type that may be incurred by LESSOR in performing said acts or duties shall be the sole responsibility of LESSEE, and LESSEE hereby agrees to pay for those costs and expenses, and release, indemnify, defend (with counsel acceptable to LESSOR), and hold harmless LESSOR, its officers, employees, agents and representatives for any liability incurred. This obligation shall extend to any costs and expenses incident to enforcement of LESSOR's right to act, including litigation costs, attorneys' fees and the costs and fees for collection of said cost, expense or liability. This provision shall survive the expiration or the termination of this Lease.

- p. LESSEE's Release and Indemnification. LESSEE hereby agrees to release, indemnify, defend (with counsel acceptable to LESSOR) and hold harmless, LESSOR, its officers, employees, agents, representatives, successors and assigns from any liability of any kind, including, but not limited to, any liability for any damages, penalties, fines, judgments or assessments that may be imposed or obtained by any person, agency or governmental authority against LESSEE by reason of any Hazardous Substance that may be present by whatever means at, in, on, over, under, or about the Premises.

LESSEE hereby agrees to release, indemnify, defend (with counsel acceptable to LESSOR), and hold harmless LESSOR, its officers, employees, agents, representatives, successors and assigns from any claims, demands, lawsuits, actions, judgments, liabilities, losses, damages, costs and expenses arising out of, connected with or related to:

- (1) The presence, escape, disposal, discharge or release of Hazardous Substances at, in, on, over, under, through, or from the Premises or elsewhere if attributable to:

- (a) LESSEE's operations and activities on or connected with the Premises; or
 - (b) LESSEE's occupancy and use of the Premises; and,
- (2) LESSEE's performance of LESSEE's obligations under this Article XIV.C. (Environmental Compliance – LESSEE's Duties) from any liability that may arise in connection with, or by reason of, any occurrence involving any Hazardous Substance that may be alleged to be connected to, or related in any way with, the Premises, LESSOR's ownership of the Premises, or this Lease, including the presence of any Hazardous Substance at, in, on, under, or about the Premises. These covenants shall survive the expiration or earlier termination of this Lease.

Furthermore, LESSEE shall be fully and completely liable to LESSOR, and shall release, indemnify, defend (with counsel acceptable to LESSOR), and hold LESSOR, its agencies, employees, officers, and agents harmless, with respect to any and all damages, costs, expenses, assessments, fees (including attorneys' fees and costs), penalties (civil and criminal), fines, and cleanup costs assessed or imposed, as a result of the use, disposal, transportation, generation and/or sale of Hazardous Substances by LESSEE or LESSEE's employees, agents, assigns, sublessees, contractors, subcontractors, lessees or invitees, or for the migration of Hazardous Substances to other properties or released into the environment arising from LESSEE's activities at, in, on, over, under, or about the Premises.

LESSEE's obligations under this Article XIV.C. (Environmental Compliance – LESSEE's Duties) shall include, but not be limited to, all costs incurred in connection with any investigation relating to Hazardous Substances at, in, on, over, under, across, through, or from the Premises or any cleanup, remediation, removal or restoration work relating to Hazardous Substances required by any government authority.

LESSEE shall, at LESSEE's sole cost and expense, have the burden of proving to LESSOR's satisfaction that:

- (1) The presence, escape, disposal, discharge or release of Hazardous Substances at, in, on, over, under, across, through, or from the Premises or elsewhere is not attributable to:
 - (a) LESSEE's operation and activities on or connected with the Premises; or
 - (b) LESSEE's occupancy and use of the Premises and,

- (2) The use, disposal, discharge, or migration of Hazardous Substances to other properties or released into the environment:
 - (a) Was not performed by or on behalf of LESSEE, or LESSEE's employees, agents, assigns, sublessees, contractors, subcontractors, lessees or invitees.
 - (b) Did not arise from LESSEE's operation or activities at, in, on, over, under, or about the Premises.

All of the covenants contained in this Article XIV.C.3.p. (LESSEE's Release and Indemnification) shall survive the expiration or earlier termination of this Lease. The parties understand and agree that the intent of this indemnification agreement includes, but is not limited by, those agreements authorized by 42 U.S.C. Section 9607(e)(1), as, amended, and any successor section thereof.

- q. Pollution Legal Liability Insurance. At its sole cost and expense, LESSEE shall obtain and keep in full force during the entire term of this Lease a pollution legal liability insurance policy containing a limit of no less than \$1,000,000.00. Such policy shall name LESSOR, its employees, agents, representatives, successors and assigns as additional insured. LESSEE shall provide proof of said insurance satisfactory to LESSOR that shall include, at a minimum, a certificate of insurance from the insurer indicating the coverage provided and the term during which said policy shall irrevocably remain in effect. In the event LESSEE changes insurers, or LESSEE's insurer provides notice of change, cancellation, termination or modification of its coverage to LESSEE, LESSEE shall provide LESSOR with notice of said action thirty (30) days prior to the effective date of said change, cancellation, termination or modification.
- r. Insurance. Prior to the commencement of the term of this Lease and thereafter, LESSEE shall obtain and keep in force a commercial liability and property damage policy of insurance issued by an insurer authorized to do business in the State of Hawaii with limits of indemnity coverage of no less than \$1,000,000.00 per person and \$2,000,000.00 per occurrence. Said policy of insurance shall include indemnity coverage for personal injury and damage to property caused by Hazardous Substances or any occurrence that may constitute a violation of any Environmental Law by LESSEE. Said policy of insurance shall name LESSOR, its employees, agents, representatives, successors and assigns as additional insured. LESSEE shall provide proof of said insurance satisfactory to LESSOR that shall include, at a minimum, a certificate of insurance from the insurer indicating the coverage provided and the term during which said policy shall irrevocably remain in effect. In the event LESSEE changes insurers, or LESSEE's

insurer provides notice of change, cancellation, termination or modification of its coverage to LESSEE, LESSEE shall provide LESSOR with notice of said action thirty (30) days prior to the effective date of said change, cancellation, termination or modification.

- D. Spill Prevention, Control and Countermeasure ("SPCC"). Pursuant to: (1) the Federal Water Pollution Control Act (also known as the Clean Water Act), 33 U.S.C. Section 1251, et seq.; and (2) 40 CFR, Part 112, often referred to as the Spill Prevention Control and Countermeasure rules (hereinafter referred to as the "SPCC rules"), LESSEE shall:
1. LESSEE's Compliance with SPCC Rules. Throughout the entire term of this Lease, comply with and completely satisfy EPA's SPCC rules now or hereafter adopted, amended, published and/or promulgated pursuant thereto.
 2. LESSEE's Responsibility to Prepare and Implement SPCC Plan. Prior the commencement date of this Lease and throughout the entire term of this Lease, prepare and implement, and amend, if necessary, LESSEE's Spill Prevention Control and Countermeasure Plan (hereinafter referred to as "SPCC Plan").
 3. Storage of Oil and Other Petroleum Products. Notwithstanding the applicability of the SPCC regulations, if LESSEE stores oil and/or other petroleum products and/or by-products in any quantity of less than 1,320 gallons, but has in or on the Premises, at least one (1) or more storage container(s) and/or tank(s) equal to or larger than 55-gallon capacity, then LESSEE is required under this Lease to prepare and implement a written plan which conforms to the SPCC Plan requirements under the SPCC rules and to comply with and completely satisfy at least the portion of the SPCC rules, dealing with periodic testing of oil storage containers, providing secondary containment, training of oil handling personnel to prevent the discharge of oil, providing security around oil storage facilities, and all record keeping pertaining thereto.
- E. National Pollutant Discharge Elimination System ("NPDES"). Pursuant to: (1) the Federal Water Pollution Control Act (also known as the Clean Water Act), 33 U.S.C. Section 1251, et seq.; and (2) the requirements contained in the National Pollutant Discharge Elimination System (hereinafter referred to as "NPDES") regulations found in Chapter 11-55, HAR, and the appendices thereto, as amended and enforced by the EPA and the DOH, respectively, LESSEE shall, throughout the entire term of this Lease, comply with and completely satisfy all of the NPDES regulations governing general permits and consolidated permits, if applicable, now or hereafter adopted, amended, published and/or promulgated pursuant thereto.
- F. Harbor Security. In addition to the Harbor security requirements prescribed in Article VII.E.7. (Compliance with LESSOR's Minimum Design and Construction Standards) and Article VII.I.8 (LESSOR's Security Fence), LESSEE shall observe, comply with, and completely satisfy all of the security requirements for the Harbor, and any and all applicable security access procedures, rules,

and/or regulations prescribed by LESSOR and/or the USCG. LESSEE accepts liability and responsibility for prohibiting unauthorized persons and vehicles from entering any restricted operations area of the Harbor through the Premises.

1. Security Agreements. At any time during the term of this Lease, LESSEE may be required to enter into security agreements with LESSOR that may be required by the USCG or other federal agency for Harbor security purposes, and said agreements shall become part of this Lease, and the agreements, covenants, promises, provisions, requirements, terms, and conditions contained herein, although executed separately.
 2. LESSEE to Maintain Security. LESSEE shall also maintain security in such a manner that unauthorized persons shall not have access to any secure or restricted Harbor operations area through any part(s) or portion(s) of the Premises. Agents, Guests, or any other party acting with the permission or consent of LESSEE, shall be under the control, supervision, or guidance of LESSEE when entering any secure or restricted Harbor operations area. LESSEE shall enter into any separate supplemental agreement required by LESSOR or the USCG that covers Harbor security requirements to ensure the protection of the Harbor.
 3. Failure to Prevent Violations. LESSEE accepts liability and responsibility for:
 - (a) LESSEE's failure to observe, comply with, and/or completely satisfy any and all Harbor security requirements and applicable security access procedures, rules, or regulations prescribed by LESSOR and/or the USCG;
 - (b) LESSEE's failure to prohibit unauthorized persons and vehicles from entering the Harbor's restricted Harbor operations area through any part(s) or portion(s) of the Premises; and
 - (c) Any and all reimbursements to LESSOR wherein LESSOR has made direct payments to any citing authority of any fines or penalties for any and all Harbor security violations by LESSEE and LESSEE's officers, employees, agents, and/or Guests. Failure on the part of LESSEE to observe, comply with, and completely satisfy this security requirement shall give LESSOR cause to assess a fee and/or terminate this Lease pursuant to Article V.D. (Additional Charges) and Article XIX. (Termination by LESSOR), respectively, hereof.
- G. Harbor Fire. LESSEE shall observe, comply with, and completely satisfy all County, State, and Federal fire codes, and shall be solely responsible for and pay any fines or penalties levied for any and all fire code violations.

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month basis for a period not to exceed one (1) year. Notice of renewal need not be reduced to writing, it being agreed that such renewal shall be automatic unless a party hereto shall give the other party ten (10) working days' notice of its intention not to renew or unless the Board of Land and Natural Resources shall fail to approve the renewal. Further, this Permit will not be renewed, or a new Permit granted should the PERMITTEE not be current in its obligations to the STATE.

2. **PERMITTEE'S PRIOR INSPECTION.** The PERMITTEE warrants that it has inspected the Premises and all improvements thereon, knows the condition thereof, accepts the premises in an "as is" condition, including soil, water, structures, and fully assumes all risks incident to the use and enjoyment of the Premises, but excluding any Hazardous Substances that may be found to exist on the premises on the commencement date of this permit and which existing hazardous substance shall be governed by paragraph 27 of this permit.

3. **SECURITY DEPOSIT.** The PERMITTEE, upon execution of this Permit, shall deposit with the STATE in legal tender or in such other form as may be acceptable to the STATE an amount equal to two (2) months' rental as security for the faithful performance on its part of all the terms and conditions, including the special terms and conditions, if any, specified in paragraph 27 of this Permit. The said deposit will be returned, without interest, to the PERMITTEE upon the termination of this Permit only if it has faithfully performed said terms and conditions to the satisfaction of the STATE. In the event the PERMITTEE does not so perform, the STATE may declare the deposit forfeited or apply it as an offset to any amounts owed by the PERMITTEE to the STATE under this Permit or to any damages or loss to the STATE caused by the breach by the PERMITTEE of such terms and conditions. The exercise of this option is without prejudice to the right of the STATE to exercise its rights under the Environmental Compliance-Permittee's Duties provision below including, but not limited to, the requirement for obtaining a surety/performance bond and the STATE's rights thereunder. Furthermore, the exercise of the STATE's rights under this provision concerning Security deposit is without prejudice to the rights of the STATE to institute action for debt or damages against the PERMITTEE or to take any other or further action against the PERMITTEE provided by law for the enforcement of the rights of the STATE under this Permit.

4. **INSURANCE.** The PERMITTEE shall, concurrently with the execution of this Permit, deliver to the STATE, a Commercial Liability Insurance policy or policies, or a certificate of insurance in lieu thereof, evidencing that such policy has been issued and is in force, with a combined single limit of not less than \$1,000,000.00 for bodily injury and damage to property per occurrence and \$2,000,000.00 aggregate. The specification of limits contained herein shall not be construed in any way to be a limitation on the liability of the PERMITTEE for any injury or damage or for any rent, service charge or other charges under this Permit.

Such insurance shall (a) be issued by an insurance company or surety company authorized to do business in the State of Hawaii or approved in writing by the Director of Transportation; (b) name the State of Hawaii as an additional insured; (c) provide that the Department of Transportation shall be notified at least thirty (30) days prior to any termination, cancellation or material change in its insurance coverage; (d) cover all injuries, losses or damages arising from, growing out of or caused by any acts or omissions of the PERMITTEE, its officers, agents, employees, invitees or licenses, in connection with the PERMITTEE's use or occupancy of the Premises including any act or omission related to any Hazardous Waste; and (e) be maintained and kept in effect at the

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PERMITTEE's own expense throughout the life of this Permit, evidenced by furnishing the STATE without notice or demand a like certificate upon each renewal thereof.

Permittee will immediately provide written notice to the contracting department or agency should any of the insurance policies evidenced on its Certificate of Insurance form be cancelled, limited in scope, or not renewed upon expiration.

The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii.

It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contribute with, provided by this policy. **See also Environmental Compliance – Permittee's Duties below.**

5. **INDEMNITY.** The PERMITTEE shall at all times with respect to the Premises use due care for public safety and shall defend, hold harmless and indemnify the STATE, its officers, agents and employees from and against all claims or demands for damages, including claims for property damage, personal injury or death, (a) arising on the Premises, or by reason of any fire or explosion thereon; or (b) arising from, growing out of, or caused by any act or omission on the part of the PERMITTEE its officers, agents, employees, invitees or licenses in connection with the PERMITTEE'S use or occupancy of the Premises. **See also Environmental Compliance – Permittee's Duties below.**

6. **METHOD OF PAYMENT OF RENTAL AND SERVICE CHARGE ON DELINQUENT RENTALS AND OTHER CHARGES.** The monthly rental shall be payable in advance, without notice or demand, at the Harbors Division Fiscal Office on Oahu and at the appropriate District Office on Hawaii, Maui or Kauai, on the first (1st) day of each and every month during the life of this Permit.

Interest; Service Charge: Without prejudice to any other remedy available to the STATE, the PERMITTEE agrees without further notice or demand as follows: (a) To pay interest at the rate of one percent (1%) per month, compounded monthly on all delinquent payments; (b) To pay a service charge of \$30.00 a month for all delinquent payments, or such other charge as may be prescribed by rules adopted by the STATE, provided that in no event shall a service charge in excess of \$50.00 be levied under this Permit; and (c) That the term "delinquent payments" as used herein means fees, rents, service charges and other charges payable by the PERMITTEE to the STATE, which are not paid when due.

7. **ACCEPTANCE OF RENT NOT A WAIVER.** The acceptance of rent by the STATE shall not constitute a waiver of any breach by the PERMITTEE of any of the terms and conditions upon which this Permit is granted and to which the PERMITTEE agrees, or of the STATE's right to terminate or revoke this Permit. Failure by the STATE to insist upon strict performance hereof by the PERMITTEE, or to exercise any option herein reserved, shall not be construed as a waiver or as a relinquishment of any of its rights under this Permit.

8. **RESERVATION OF RIGHT TO INCREASE OR DECREASE RENT.** The STATE reserves the right to increase or decrease the monthly rental at any time upon thirty (30) days' advance written notice.

9. **UTILITIES AND OTHER CHARGES.** The PERMITTEE shall be responsible for and pay

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Property Management
79 South Nimitz Highway
Honolulu, HI 96813
Attn: Property Management, Section Head
Phone: (808) 587-1944
Fax: (808) 587-2504

12. **ENTRY BY STATE.** The STATE or its agents and employees may enter the Premises at all reasonable hours to inspect the Premises and determine if the PERMITTEE is complying with the terms and conditions of this Permit or for any other proper purpose. The PERMITTEE shall not make any claim for damages or set off of rent, service charge or other charges by reason or on account of such entry.

13. **REPAIRS.** The PERMITTEE shall, at its own expense, keep and maintain the Premises in condition similar to that which existed on the effective date of this Permit, ordinary wear and tear and damage by acts of God excepted. **See also Environmental Compliance – Permittee’s Duties below.**

14. **STRUCTURAL IMPROVEMENTS, ALTERATIONS OR ADDITIONS.** No substantial improvement, alteration or addition of a structural nature shall be made, installed or constructed on, under or within the Premises by the PERMITTEE unless it first submits its plans and specifications thereof to the STATE for its approval and unless said plans and specifications are in fact approved in writing by the STATE. A total of four (4) sets of the proposed plans, stamped by a licensed engineer authorized to conduct business in the State, shall be submitted to the State for its review and approval. Such plans and specifications shall not be submitted unless they are in full compliance with all applicable statutes and rules and regulations. Any improvements, alterations or additions shall be accomplished at the sole cost and risk of the PERMITTEE and the STATE shall not be responsible for any damage to or destruction of any such improvements, alterations or additions or any personal property on the Premises. The Permittee shall also provide notice to the responsible agencies, including the Office of Environmental Quality Control, and otherwise comply with HRS Chapter 343 to determine if such improvement, alteration or addition requires environmental assessments or statements. **See Environmental Compliance – Permittee’s Duties below.**

15. **REMOVAL OF IMPROVEMENTS OR ADDITIONS.** The PERMITTEE may remove, at its own cost and risk, any and all improvements or additions or any portions thereof, constructed or installed by it upon the Premises, at any time during the life of this Permit or within thirty (30) days after the termination or revocation hereof; provided that, the PERMITTEE shall give, prior to said termination or revocation, written notice of its intent to remove the same and that in the event of such removal, the Premises shall be restored by the PERMITTEE to a condition similar to that which existed immediately prior to the construction or installation thereof; ordinary wear and tear excepted and damage by acts of God excepted; provided further that, until such removal and restoration has been completed to the satisfaction of the STATE, the PERMITTEE shall continue to pay the rent set forth in item 5 herein. Failure of the PERMITTEE to give notice of intention to remove prior to termination or revocation shall be deemed to be an abandonment of said improvements or additions. **See also Environmental Compliance – Permittee’s Duties below.**

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16. OPTION TO REQUIRE REMOVAL OF IMPROVEMENTS OR ADDITIONS. The STATE, with respect to any improvements or additions or any portions thereof constructed or installed by the PERMITTEE on the Premises, reserves the right within twenty (20) working days after the date of termination or revocation of this Permit to require the PERMITTEE to remove the same at the PERMITTEE's cost and risk within thirty (30) days after said termination or revocation. Upon failure of the PERMITTEE to effect such removal within the specified time, the STATE may effect such removal, and restore the Premises to a condition similar to that which existed immediately prior to the construction or installation of the improvements or additions by its own employees or by an independent contractor and assess the PERMITTEE the total cost thereof.

17. COMPLIANCE WITH LAWS; DISCRIMINATION PROHIBITED. The PERMITTEE shall comply with all laws, ordinances and rules and regulations of all governmental agencies, applicable to the Premises or relating to and affecting any business or other commercial activity conducted on the Premises.

The use and enjoyment of the Premises shall not be in support of any policy which discriminates against anyone based upon race, creed, color, sex or national origin.

The PERMITTEE, for itself, its personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that in the event facilities are constructed, maintained, or otherwise operate on the said property described in this permit for a purpose for which a United States Department of Transportation program or activity is extended or for another purpose involving the provision of similar services or benefits. The PERMITTEE shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to Title 49, Code A, Office of the Secretary, Part 21, Non-Discrimination in Federally-Assisted programs of the Department of Transportation-Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations may be amended.

That in the event of breach of any of the above non-discrimination covenants, the STATE shall have the right to terminate this permit and re-enter and repossess said land and the facilities thereon, and hold the same as if said permit had never been made or issued.

The PERMITTEE assures that it will undertake an affirmative action program as required by 14 CFR Part 152, Subpart E, to ensure that no person shall on the grounds of race, creed, color, national origin, or sex, be excluded from participating in any employment activities covered in 14 CFR Part 152, Subpart E. The PERMITTEE assures that no person shall be excluded on these grounds from participating in or receiving the services or benefits of any program or activity covered by this subpart. The PERMITTEE assures that it will require that its covered suborganizations provide assurances to the STATE that they similarly will undertake affirmative action programs and that they will require assurances from their suborganizations as required by 14 CFR Part 152, Subpart E, to the same effect.

18. TRANSFERABILITY. This Permit and the Premises or any part thereof, inclusive of any and all rights or obligations accruing or arising under it, shall not be sold, transferred, assigned, leased, mortgaged, sublet or otherwise alienated or encumbered in any manner whatsoever.

19. PROPERTY TAXES. The PERMITTEE shall pay all real property taxes lawfully assessed against the Premises.

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20. **TERMINATION AND REVOCATION.** This Permit may be terminated by either party without cause upon thirty (30) days advance written notice; provided that, in the event the PERMITTEE fails to pay any rental, service charge, fees or charges when due or otherwise breaches any of the terms and conditions, the STATE may revoke this Permit upon five (5) working days written notice.

21. **RIGHT TO RE-ENTER AND ASSUME POSSESSION.** The STATE reserves the right and PERMITTEE agrees that, upon breach of any one or more of the terms and conditions of this Permit and/or termination thereof under paragraph 20 herein, the STATE may without necessity of court action, enter upon and administratively take possession of the Premises from PERMITTEE.

22. **RESTORATION.** The PERMITTEE shall within thirty (30) days of the termination or revocation of this Permit, restore the Premises, at its own cost and risk to a condition similar to that which existed prior to the effective date of this Permit, reasonable and ordinary wear and tear and damage by acts of God excepted, and peacefully surrender possession thereof to the STATE. In the event the PERMITTEE fails to effect such restoration of the Premises, the STATE may accomplish the same by its own employees or by an independent contractor and assess the PERMITTEE the total cost thereof. **See also Environmental Compliance – Permittee's Duties below.**

23. **HOLD OVER TENANCY.** If the PERMITTEE does not vacate the Premises upon the revocation or termination of the Permit, the PERMITTEE shall pay the STATE hold over rent. The rent for each day, or part of a day, during which the PERMITTEE remains in possession will be the amount payable immediately prior to the revocation or termination of the Permit. During any hold over period, the PERMITTEE shall be deemed an illegal occupant and acceptance of such payment by the STATE shall not constitute a waiver of any of the terms and conditions of this permit and shall not preclude the STATE from pursuing any other rights or remedies the STATE may be entitled to pursue under this Permit, including but not limited to assuming possession of the Premises as provided in paragraph 21 above or bringing an ejectment action for the recovery of Premises, without first giving notice to quit or making a demand for possession.

24. **COURT COSTS AND ATTORNEY'S FEES.** The PERMITTEE shall pay any and all court costs and attorney's fees incurred or paid by the STATE in collecting rents, penalties, service charges, fees or other charges due from or payable by the PERMITTEE under this Permit in removing from the Premises the PERMITTEE and any improvements or additions constructed or installed by it thereon, or in recovering any damages or losses caused by the PERMITTEE's breach of any of the terms or conditions of this Permit.

25. **INTERPRETATION.** The use of any gender shall include all genders, the use of the singular shall include the plural and the use of the plural shall include the singular, as the context may require.

26. **CONFLICTING TERMS AND CONDITIONS.** When an inconsistency exists between these Terms and Conditions and the Special Terms and Conditions, the Special Terms and Conditions shall govern.

27. **SPECIAL TERMS AND CONDITIONS.**

ENVIRONMENTAL COMPLIANCE – PERMITTEE’S DUTIES

A. Definitions.

For purposes of this Revocable Permit, Permittee agrees and understands that the following terms shall have the following meanings:

“Environmental Laws” shall mean all federal, state and local laws of every nature including statutes, ordinances, rules, regulations, codes, notices, standards, directives of every kind, guidelines, permits, licenses, authorizations, approvals, interpretations of the foregoing by any court, legislative body, agency or official, judicial decisions, orders, rulings or judgments, or rules of common law which currently are in effect or which may come into effect through enactment, issuance, promulgation, adoption or otherwise, which in any way pertain to, relate to, or have any relevance to the environment, health or safety. These environmental laws include, but are not limited to, regulations and orders of the federal Environmental Protection Agency and of the State of Hawaii Department of Health.

“Hazardous Substance” shall mean and include any chemical, substance, organic or inorganic material, controlled substance, object, condition, waste, living organism, or combination thereof which is, may be, or has been determined by proper state or federal authority under any environmental law to be, hazardous to human health or safety or detrimental to the environment. This term shall include, but not be limited to, petroleum hydrocarbons, asbestos, radon, polychlorinated biphenyls (PCBs), methane, and other materials or substances that are regulated by state or federal authorities.

B. Permittee’s Activities and Duties.

1. **Compliance with Environmental Laws.** Permittee agrees, at its sole expense and cost, to comply with all environmental laws that apply to the premises during the term of this Revocable Permit, and Permittee’s occupancy of, and activities on, the premises. This duty shall survive the expiration or termination of this Revocable Permit which means that the Permittee’s duty to comply with environmental laws shall include complying with all environmental laws, regulations and orders that may apply, or be determined to apply, to the occupancy and activities of the Permittee on the premises after the expiration or termination of this Revocable Permit. Failure of the Permittee to comply with any environmental laws shall constitute a breach of this Revocable Permit for which the State shall be entitled, in its discretion, to terminate this Revocable Permit and take any other action at law or in equity it deems appropriate.

2. **Hazardous Substances.** Permittee shall not use, store, treat, dispose, discharge, release, generate, create, or otherwise handle any Hazardous Substance, or allow the same by any third person, on the premises without first obtaining the written consent of the State and complying with all environmental laws, including giving all required notices, reporting to, and obtaining permits from, all appropriate authorities, and complying with all provisions of this Revocable Permit.

3. **Notice to the State.** Permittee shall keep the State fully informed at all times regarding all

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Environmental law related matters affecting the Permittee or the premises. This duty shall include, without limit to the foregoing duty, providing the State with a current and complete list and accounting of all hazardous substances of every kind which are present on or about the premises and with evidence that the Permittee has in effect all required and appropriate permits, licenses, registrations, approvals and other consents that may be required of or by federal and state authorities under all environmental laws. This duty shall also include providing immediate written notice of any investigation, enforcement action, remediation or other regulatory action, order of any type, or any legal action, initiated, issued, or any indication of an intent to do so, communicated in anyway to the Permittee by any federal or state authority or individual which relates in any way to any environmental law or any hazardous substance and the Permittee or the premises. This written notice to the State shall include the Permittee immediately providing the State with copies of all written communications from individuals or state and federal authorities, including copies of all correspondence, claims, complaints, warnings, reports, technical data and any other documents received or obtained by the Permittee. At least thirty (30) days prior to termination of this Revocable Permit, or termination of the possession of the premises by Permittee, which ever shall first occur, Permittee shall provide the State with written evidence satisfactory to the State that Permittee has fully complied with all environmental laws, including any orders issued by any governmental authority to the Permittee that relate to the premises.

4. **Notice to Authorities.** Permittee shall provide written notice to the Environmental Protection Agency and the State of Hawaii Department of Health at least sixty (60) days prior to the termination of this Revocable Permit, or sixty (60) days prior to Permittee's termination of possession of the premises, whichever occurs first, the fact that Permittee intends to vacate the premises and terminate its operations on those premises. Permittee shall allow the agents or representatives of said authorities' access to the premises at any and all reasonable times for the purpose of inspecting the premises and taking samples of any material for inspection or testing for compliance with any environmental laws. Permittee shall provide copies of said written notices to the State at the time said notices are provided to said authorities.

5. **Disposal/Removal.** Except for materials that are lawfully sold in the ordinary course of the Permittee's business and for which the Permittee has obtained all required authorizations from appropriate authorities including the prior written permission of the State to have said substance on the premises, Permittee shall cause any hazardous substances to be removed from the premises for disposal. This duty shall include the transportation of said hazardous substance from the premises solely by duly licensed hazardous substance transporters to duly licensed facilities for final disposal as required by all applicable environmental laws. Permittee shall provide the State with copies of documentary proof, including manifests, receipts or bills of lading, which reflect that said hazardous substances have been properly removed and disposed of in accordance with all environmental laws.

6. **Environmental Investigations and Assessments.** The Permittee, at its sole cost and expense, shall cause to be conducted such investigations and assessments of the premises to determine the presence of any hazardous substance on, in, or under the premises as may be directed from time to time by the State, in its sole discretion, or by any federal or state authority. The extent and number of any environmental investigations and assessments shall be determined by the State or the federal or state authority directing said investigations and assessments to be conducted.

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Permittee shall retain a competent and qualified person or entity that is satisfactory to the State or governmental authority, as the case may be, to conduct said investigations and assessments. Permittee shall direct said person or entity to provide the State or governmental authority, if so requested, with testable portions of all samples of any soils, water, ground water or other material that may be obtained for testing and provide directly to the State and the governmental authority at the sole expense of the Permittee written results of all tests on said samples upon completion of said testing.

7. **Remediation.** In the event that any hazardous substance is used, stored, treated, disposed on the premises, handled, discharged, released, or determined to be present on the premises, or to have migrated from the premises, Permittee shall, at its sole expense and cost, remediate the premises, or any location off the premises to which it is determined that the hazardous substance has migrated, of any hazardous substances. Said duty to remediate includes the removal and disposal of said hazardous substances in accordance with paragraph 5. This duty to remediate includes strictly complying with all environmental laws and directives to remediate said hazardous substance issued from the State or any federal or State governmental authority charged with enforcing the Environmental laws. This duty to remediate shall include replacement of any materials, such as soils, removed with material that is satisfactory to the State and governmental authority, as the case may be.

8. **Restoration and Surrender of Premises.** The Permittee hereby agrees to restore the premises, at its sole cost and expense, including the soil, water and structures on, in, or under the premises, to the same condition as the premises existed at the commencement of this Revocable Permit, fair wear and tear to the structures excepted. In the event Permittee does not restore the premises to the same condition as it existed at the commencement of the Revocable Permit, as determined by the State, the Permittee understands and agrees that the State may exercise its rights under the paragraph entitled State's Right to Act, and until such time as the restoration is complete to the satisfaction of the State, Permittee shall be liable for Revocable Permit rent in the same manner and amount as if the Revocable Permit had continued in effect during the period of restoration.

9. **State's Right to Act.** In the event the Permittee fails for any reason to comply with any of its duties under this Revocable Permit or under any environmental laws within the time set for doing so, or within a reasonable time as determined by the State, the State shall have the right, but not the obligation, in its sole discretion, to perform those duties, or cause them to be performed. Permittee hereby grants access to the premises at all reasonable hours to the State, its agents and anyone designated by the State in order to perform said acts and duties. Any cost, expense or liability of any type that may be incurred by the State in performing said acts or duties shall be the sole responsibility of the Permittee and Permittee hereby agrees to pay for those costs and expenses and indemnify the State for any liability incurred.

This obligation shall extend to any costs and expenses incident to enforcement of State's right to act, including litigation costs, attorneys' fees and the costs and fees for collection of said cost, expense or liability.

10. **Release and Indemnity.** Permittee hereby agrees to release the State, its officers, agents, successors and assigns from any liability of any kind, including, but not limited to, any liability for

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any damages, penalties, fines, judgments or assessments that may be imposed or obtained by any person, agency or governmental authority against the State and/or the Permittee by reason of any hazardous substance that may be present by whatever means on, in or under the premises.

The Permittee hereby agrees to indemnify, defend with counsel suitable to the State, and hold harmless

the State from any liability that may arise in connection with, or by reason of, any occurrence involving any hazardous substance that may be alleged to be connected or related in any way with the premises, the State's ownership of the premises, or this Revocable Permit, including the presence of any hazardous substance on the premises. Permittee understands and agrees that any assessments, fines or penalties that may be assessed against the Permittee or the State by reason of any environmental law violation concerning the premises shall be paid, complied with, and in every way satisfied by the Permittee and not the State.

11. Surety/Performance Bond for Cleanup/Restoration. At its sole cost and expense, Permittee shall provide the State with a Bond, or other security satisfactory to State, in the amount of \$ N/A to assure removal of any hazardous substances and the remediation and restoration of the premises during the term of, and at the conclusion of the Revocable Permit so as to comply with the terms of this Revocable Permit to the satisfaction of the State and in order to comply with environmental laws. Permittee shall provide written evidence that said Bond or security has been secured by the Permittee which evidence shall indicate the term during which said Bond or other security shall irrevocably remain in effect.

12. Insurance. Effective at the commencement of this Revocable Permit, Permittee shall obtain and keep in force a comprehensive liability and property damage policy of insurance issued by an insurer licensed to do business in the State of Hawaii with limits of indemnity coverage no less than \$1,000,000.00 per occurrence and \$2,000,000.00 aggregate. Said policy of insurance shall provide coverage for personal injury and damage to property caused by hazardous substances or any occurrence that may constitute a violation of any environmental law by the Permittee or the State. Said policy of insurance shall name the State as an additional insured. Permittee shall provide proof of said insurance satisfactory to the State which shall include, at a minimum, the coverage provided and the term during which said policy shall be effective.

Permittee will immediately provide written notice to the contracting department or agency should any of the insurance policies evidenced on its Certificate of Insurance form be cancelled, limited in scope, or not renewed upon expiration.

The State of Hawaii is added as an additional insured as respects to operations performed for the State of Hawaii.

It is agreed that any insurance maintained by the State of Hawaii will apply in excess of, and not contribute with, provided by this policy.

28. AMERICANS WITH DISABILITIES ACT. The PERMITTEE shall comply with the rules and regulations relating to the Americans with Disabilities Act (ADA) 28 C.F.R. Part 36 entitled, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities." The ADA Title III Regulation prohibits discrimination on the basis of disability by public accommodations and requires places of public accommodation and commercial facilities to be

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designed, constructed, and altered in compliance with the accessibility standards established by 28 C.F.R Part 36. Plans to construct or alter the existing improvements shall be reviewed and preapproved by the STATE prior to any construction commencing. PERMITTEE's failure to comply with this provision shall be considered a breach of the terms and conditions of this agreement which may result in the revocation of this permit and termination of PERMITTEE's occupancy.

29. **BEST MANAGEMENT PRACTICES.** The PERMITTEE shall comply with Clean Water Act and STATE Harbors Division Stormwater Management Program and subject to Harbors Division Tenant Inspection Program. No pollutant is allowed to be discharged directly or indirectly through the Harbors storm drainage system (also known as small MS4) and or through other potential pathways into adjacent STATE waters.

The PERMITTEE shall implement and maintain the Best Management Practices (BMP) that are described in the Harbors Division Stormwater website (<http://hidot.hawaii.gov/harbors/malamaikeawakai/>) as applicable to its construction projects and its business activities. The PERMITTEE shall attend mandatory Annual Stormwater Awareness Training hosted by the Harbors Division.

Attachment 3

Best Management Practices

1. VEHICLE & EQUIPMENT WASHING

BEST MANAGEMENT PRACTICES



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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

STORMWATER IMPACTS

Wash water from vehicle and equipment cleaning activities conducted outside or in areas where wash water flows onto the ground can generate dry weather runoff potentially contaminated with detergents, heavy metals, oil, grease, toxic substances, sediments, and other pollutants that pose a threat to the HDOT Harbors Division small MS4 or State waters. The following BMPs are intended to reduce the impact of vehicle and equipment washing activities on stormwater runoff.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962

OFF-SITE WASHING

- 1 Wash vehicles and equipment at an off-site washing station.



A commercial car wash will typically recycle or treat wash water before it is discharged into the sanitary sewer.

ON-SITE WASHING

- 2 Wash vehicles and equipment inside or where wash water can be contained (e.g., berm or sump) and properly disposed of or directed to sanitary sewer.
Note: All on-site washing must be approved by HDOT-Harbors Division.
- 3 Use hose nozzles with automatic shut off and bio-degradable soaps, where appropriate.
- 4 Use the minimum amount of water and soap for all washing activities.
- 5 Inspect paved surfaces within the wash area and clean periodically to remove buildup of particulate matter or other pollutants.
- 6 Train employees on proper cleaning, maintenance, and wash water disposal procedures. Maintain training records on-site.



2. VEHICLE & EQUIPMENT FUELING

BEST MANAGEMENT PRACTICES



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STORMWATER IMPACTS

Transfer and storage of bulk petroleum products such as gasoline, diesel, and motor oil have the potential to pollute stormwater run-off if not handled properly. The BMPs outlined in this fact sheet are intended to prevent fuel spills and leaks while preventing pollutants from impacting stormwater runoff.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962

OFF-SITE FUELING

- 1 Fuel vehicles and equipment offsite at a commercial fueling station, whenever feasible.



Fueling off-site eliminates the risk of a leak or spill impacting stormwater runoff.

ON-SITE FUELING

- 2 Conduct vehicle and equipment fueling in designated areas specifically designed to contain potential spills and prevent contact with stormwater.
- 3 Do not top off or allow unattended fueling.
- 4 Clean up spills immediately by following the spill response protocol outlined in the *General BMPs for Business* fact sheet.
- 5 Utilize drip pans when remote or mobile fueling is conducted.
- 6 Equip dispensing nozzles with automatic shut-off controls.
- 7 Provide sufficient secondary containment for aboveground storage containers of 55 gallons or greater. Develop and implement an SPCC Plan, if required.
- 8 Maintain an adequate supply of spill kits and spill control equipment near fueling areas.
- 9 Perform periodic inspections of petroleum handling equipment and other structural controls.
- 10 Train personnel on proper fueling operations as well as spill response and reporting procedures.

EPA Website for SPCC Guidance:

<http://www.epa.gov/oil-spills-prevention-and-preparedness-regulations>

HDOH Spill Reporting:

<https://health.hawaii.gov/heer/>



3. OUTDOOR MATERIAL STORAGE

BEST MANAGEMENT PRACTICES



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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

STORMWATER IMPACTS

Proper storage of products and materials such as paints, solvents, cleaners, and rusted materials can significantly reduce pollutants from coming in contact with stormwater runoff. These BMPs are intended to reduce the likelihood of accidental spills or releases of liquid materials during storm events.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962

BMP IMPLEMENTATION



Outdoor material storage should be placed in designated areas designed to contain spills and prevent contact with stormwater.

- 1 Outdoor storage areas should be situated away from areas prone to flooding and in a location where they will not be accidentally damaged by equipment or vehicles.
- 2 Liquid storage containers 55-gallon or above and used batteries should be stored indoors or under cover and within secondary containment measures. Liquid accumulation in secondary containment measures should be minimized, managed, and disposed of properly.
- 3 Ensure all liquid containers are closed, secured, labeled, and stored neatly away from high-traffic areas.
- 4 Inspect storage areas regularly for leaking or corroded containers and other changes in the containers or contents that may indicate deterioration.
- 5 Maintain an inventory of stored materials including an SDS for all chemicals.
- 6 Maintain spill kits in accessible areas.
- 7 Clean up spills immediately by following the spill response protocol outlined in the *General BMPs for Business* fact sheet.
- 8 Train employees on proper storage, handling, and spill response procedures and maintain training records on-site.



4. GENERAL BMPs FOR BUSINESS

BEST MANAGEMENT PRACTICES



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STORMWATER IMPACTS

Rainfall travels over surfaces such as roofs, roads, and parking lots while picking up oils, metals, fertilizers, pesticides, sediments and other pollutants before entering the HDOT Harbors Division small MS4 and eventually the harbor. These BMPs are intended to reduce the amount of pollutants that enter the MS4 and receiving water.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962

TRAINING

Train employees on proper storage, handling, and spill response requirements and maintain records. Report all spills in accordance with the HDOH Spill Reporting and Emergency Response requirements.



SPILL RESPONSE PROTOCOL



Keep a spill kit readily available and stocked. Re-stock after use.



Clean up spills immediately to minimize safety hazards and prevent spills from reaching a storm drain inlet.



Use absorbent materials to clean small spills rather than hosing down the area. Remove absorbent promptly and properly dispose.

CLEANING

- 1 Use non-toxic substitutes for chemicals whenever possible.
- 2 Control litter by sweeping and picking up trash regularly.
- 3 Dry sweep floors, processing and storage areas, access roads, parking lots, and sidewalks. Do not wash down with a hose.
- 4 Properly contain and dispose sweeping debris.

MAINTENANCE

- 5 Inspect vehicles and equipment for leaks regularly.
- 6 When draining fluids, use a drip pan and a funnel to prevent spills.

LANDSCAPING

- 7 Use environmentally safe alternatives or low toxicity chemicals, whenever possible.
- 8 Use landscaping pesticides and fertilizers in the smallest amount necessary and never apply immediately before or during rainfall.

5. SOLID AND HAZARDOUS WASTE HANDLING

BEST MANAGEMENT PRACTICES



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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

STORMWATER IMPACTS

Proper handling of solid and hazardous waste may reduce contaminants from entering stormwater runoff. BMPs are intended to reduce the potential of hazardous wastes from entering the MS4 or receiving water.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962



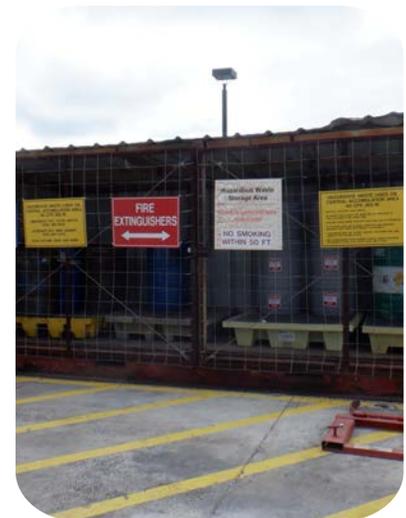
EXAMPLES OF SOLID AND HAZARDOUS WASTE

Waste Oil – Used Hydraulic Fluid – Petroleum Fluids - Waste Paint & Debris – Used Paint Thinner – Industrial Solvents – Rags & Other Cleaning Materials Contaminated with Grease, Oil, Paint, Thinners, Other Industrial Chemicals

BMP IMPLEMENTATION

- 1 Solid and hazardous wastes should be stored in secure, closed containers, protected from damage, and within secondary containment, if applicable.
- 2 Clearly label hazardous wastes with the words “hazardous waste,” product name, and accumulation start date.
- 3 Maintain a list of all solid and hazardous wastes.
- 4 Inspect containers regularly for damage.
- 5 Arrange for regular hazardous waste collection by a licensed vendor. Do not discard hazardous waste into dumpsters. Maintain disposal manifests.
- 6 Recycle whenever possible such as used oil, spent solvents, used batteries, scrap metal, used oil filters, etc.
- 7 Choose environmentally friendly materials whenever possible.
- 8 Only purchase and store needed quantities of materials.
- 9 If containers spill or leak, ensure it is cleaned up immediately by following the spill response protocol outlined in the *General BMPs for Business* fact sheet.

The only hazardous materials allowed on state property are those necessary for business operations and may require review and approval by Harbors Division.



6. MATERIAL DELIVERY AND HANDLING

BEST MANAGEMENT PRACTICES



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STORMWATER IMPACTS

Proper handling of products and materials is an effective way to minimize the possibility of a spill. Containerized products and bulk materials must be handled properly in all stages of delivery, storage, use, and disposal. These BMPs are intended to reduce the likelihood of accidental spills or releases of liquid materials during storm events.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962

BMP IMPLEMENTATION



Delivery and handling should take place in designated areas near warehouse entrances or staging/storage areas distant from drains when possible.

- 1 Maintain accurate and up to date records of materials delivered and stored on-site.
- 2 Minimize on-site inventory and handling of hazardous materials.
- 3 Stage containers on pallets, under cover, and store in secondary containment, when possible.
- 4 Perform periodic inspections to verify conditions of containers, stockpiles, secondary containment, and other structural controls.
- 5 Keep a spill kit readily available and stocked.
- 6 Clean up spills immediately by following the spill response protocol outlined in the *General BMPs for Business* fact sheet.
- 7 Report all spills in accordance with the Hawaii Department of Health's Spill Reporting and Emergency Response requirements and document response actions.
- 8 Train employees on proper delivery, handling, and spill response requirements.



7. BUILDING AND REMODELING

BEST MANAGEMENT PRACTICES



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STORMWATER IMPACTS

New development and re-development projects have the potential to create a variety of pollutants due to the nature of the activity as well as removal of soil cover. These BMPs are intended to sustain water quality in the harbor during active construction.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962

SOIL EROSION AND SEDIMENTATION

- 1 Minimize removal of existing vegetation. Re-vegetate as soon as possible using native seed mix and mulch.
- 2 Reduce traffic on disturbed soils and divert runoff around them.
- 3 Dry sweep paved surfaces and ensure debris and sediments are properly contained; do not hose down or use blowers.
- 4 Use sediment control devices, including silt fences, inlet protection, diversion ditches, and swales to minimize off-site migration of soil.

*Submit all
building or
remodeling plans
to the HDOT-
Harbors Division
for review and
acceptance.*



GENERAL HOUSEKEEPING BMPs

- 5 Mix paints and solvents in designated areas away from drains, ditches, and surface waters. Properly store and dispose of materials.
- 6 Use a tarp or cloth to collect chips from scraping or sand blasting.
- 7 Cover and contain painting and coating activities to prevent overspray from reaching storm drains or waters.
- 8 Purchase and store only the quantities of materials needed and use non-toxic substitutes for chemicals when possible.
- 9 Construct and maintain temporary concrete wash out facilities of adequate quantity and size for the project.
- 10 Maintain an adequate supply of spill kits.
- 11 Train employees on proper material storage, handling, and spill response.



8. SMALL VESSEL MAINTENANCE ACTIVITIES

BEST MANAGEMENT PRACTICES



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STORMWATER IMPACTS

Small vessel maintenance activities have the potential to impact the harbor. Any vessel or shore-side work must be requested via permit, which is available at <https://hidot.hawaii.gov/harbors/doing-business/shoreside-and-vessel-work-permit/>. These BMPs are intended to reduce the likelihood of debris and pollutants such as detergents, heavy metals, oils and greases, toxic substances, and sediments that may be generated during small vessel maintenance from entering the harbor.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

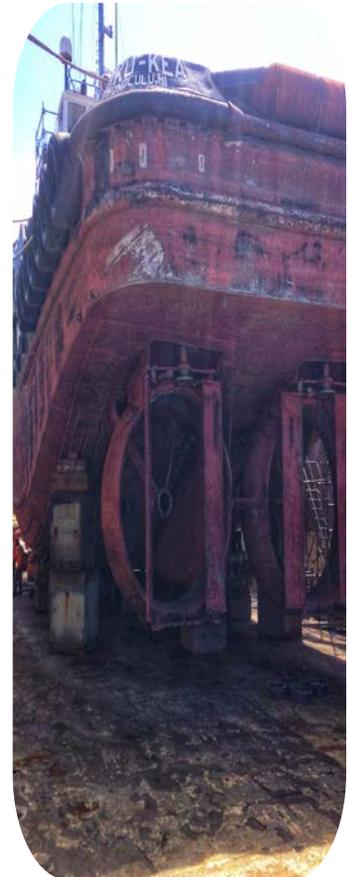
Hotline: 808-587-1962

BMP IMPLEMENTATION



Small vessel maintenance may include, but is not limited to painting, grinding and chipping, using chemicals for rust and paint removal, washing, and engine repair.

- 1 Perform vessel hull maintenance in a dry dock, slipway, or haul-out facility, or beyond waters under the jurisdiction of the State of Hawaii.
- 2 Wash exterior surfaces with fresh water only using low pressure (<100 psi). Wet sponges are preferred to rinsing.
- 3 Never use detergents or other chemicals. Clean with dry methods.
- 4 Painting is only allowed on the pier side of the vessel. Implement containment measures during all painting, grinding, or chipping activities. Properly dispose of all debris.
- 5 Use less toxic materials whenever possible such as anti-foulant paints.
- 6 Do not use chemicals or compounds such as Naval Jelly (Phosphoric Acid) for rust or paint removal or Tetrachlorethylene (TCE) for hull maintenance. **Note:** Hull maintenance in Honolulu Harbor and Kalaeloa Barbers Point Harbor is strictly prohibited.
- 7 Maintain the hull and exterior surfaces more frequently to prevent the build-up of rust, marine growth, and aquatic nuisance species (invasive species).
- 8 On Oahu, radio or call Harbor Traffic Control at 808-587-2076 **before** painting begins to allow for inspection by HDOT Harbors Division. Maui: 808-837-3350; Hawaii: 808-933-8850; Kauai: 808-241-3750



9. BUILDING POWER WASHING

BEST MANAGEMENT PRACTICES



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STORMWATER IMPACTS

Building power washing generates wash water that may contain contaminants such as detergents, oil, dirt, grease, paint chips, metals, and grime. These BMPs are intended to reduce the likelihood of a discharge of these contaminants.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

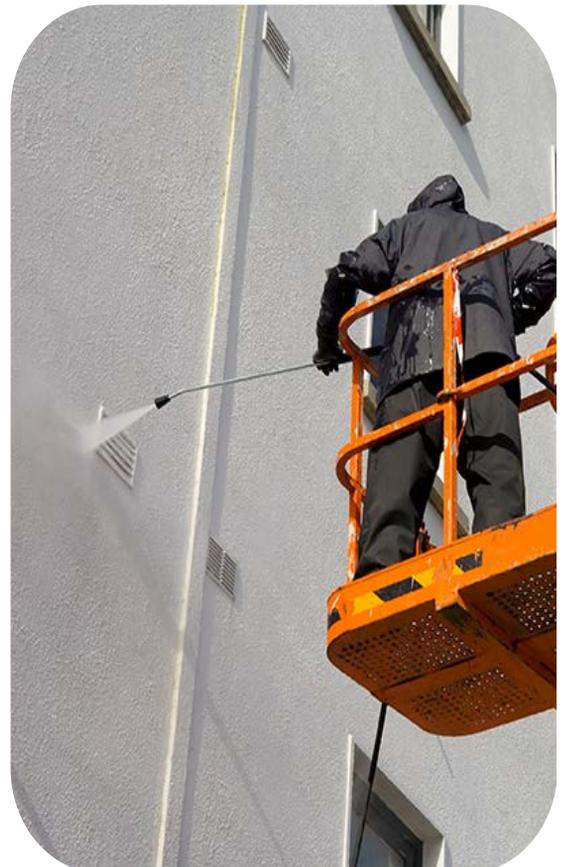
Hotline: 808-587-1962

BMP IMPLEMENTATION



All tenants are required to obtain written consent from HDOT Harbors Division for any building power washing and provide proper containment.

- 1 Apply dry wash methods whenever possible. If dry wash methods are not feasible, ensure wash water is properly contained and disposed of.
- 2 Implement containment measures to capture wash water. Ensure the system is adequately designed to prevent water from entering the HDOT Harbors Division small MS4 or running off-site.
- 3 BMPs must be approved in writing by HDOT Harbors Division before building power washing can commence.
- 4 Ensure that paint and wash water from buildings is evaluated and properly disposed of. Note: Old paint from commercial buildings may contain heavy metals and might be classified as a hazardous waste.
- 5 Ensure all wash water is properly disposed of (such as via sanitary sewer, POTW, or industrial waste disposal facility, etc.).



10. SIDEWALK AND WALKWAY POWER WASHING

BEST MANAGEMENT PRACTICES



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STORMWATER IMPACTS

Sidewalk and walkway power washing generates wash water that could contain contaminants such as oil, dirt, grease, and grime. These BMPs are intended to reduce the likelihood of debris and pollutants from entering the MS4 or harbor.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962

BMP IMPLEMENTATION



Use alternative methods to clean pavement such as sweeping wherever practicable.

- 1 Block all storm drains with an impervious barrier (e.g., gravel bags, berms, plug, rubber mat) prior to power washing to prevent washing water from entering the MS4.
- 2 Remove and collect loose debris with a vacuum or other machinery before power washing.
- 3 Minimize water using high pressure low volume nozzles.
- 4 Clean surface oil with rags or absorbents prior to power washing. If using granular material, thoroughly sweep and properly dispose of material before washing.
- 5 Only use water to clean the area.
- 6 Contain and ensure any wash water is properly disposed of.
- 7 If any visible pollutants are observed within the wash water, pump all residual water into the City's publicly owned treatment works through a sanitary sewer on-site. Approval by the City & County is required.



11. STORM DRAIN INLET PROTECTION

BEST MANAGEMENT PRACTICES



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STORMWATER IMPACTS

Stormwater runoff collects debris, chemicals sediment and other pollutants before discharging into a storm drain inlet. The following BMPs are intended to prevent potential pollutants from entering storm drain inlets and eventually discharge to the harbor.

Stormwater Website:

<http://www.hidot.hawaii.gov/harbors/malamaikeawakai>

Hotline: 808-587-1962

BMP IMPLEMENTATION



Only rain and permitted non-stormwater discharges are allowed to enter HDOT Harbors Division small MS4.

- 1 Stencil catch basins and inlets as a reminder to prevent pollutants from being dumped into the MS4 and post signs nearby to raise public awareness on pollution prevention.
- 2 Install filter fabric or similar BMP at each on-site storm drain inlet. Ensure the fabric overlaps the side of the inlet.
- 3 Maintain or replace all BMPs installed in storm drain inlets as needed.
- 4 Properly dispose of wastes collected from storm drain inlet cleaning.
- 5 Clean on-site catch basins and storm drain inlets in high pollutant load areas as needed and before the wet season.
- 6 Notify HDOT Harbors Division if repairs are needed for deteriorated storm drains and their piping.
- 7 For storm drain inlet protection during construction phase, refer to the Harbors Construction Site Runoff Control Program on the same stormwater website.



Attachment 4

Tenant Stormwater Compliance Inspection Form



State of Hawaii Department of Transportation Harbors Division Tenant Stormwater Compliance Inspection Form

Harbor: _____
Inspector(s): _____

Date/Time: _____
Weather Conditions: _____

Type of Inspection:	<input type="checkbox"/> Regular Inspection	<input type="checkbox"/> Follow-up Inspection	<input type="checkbox"/> Final Inspection
	<input type="checkbox"/> New Tenant Inspection - Date of Occupancy: _____		

Tenant Business Name:	_____		
Tenant Permit(s):	_____		
Facility Location:	_____		
Facility Mailing Address:	_____		
Tenant Representative:	_____		
Phone Number:	_____	Mobile Number:	_____
Fax Number:	_____	E-mail Address:	_____
EPA ID No. (if any):	_____	IWDP No. (if any):	_____

Facility Description:

Site Drainage Description (including stenciling):

Any illicit discharge into Harbors storm water drainage system? Yes No N/A

If "Yes", please describe here:

Related Risk Ranking Criterion:

Operations:

<input type="checkbox"/> Vessel Maintenance	<input type="checkbox"/> Vessel Washing
<input type="checkbox"/> Vessel Fueling	<input type="checkbox"/> Vehicle/Equipment Fueling
<input type="checkbox"/> Vehicle/Equipment Maintenance	<input type="checkbox"/> Vehicle/Equipment Washing
<input type="checkbox"/> Petroleum Product Storage	<input type="checkbox"/> Material Storage
<input type="checkbox"/> Hazardous Material Storage	<input type="checkbox"/> Material Handling
<input type="checkbox"/> Waste Handling	<input type="checkbox"/> Building Maintenance

NPDES Compliance Yes No N/A

NPDES Permit Number: _____ Expiration Date: _____

DMR Compliance: Yes No N/A

SPCC Compliance: Yes No N/A

If "Yes", please complete this section

Last round of sampling: _____

- The facility maintains records of monitoring data for a minimum of five years? Yes No N/A
- The facility has a SWMP and/or SWPCP? Yes No N/A
- The facility has filed a Discharge/Connection Permit with Harbors? Yes No N/A
- Discharge points exhibit unusual characteristics (e.g., sheen, color) Yes No N/A

Material Inventory:

No.	Inspection Item	Yes	No	N/A	Remarks
Storage					
1	SPCC Compliance: Facility with an aggregate shell capacity of 1,320 gallons or more of petroleum products.				
2	AST Containment: ASTs are situated over an impervious surface, have adequate secondary containment and integrity protection, and containment drain valves are kept locked.				
3	AST Overflow Protection: Bulk product ASTs are equipped with overflow protection alarms or automatic shutdown pumps.				
4	AST Malfunction: Visible piping, tanks, and hoses in good condition (e.g., no exhibit signs of leakage, wear, or malfunction).				
5	Oily Equipment: Oily or leaking equipment is stored under cover or with drip pans. Drip pans are cleaned regularly.				
6	Storm Water Management: Storm water accumulation in secondary containment is minimized, managed, properly disposed of, and logged.				
7	Salvaged Equipment/Vehicle: Fluids and batteries are removed from salvaged equipment/vehicle before storage.				
8	Outdoor Material Storage: Outdoor storage areas have coverings that prevent contact of these items with storm water. Materials are kept above the ground higher than the level of runoff.				
9	Labeling: Containers are properly labeled.				
10	Compatibility: Containers are stored in an organized manner, compatible with other stored materials, properly labeled, and not stored past allowable holding times.				
11	EPCRA: The facility is required to report chemical inventory (Tier II) and/or Toxic Release Inventory (TRI) report.				
Fueling					
12	Fueling BMPs: Fueling area engineering controls and BMPs are effective in preventing storm water run on/off.				
13	Fueling Inspections: Equipment in fueling areas is in good condition (e.g., do not exhibit signs of leakage, wear, or malfunction). An inspection log is available for inspection.				
Washing					
14	Vessel/Vehicle/Equipment Washing: Vehicle or equipment washing is conducted with approval from HDOT Harbors.				
15	Hand Washing: Hand or dish washing is conducted over a sink that is plumbed to sanitary sewer or is disposed of appropriately.				
Vessel/Vehicle/Equipment Maintenance					
16	Vessel/Vehicle/Equipment Maintenance Area: Maintenance is conducted regularly in a designated area, preferably covered or away from storm drains.				
17	Preventive Maintenance: Preventive maintenance is performed on vehicles and equipment to prevent leaks. Vehicle and equipment are monitored periodically for leaks and drip pans are used.				
18	Maintenance Logs: Records are kept.				
19	Parts Washer: Parts washer fluid is disposed appropriately with an authorized disposal contractor.				
Material Handling					
20	Material Handling Area: Loading areas are free of stains and pavement is in good condition that would indicate good material handling practices.				
Spill Response					
21	Spills and Stains are cleaned thoroughly.				
22	Spill Kits are kept in all high risk areas and are refilled as needed.				
23	Spill Recording: Records are kept in the SWPCP or SPCC.				
24	Harbors Environmental Hotline: Emergency storm water contact numbers have been posted on site.				

No.	Inspection Item	Yes	No	N/A	Remarks	
Building Maintenance & Housekeeping						
25	Sweeping: Trash, debris, and dirt are swept up regularly.					
26	Deck/Floor Washing: Dry sweeping or mopping is conducted instead of spraying/hosing down.					
27	Sumps and OWS Maintenance: Structural controls such as containment sumps or OWSs are serviced regularly.					
28	Cleanliness: All work areas and storage areas are neat and clean.					
Waste Handling						
29	Trash Bins: Trash bins are kept closed when not in use and are not overflowing.					
30	Used Batteries: Spent lead acid batteries are protected from contact with stormwater runoff and placed in secondary containment while awaiting disposal. Batteries are disposed in a timely manner.					
31	EPA Generators: Wastes are disposed properly, hazardous waste generator status is noted, and records are available. Facility has an EPA hazardous waste generator identification number and follows appropriate regulations/requirements (VSQG, SQG, LQG).					
32	Hazardous Waste Containment: Hazardous waste and used oil storage areas have impermeable surfaces, adequate secondary containment, and integrity protection.					
33	Chemical Toilets are cleaned by contractors in a manner that does not allow chemicals (i.e. blue liquid) to enter the Harbor.					
Training						
34	HDOT Harbors Annual Training: A representative has attended the most recent HDOT Harbors Storm Water Awareness Training.				If "No", the latest training attended:	
35	Material Handling Training: Training records are available (e.g. forklift operators, HAZCOM).				Most recent training date:	
36	Container Storage Training: Training records are available for employees conducting AST or chemical storage inspections.				Most recent training date:	
37	Fueling Training: Training records are available for employees conducting (large scale) vehicle/equipment fueling inspection.				Most recent training date:	
38	Hazardous Waste Training: Training records are available for employees involved hazardous/universal waste handling/disposal activities.				Most recent training date:	
General Observed BMPs						
39	General Housekeeping	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Average	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor or Unacceptable
40	Recordkeeping	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Average	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor or Unacceptable <input type="checkbox"/> Not Applicable
41	All personnel are well-trained	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Average	<input type="checkbox"/> Fair	<input type="checkbox"/> Poor or Unacceptable
42	Need follow-up inspection	<input type="checkbox"/> Yes	<input type="checkbox"/> No			

Tenant Risk Ranking Criteria		Score
1 Vessel Maintenance and Repair		
0	Neither maintenance nor repair activities are conducted on-site.	
1	Maintenance and repair activities on any size vessel are conducted entirely indoors or on a dry dock (with proper dust control BMPs and containment), with no or minimal potential for discharge of pollutants.	
2	Minor maintenance and repair for small vessels is conducted (with proper dust control BMPs and containment) with minimal potential for discharge of pollutants.	
3	Maintenance and repair activities on large vessels are conducted outdoors and out of the water (with proper dust control BMPs and containment), with minimal potential for discharge of pollutants.	
4	Major maintenance and repair activities on any size vessel are conducted in a partially contained or uncontained area with moderate potential for discharge of pollutants.	
5	Maintenance and repair activities on any size vessel are conducted in an uncontained area or in an area with significant potential for discharge of pollutants (e.g., within 50 feet of nearest storm drain inlet or surface water). (Automatic trigger to high risk designation)	
2 Vessel Fueling		
0	No fuel transfer activities are conducted on-site.	
1	Fueling of small vessel is conducted by a fueling company with proper spill containment and diversion.	
2	Fueling of small vessel is conducted with spill containment and diversion.	
3	Fueling of large vessel is conducted in designated area with spill containment and diversion.	
4	Fueling of small vessel is conducted in areas WITHOUT spill containment and diversion.	
5	Fueling of large vessel is conducted in areas WITHOUT spill containment or diversion. (Automatic trigger to high risk designation)	
3 Vessel Rinsing		
0	No vessel rinsing is conducted on-site.	
1	Vessel rinsing is conducted in an area designed to contain wash water and debris, with no or minimal potential discharge of pollutants.	
2	Vessel rinsing is uncontained but not conducted in an area adjacent to Harbors storm drainage system or state waters and has a minimal potential for discharge of pollutants.	
3	Vessel rinsing is uncontained but not conducted in an area adjacent to Harbors storm drainage system or state waters and has a moderate potential for discharge of pollutants.	
4	Vessel rinsing is uncontained and conducted in an area adjacent to Harbors storm drainage system or state waters and has a moderate potential for discharge of pollutants.	
5	Vessel rinsing is uncontained and conducted in an area adjacent to Harbors storm drainage system and has a significant potential for discharge of pollutants. (Automatic trigger to high risk designation)	
4 Vehicle and/or Equipment Maintenance and Repair		
0	No equipment/vehicle maintenance and/or repair activities are conducted on-site.	
1	Maintenance/repair activities are conducted entirely indoors, on a small scale, with minimal potential for discharge of pollutants.	
2	Maintenance/repair activities are conducted entirely indoors, on a large scale, with minimal potential for discharge of pollutants.	
3	Maintenance/repair activities are conducted in a covered area with minimal to moderate potential for discharge of pollutants.	
4	Maintenance/repair activities are conducted outdoors within containment or in an area with moderate potential for discharge of pollutants.	
5	Maintenance/repair activities are conducted outdoors or in an area with significant potential for discharge of pollutants. (Automatic trigger to high risk designation)	
5 Vehicle and/or Equipment Fueling		
0	No equipment and/or vehicle fueling activities are conducted on-site.	
1	Equipment/vehicle fueling is conducted by a fueling company with spill containment and diversion.	
2	Equipment/vehicle fueling is conducted on a small scale (i.e., less than 25 gallons per fueling) in areas with spill containment and diversion.	
3	Equipment/vehicle fueling is conducted on a large scale in areas with spill containment and diversion.	
4	Equipment/vehicle fueling is conducted on a small scale in areas WITHOUT spill containment and diversion, but not in areas adjacent to Harbors storm drainage system and state waters.	
5	Equipment/vehicle fueling is conducted on a large scale in areas WITHOUT spill containment and diversion, or on any scale in areas adjacent to Harbors storm drainage system WITHOUT spill containment and diversion. (Automatic trigger to high risk designation)	
6 Vehicle and/or Equipment Washing		

Tenant Risk Ranking Criteria		Score
0	No equipment/vehicle washing is conducted on-site.	
1	Equipment/vehicle washing is conducted with Harbors consent and in a covered wash area following an approved method, with no or minimal potential discharge of pollutants.	
2	Equipment/vehicle washing is conducted with Harbors consent and in an uncovered wash area following an approved method, with minimal potential discharge of pollutants.	
3	Equipment/vehicle washing is conducted with Harbors consent and in uncovered wash area following an approved method with moderate potential discharge of pollutants (e.g., adjacent to Harbors storm drainage system or state waters).	
4	Equipment/vehicle washing is not consented by the Harbors but fully contained.	
5	Equipment/vehicle washing is not consented by the Harbors and not contained. (Automatic trigger to high risk designation)	
7 Aboveground Oil Storage (size of container ≥ 55-gallon ONLY)		
0	No oil product is stored on-site.	
1	Less than 1,320 gallons of oil is properly stored in a covered area and has no or minimal potential for discharge of pollutants.	
2	Less than 1,320 gallons of oil is properly stored in an uncovered area and has minimal potential for discharge of pollutants.	
3	More than 1,320 gallons of oil is properly stored with minimal potential for discharge of pollutants, and the facility has an SPCC Plan.	
4	More than 1,320 gallons of oil is properly stored with minimal to moderate potential for discharge of pollutants, but the facility does not have a SPCC Plan.	
5	Oil is improperly stored and/or managed and has a significant potential for discharge of pollutants. (Automatic trigger to high risk designation)	
8 Container Storage (size of containers < 55-gallon)		
0	No containers are stored on-site.	
1	All containers are properly managed and stored entirely indoors and have no or minimal potential for discharge of pollutants.	
2	All containers are properly managed and stored under the cover, and have minimal potential for discharge of pollutants.	
3	Containers are properly managed and stored outdoors with minimal potential for discharge of pollutants (e.g., distance from site to the nearest storm drain inlet or surface water is greater than 100 feet or 30 meters).	
4	Containers are improperly managed but stored indoors or under the cover with moderate potential for discharge of pollutants.	
5	Containers are improperly managed and stored outdoors with significant potential for discharge of pollutants. (Automatic trigger to high risk designation)	
9 Waste Handling and Disposal (excluding Used Oil)		
0	No waste is stored on-site.	
1	All wastes are non-hazardous and stored indoors or outdoors in covered areas, and have no or minimal potential for discharge of pollutants.	
2	All wastes are non-hazardous and stored outdoors uncovered, and have moderate potential for discharge of pollutants.	
3	Hazardous wastes are generated and tenant is classified as a VSQG. Hazardous wastes are properly managed, stored, and disposed of. Storage areas have no or minimal potential for discharge of pollutants.	
4	Hazardous wastes are generated and the tenant is classified as a SQG or LQG. Hazardous wastes are properly managed, stored and/or disposed of. Storage areas have no or minimal potential for discharge of pollutants.	
5	Hazardous wastes are generated and the tenant is classified as a VSQG, SQG, or LQG. Hazardous wastes are improperly managed, stored, and/or disposed of. Storage areas have significant potential for discharge of pollutants. (Automatic trigger to high risk designation)	
10 Spill History		
0	No history of oil/chemical spills on-site.	
1	One to three non-reportable oil/chemical spills in minimal quantity (e.g., less than five gallons for oil) in the past three years.	
2	One to three non-reportable oil/chemical spills in moderate quantity (e.g., oil spill of 5 gallons or greater but less than 25 gallons; for all other chemicals please refer to 40 CFR 302.4) in the past three years.	
3	One to three reportable oil/chemical spills (see 40 CFR 302.4) in the past three years and spill kit is onsite.	

Tenant Risk Ranking Criteria		Score
4	One to three reportable oil/chemical spills in the past three years and no spill kit onsite.	
5	Two or more oil/chemical spills entered into Harbors storm drainage system. Or more than three reportable oil/chemical spills in one calendar year. (Automatic trigger to high risk designation)	
11 Enforcement History		
0	No verbal or written warnings were issued in the past two years.	
1	Class II violations (such as verbal/written warnings and potential violations identified in an inspection report) were issued in the past two years and corrective actions were immediately taken by the tenant.	
2	Class I violations (identified in an inspection report and/or documented in a NAV) were issued in the past two years and corrective actions were taken by the tenant.	
3	Class II violations were issued in the past two years, but corrective actions were NOT immediately taken by the tenant.	
4	Class I violations were issued in the past two years, but corrective actions were NOT immediately taken by the tenant.	
5	Civil penalties or administrative actions were assessed for non-compliance in the past two years. (Automatic trigger to high risk designation)	
12 Training Attendance History		
-2	The tenant has attended all annual trainings during its tenancy.	
-1	The tenant has attended the most recent training.	
2	The tenant has not attended the most recent training.	
4	The tenant has never attended the training.	
13 Site Condition and General Housekeeping		
0	All activities are conducted indoors and have no or minimal potential for discharge of pollutants. General housekeeping is in good condition.	
1	All activities are conducted indoors and have minimal potential for discharge of pollutants. General housekeeping is in average or fair condition.	
2	Activities are conducted indoors and outdoors, and general housekeeping is in good condition (e.g., sources of pollutants are properly managed).	
3	Activities are conducted indoors and/or outdoors and have minimal to moderate potential for discharge of pollutants. General housekeeping is in fair or above average condition.	
4	Activities are conducted outdoors and have moderate potential for discharge of pollutants. General housekeeping is in fair condition.	
5	Activities are conducted outdoors and pose a significant threat to the environment. (Automatic trigger to high risk designation)	
14 Lease Agreement and/or Revocable Permit Requirements		
0	Tenant appears to be in compliance with environmental requirements in their tenant lease or revocable permit.	
5	Tenant is not in compliance with their revocable permit or lease. (Automatic trigger to high risk designation)	

Total Risk Ranking Score: 0
Tenant Risk Ranking Category: Low

Attachment 5

Low-Risk Tenant Reconnaissance Inspection Form



State of Hawaii Department of Transportation Harbors Division
Low-Risk Tenant Reconnaissance Form

Harbor: _____
Inspector(s): _____

Date/Time: _____
Weather Conditions: _____

Tenant Business Name: _____
Tenant Permit(s): _____
Facility Location: _____
Facility Mailing Address: _____
Tenant Representative: _____
Phone Number: _____ Mobile Number: _____
Fax Number: _____ E-mail Address: _____
EPA ID No. (if any): _____ IWDP No. (if any): _____

Facility Description:

Site Drainage Description (including stenciling):

Any illicit discharge into Harbors storm water drainage system? [] Yes [] No [] N/A

If "Yes", please describe here: [] Please check here if a follow-up inspection is necessary.

Related Risk Ranking Criterion:

Remarks:

[] No significant changes (Please check here if no status change. Otherwise, please specify any changes below)

Site Overview

Attachment 6

Suspected Illicit Discharge Reporting Form



Suspected Illicit Discharge Reporting Form

General Information: Use this form to report a suspected illicit discharge. If you are unsure, please contact your supervisor or HAR-EE. Examples of illicit discharges: uncontained vehicle/equipment/building/sidewalk washing, sink discharging directly to ground or storm drain inlet, petroleum spills/sheens, unpermitted vessel discharges, uncontained vessel painting/chipping/sandblasting/cleaning, etc.

Observer Information

Name:			
Office Code:		Telephone Number:	
Report Date:			

Description of Suspected Illicit Discharge

Address or Location:		Date and Time:	
Description: (Include Substance and Amount, if known)			
Media into which the discharge occurred: <input type="checkbox"/> Air <input type="checkbox"/> Natural Soil <input type="checkbox"/> Concrete/Asphalt Pavement <input type="checkbox"/> Stream <input type="checkbox"/> Harbor <input type="checkbox"/> Other: _____			
Responsible Party: (if known)			
Cause of Discharge: (if known)			
Clean-up Actions: (if applicable)			
Notifications Made:			

Please forward completed form and/or picture(s) to HAR-EE office. Fax Number: (808) 587-1864

Point of Contact for Reporting

Agency	Telephone Number
Harbor Traffic Control (Aloha Tower) [HAR-OCT]	(808) 587-2076, (808) 587-2077
Harbors Engineering Environmental Section [HAR-EE]	(808) 587-1962

Additional Follow-up By HAR-EE (to be filled by HAR-EE):

Attachment 7

**Permit to Discharge into HDOT
Harbors Division Small MS4**

Permit to Discharge into HDOT Harbors Division Small MS4

Application Date: _____

Note: This form is to be used for discharge to Harbors Division Small MS4 system ONLY. No permanent structure will be constructed at the location(s) specified below. Otherwise, please use **Permit for Connection to HDOT Harbors Division Small MS4** form.

Pursuant to Hawaii Administrative Rules, Chapter 11-55, application is hereby made to discharge into the State of Hawaii Department of Transportation (HDOT) Harbors Division Small Municipal Separate Storm Sewer System (MS4) at the location(s) specified below and at no other place.

1.	Name of Harbor:	
2.	Tax Map Key No:	
3.	Location:	
4.	Type of Discharge	
	<input type="checkbox"/> Storm water associated with industrial activities	<input type="checkbox"/> Hydrotesting water
	<input type="checkbox"/> Storm water associated with construction activities	<input type="checkbox"/> Dewatering
	<input type="checkbox"/> Others (Specify):	
5.	Complete the <i>Drain Discharge Worksheet</i> on Page 3 and attach related Plan(s).	

Licensee*, the undersigned, hereby agrees to the following:

1. That the Licensee shall indemnify and hold the State free and harmless from all suits and actions resulting from the licensee's discharge operations.
2. That the Licensee shall provide appropriate control measures and/or treatment devices for the removal of soil particles, and/or other pollutant(s) in the discharge, and such discharge shall meet the basic water quality criteria applicable to all state waters, as identified in Section 11-54-4, and any other applicable sections in Chapter 11-54, Hawaii Administrative Rules, at the point of discharge into state waters.
3. That the Licensee shall obtain National Pollutant Discharge Elimination System (NPDES) permit as required by the State of Hawaii Department of Health (HDOH) and submit a copy to the HDOT Harbors Division with this form, if necessary.
4. That a copy of any effluent monitoring required by the NPDES permit shall be furnished to the HDOT Harbors Division, when requested.
5. That the Licensee shall make all restoration to any State property damaged during the Licensee's discharge operations in accordance with the HDOT Harbors Division requirements.
6. That the Licensee shall discontinue the discharge, should the HDOH determine that the receiving waters are being polluted, the discharge does not meet the effluent requirements of the NPDES permit, and the Licensee's operations are not in the best interest of the general public. In addition, the Licensee shall be liable for any and all penalties as a result of discharges from the Licensee's system.

7. That if the HDOT Harbors Division determines that any material or substance from the Licensee's discharge operations have settled into Harbors Small MS4, the Licensee shall immediately remove and clear any material and substance to the satisfaction of the HDOT Harbors Division.
8. That the Licensee shall comply with Harbors *Construction Site Runoff Control Program* and *Post-Construction Storm Water Management in New Development and Redevelopment*, and inspect and clean the Harbors Small MS4 prior to discharging, when applicable.
9. That the Licensee shall notify the Harbors Environmental Section at (808) 587-1962 at least 72 hours before commencing discharge and at the conclusion of the discharge operation to arrange for necessary inspectional services.
10. That the Licensee shall require this permit to be part of the contract with its construction contractor when applicable.

Print Name of Licensee	Company Name
Licensee's Title	Company Address
	City, State, Zip Code
Signature of Licensee	E-mail Address
Date	
Telephone No.	Fax No.

Reviewed By:

Environmental Section	Date
-----------------------	------

Approved By:

Engineering Program Manager	Date
-----------------------------	------

CONSTRUCTION DATA
Work Started: _____
Work Completed: _____
Inspector: _____

*Licensee shall be the authorized representative of the party seeking to discharge into the HDOT Harbors Division Small MS4 under this permit.

Drain Discharge Worksheet

If "No" is checked, please provide justification beneath each item.		
Item	Yes	No
1. Site Map showing subject discharge point(s) to Harbors drainage system in NAD 83 Geographic coordinates (latitude, longitude) is attached.	<input type="checkbox"/>	<input type="checkbox"/>
2. Storm Water Flow Map is attached.	<input type="checkbox"/>	<input type="checkbox"/>
3. Quantity of storm water and site process water entering Harbors drainage system is attached.	<input type="checkbox"/>	<input type="checkbox"/>
For Construction Project (Please refer to <i>City and County of Honolulu Storm Water Best Management Practice Manual – Construction, November 2011</i> , for more information)		
4. Description of erosion controls and location(s) are attached.	<input type="checkbox"/>	<input type="checkbox"/>
5. Project schedule is attached.	<input type="checkbox"/>	<input type="checkbox"/>

Attachment 8

Permit for Connection to HDOT Harbors Division Small MS4

Permit for Connection to HDOT Harbors Division Small MS4

Application Date: _____

Note: This form is to be used for connection to Harbors Division Small MS4. Permanent structure(s) will be constructed at the location(s) below if approved. Otherwise, please use **Permit to Discharge into HDOT Harbors Division Small MS4** form.

Pursuant to Hawaii Administrative Rules, Chapter 11-55, application is hereby made to connect to the State Department of Transportation (HDOT) Harbors Division Small Municipal Separate Storm Sewer System (MS4) at the location(s) specified below and at no other place.

1.	Name of Harbor:	_____
2.	Tax Map Key No:	_____
3.	Location:	_____
4.	Description of Connection(s):	_____
5.	Complete the Drain Connection Worksheet on Page 3 and attach related Plan(s).	

Licensee*, the undersigned, hereby agrees to the following:

1. That the Licensee shall bear the entire cost of engineering, construction, and maintenance of the private storm drainage system.
2. That the Licensee shall indemnify and hold the State free and harmless from all suits and actions caused by the Licensee's acts or failure to act in connection with engineering construction and maintenance of the Licensee's private storm drainage system and its connection to the HDOT Harbors Division Small MS4.
3. That the construction of the storm drainage system shall be made in accordance with plans and specifications approved by the Harbors Division, and subject to compliance with all applicable statutes, ordinances, and rules and regulations of Federal, State or City agencies having the effect of the law. If a National Pollutant Discharge Elimination System (NPDES) Permit is warranted in accordance with Hawaii Administrative Rules (HAR) 11-55, the Licensee shall obtain the permit as required by the State Department of Health (HDOH) and submit a copy to the HDOT Harbors Division with this form.
4. That prior to any construction work, the Licensee shall obtain permission to perform work from the HDOT Harbors Division Engineering Program Manager, and comply with Harbors *Construction Site Runoff Control Program* and *Post-Construction Storm Water Management in New Development and Redevelopment*.
5. That in the event any portion of the HDOT Harbors Division Small MS4 is damaged or destroyed during the construction of the private storm drain connection, the Licensee shall bear the entire cost of engineering and construction, or replacement of the damaged system.
6. That no additions or alterations to the private storm drainage system will be made without the prior written consent of the HDOT Harbors Division.
7. That the private storm drainage system shall remain at the Licensee's property and that the Licensee will be solely responsible for its maintenance and upkeep.
8. That in the event, the private storm drainage system within the State right-of-way shall at any time interfere with any public use, the Licensee will relocate the private water drainage system at the Licensee's sole expense.

9. That any time the private storm drainage system discharges pollutants or other objectionable material into the HDOT Harbors Division Small MS4 which exceeds applicable water quality standards of the HDOH as identified in Section 11-54-4, Hawaii Administrative Rules, or otherwise misuses the system, or causes a violation of any provisions of the State's NPDES permit, the HDOT Harbors Division, by written notice, may terminate this licensee and have the system removed at the Licensee's expense. In addition, the Licensee shall be liable for any and all penalties as a result of discharges from the Licensee's system.
10. That discharge into the HDOT Harbors Division Small MS4 shall be composed entirely of storm water, or other discharges allowed by HDOH. In the event the discharge into the HDOT Harbors Division Small MS4 comes from a point or non-point source regulated by HDOH, the Licensee shall obtain the proper NPDES permit(s) from HDOH in accordance with HAR 11-55, and shall provide effluent monitoring reports required by their NPDES permit to HDOT Harbors Division when requested.
11. That the HDOT Harbors Division, or its authorized representative, may during reasonable hours and upon notification to the Licensee, enter building or premises to inspect or investigate, measure or test any effluent discharged directly or indirectly to the HDOT Harbors Division Small MS4.
12. That the Licensee will notify the Harbors Environmental Section at (808) 587-1962 at least 72 hours before commencing construction work, to arrange for necessary inspectional services.
13. That the Licensee shall require this permit to be part of the contract with its construction contractor.
14. That this agreement shall be made a condition of any subsequent transfer of property ownership.

Print Name of Licensee	Company Name
Licensee's Title	Company Address
	City, State, Zip Code
Signature of Licensee	E-mail Address
Date	Fax No.
Telephone No.	

Reviewed By:

Environmental Section	Date
-----------------------	------

Approved By:

Engineering Program Manager	Date
-----------------------------	------

CONSTRUCTION DATA

Work Started:	
Work Completed:	
Inspector:	

*Licensee shall be the authorized representative of the party seeking to connect and discharge to the HDOT Harbors Small MS4 under this permit.

Drain Connection Worksheet

If “No” is checked, please provide justification beneath each item.		
Item	Yes	No
1. Site Map showing subject discharge point(s) to Harbors drainage system in NAD 83 Geographic coordinates (latitude, longitude) is attached.	<input type="checkbox"/>	<input type="checkbox"/>
2. Storm Water Flow Map is attached.	<input type="checkbox"/>	<input type="checkbox"/>
3. Quantity of storm water and site process water entering Harbors drainage system is attached.	<input type="checkbox"/>	<input type="checkbox"/>
4. Description of Best Management Practices and location(s) are attached.	<input type="checkbox"/>	<input type="checkbox"/>
5. Drain Construction/Structure Plan is attached.	<input type="checkbox"/>	<input type="checkbox"/>
6. Type of Discharge and copy of NPDES permit issued by HDOH (if applicable).	<input type="checkbox"/>	<input type="checkbox"/>

Please refer to *City and County of Honolulu Storm Water Best Management Practice Manual – Construction, November 2011*, for more information.

Attachment 9

List of Alternative Products for Cleaning

Alternative Products for Cleaning

Battery Acid	Use baking soda to absorb a spill.
Bleach	As a substitute, try borax powder available at grocery stores.
Brass Cleaner	Use vinegar and a clean dry rag to remove tarnish.
Drain Opener	Pour $\frac{1}{4}$ cup baking soda down the drain, follow with $\frac{1}{2}$ cup vinegar. Allow the effervescent mix to bubble for 30 minutes. Finish the job by flushing the drain with boiling water. For tough clogs, try using a plumber's snake.
Fiberglass Stain	Baking soda and water mixed into a paste works great on Formica.
Floor Cleaner	Use one cup of white vinegar in two gallons of water.
General Cleanser	Dissolve one teaspoon of borax in one quart of warm water. For tough jobs, use a $\frac{1}{2}$ cup of borax and a splash of vinegar in water.
Hand Cleaner	Instead of paint thinner try washing soda (sodium bicarbonate), found in the laundry section of most grocery stores. Washing soda is caustic, so be sure to use plenty of water.
Mildew Remover	Mix equal parts of lemon juice and salt or vinegar and salt. Use a plastic spray bottle to spray on outside canvas.
Paper Towels	Use cloth rags that can be washed and re-used.
Scouring Powders	Baking soda with a plastic "bun" scrubber works great on porcelain head and shower tiles.
Shower Cleaner	Wet surface, sprinkle with baking soda, and scrub.
Soap	Use phosphate-free products available at most grocery and health food stores.
Wood Polish	For interior wood use one teaspoon lemon juice with two teaspoons vegetable oil. Apply mixture with a clean, dry cloth.

Attachment 10

List of Major Environmental Regulations

Major Environmental Regulations

Harbors has identified a major list of environmental regulations applicable to their activities and operations. The list includes stormwater management under the Clean Water Act [CWA]; petroleum products storage under the Spill Prevention, Control, and Countermeasure [SPCC] rule; waste management including hazardous waste, used oil, and universal waste; storage tank management; and hazardous substance/chemical storage under the Emergency Planning and Community Right-to-Know Act [EPCRA]. These regulations are reflected and implemented through using Harbors revised Tenant Stormwater Compliance Inspection Form (Attachment 4) during inspections.

1. Clean Water Act and National Pollutant Discharge Elimination System

The CWA (contained in 33 United States Code [USC] §§ 1251 to 1387) is the primary federal statute that addresses water pollution in the United States. It establishes the basic structure for regulating discharges of pollutants into waters of the United States and establishing quality standards for surface waters. It also establishes a number of programs designed to restore and protect the quality of nation's waters by eliminating the discharge of pollutants into surface waters. The CWA traces its roots to the Federal Water Pollution Control Act [FWPCA], which was originally enacted in 1948.

In 1972, congressional amendments to the FWPCA established the National Pollutant Discharge Elimination System [NPDES]. As authorized by the CWA, the NPDES program was established to control discharges of pollutants to navigable waters from point sources (e.g., industrial plants and municipal wastewater treatment facilities). Those discharges were authorized by permits issued under the program. The permits usually set numerical limitations on the authorized discharges (i.e., the composition and the concentration of pollutants in the effluent) and impose other conditions on the permittee. They give the permittee the right to discharge specified pollutants from specified outfalls for a limited period of time.

In 1987, the FWPCA was amended to include stormwater discharges as a significant source of water pollution. The NPDES program was also expanded to include non-point sources (e.g., stormwater runoff from construction sites, croplands, urban areas, etc.). Stormwater runoff is commonly transported through Municipal Separate Storm Sewer Systems [MS4s], and is often discharged directly into local water bodies without any treatment. To prevent harmful pollutants from being washed or dumped into an MS4, operators must submit a Notice of Intent [NOI] to seek coverage under NPDES program and develop a stormwater management program to reduce the contamination of stormwater runoff and prohibit illicit discharges.

In 1990, the United States Environmental Protection Agency [USEPA] promulgated regulations (contained in 40 Code of Federal Regulations [CFR] Parts 122, 123, and 124) to establish permit programs for stormwater discharges. It required medium and large cities or certain counties with populations of 100,000 or more, and construction activities disturbing five acres or more of land

to obtain NPDES permit coverage for their stormwater discharges. These regulations are referred to as the “Phase I Program.” In 1999, the USEPA published the Storm Water Phase II Final Rule and expanded the Phase I Program by extending NPDES coverage to small MS4s in and/or outside the urbanized areas, and to construction activities that disturb between one and five acres of land to obtain NPDES permit coverage for their stormwater discharges (USEPA, 2000).

Generally, coverage under NPDES program is required for any discharge of a pollutant from a point source to nation’s waters. Individual homes that are connected to a municipal system, use a septic system, or do not discharge to any surface water do not need to apply for an NPDES permit. However, industrial, municipal, and other facilities must obtain permits if their discharges flow directly to surface waters. In addition, most stormwater discharges are considered point sources and require coverage under NPDES program. In most cases, the NPDES program is administered by authorized states.

For the State of Hawaii, the USEPA has delegated authority to the HDOH Clean Water Branch [CWB], to administer the NPDES program including permit coverage issuance (to municipalities, industries, and construction projects), enforcement, program related regulatory & policy development, and other pertinent program elements. Meanwhile, the USEPA continues to maintain overall enforcement authority. State water quality regulations have been codified in the Hawaii Administrative Rules [HAR] Title 11 Chapter 54 (Water Quality Standards) and HAR Title 11 Chapter 55 (Water Pollution Control). Hawaii Revised Statutes [HRS] Title 19 Chapter 342D provides the State with the procedures, rules, and regulations for the enforcement of the State’s Clean Water Program.

A. 40 CFR Parts 122 to 124 – USEPA Administered Permit Programs: The National Pollutant Discharge Elimination System

The regulatory provisions contained in these parts implement the NPDES program under sections 301, 318, 402, and 405 of the CWA. These parts cover the basic USEPA permitting requirements (40 CFR Part 122) and minimum requirements for administering the approved state program (40 CFR Part 123); as well as procedures for USEPA processing of permit applications and appeals (40 CFR Part 124). These provisions also establish the requirements for public participation in the USEPA and state permit coverage issuance and enforcement and related variance proceedings, and in the approval of state NPDES programs.

B. HAR Title 11 Chapter 54 – Water Quality Standards

This chapter establishes water quality standards applicable for the state waters (defined in HAR 11-54-1 and HRS 342D-1) that shall be maintained and protected to ensure protection of human health. To ensure compliance, all state waters are subject to monitoring and to the numerical limitations for acute and chronic toxicity as established in this chapter. These regulations detail the following: definitions; general policy on water quality and anti-degradation; classification of state waters and water uses; basic water quality criteria applicable to all waters; uses and specific

criteria applicable to inland waters, marine waters, and recreational areas; zones of mixing; water quality certification and components; revisions; and severability.

C. HAR Title 11 Chapter 55 – Water Pollution Control

This chapter became effective on October 22, 2007. This chapter establishes the application of general and individual NPDES permits for facilities in the State of Hawaii. The NPDES permit conditions include, but are not limited to, basic water quality criteria, permit coverage, onshore/offshore construction, sampling requirements and definitions, duties to comply/reapply/mitigate, operation and maintenance, inspection and entry, monitoring and recordkeeping, signatory requirement, reporting requirements, modification, renovation, penalties, remediation, civil and criminal liability, oil and hazardous substance liability, hearings, appeals, severability, public interest, and field citations. HAR Title 11 Chapter 55 also establishes general permit conditions for specific activities with the potential to impact the stormwater, including industrial activities (HAR 11-55 Appendix B), construction activities (HAR 11-55 Appendix C), and construction activity dewatering (HAR 11-55 Appendix G).

2. Spill Prevention, Control and Countermeasure Rule

A. 40 CFR Part 112 – Oil Pollution Prevention

Originally published in 1973 under the authority of Section 311 of the CWA, the Oil Pollution Prevention regulation (40 CFR Part 112) sets forth requirements for prevention of, preparedness for, and response to oil discharges at specific non-transportation related facilities. To prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil, the regulation requires these facilities to develop and implement SPCC plans and establishes procedures, methods, and equipment requirements (Subparts A, B, and C). On December 5, 2008, the Federal Register published USEPA's final rule to amend the SPCC rule. This regulation includes requirements for facilities to prepare, amend, and implement SPCC plans to prevent discharges of oil to navigable waters and adjoining shorelines.

To determine if a facility is subject to the SPCC rule, it must meet three criteria:

- ❖ It must be non-transportation-related;
- ❖ It must have an aggregate aboveground storage capacity greater than 1,320 gallons or a completely buried underground storage capacity greater than 42,000 gallons; and
- ❖ There must be a reasonable expectation of a discharge into or upon navigable waters of the United States or adjoining shorelines.

When calculating oil storage capacity, the facility should not count containers less than 55 gallons; completely buried tanks that are subject to all of the technical requirements of the Underground Storage Tank [UST] Regulation (40 CFR Part 280) or all of the technical requirements of a state UST program (HAR 11-281) approved under 40 CFR Part 281; containers that are permanently

closed as defined in 40 CFR Part 112.2; or parts of the facility used exclusively for wastewater treatment and not used to satisfy any requirement of 40 CFR Part 112. Preparation of the SPCC plan is the responsibility of the facility owner or operator.

B. 40 CFR Part 110 – Discharge of Oil

The regulations of this part apply to the discharge of oil prohibited by Section 311(b) (3) of the CWA. For purposes of Section 311(b)(4) of the Act, discharges of oil in such quantities that the Administrator of the USEPA has determined may be harmful to the public health or welfare or the environment of the United States include discharges of oil that:

- Violate applicable water quality standards; or
- Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

According to 40 CFR Part 110.6, “Any person in charge of a vessel or of an onshore or offshore facility shall, as soon as he or she has knowledge of any discharge of oil from such vessel or facility in violation of Section 311(b)(3) of the Act, immediately notify the National Response Center [NRC] (800-424-8802). If direct reporting to the NRC is not practicable, reports may be made to the United States Coast Guard [USCG] or USEPA predesignated On-Scene Coordinator [OSC] for the geographic area where the discharge occurs. All such reports shall be promptly relayed to the NRC. If it is not possible to notify the NRC or the predesignated OSC immediately, reports may be made immediately to the nearest USCG unit, provided that the person in charge of the vessel or onshore or offshore facility notifies the NRC as soon as possible.” The procedures for such notice are set forth in USCG regulations (33 CFR 153, Subpart B) and in the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300, Subpart E).

3. Waste Management Regulations

The Resource Conservation and Recovery Act (42 USC §§ 6901), commonly referred to as RCRA, is the primary law governing the disposal of solid and hazardous waste in United States. Congress passed RCRA on October 21, 1976, which amended the Solid Waste Disposal Act [SWDA] of 1965. RCRA gives USEPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste (40 CFR Parts 260 through 272). RCRA also set forth a framework for the management of non-hazardous solid wastes (40 CFR Parts 273 through 279). The 1986 amendments to RCRA further address environmental problems that could result from underground tanks storing petroleum and other hazardous substances (40 CFR Parts 280 through 282).

RCRA set national goals for protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of

waste generated, and ensuring that wastes are managed in an environmentally-sound manner. To achieve these goals, RCRA established three distinct programs as follows:

- ❖ The hazardous waste program regulated under RCRA Subtitle C.
- ❖ The solid waste program regulated under RCRA Subtitle D.
- ❖ The UST program regulated under RCRA Subtitle I.

For the State of Hawaii, the USEPA has delegated authority to HDOH Solid and Hazardous Waste Branch [SHWB] to administer the solid and hazardous waste management control program including permit issuance, inspections, compliant response, enforcement, technical assistance & training, program related regulatory & policy development, and other pertinent program elements. Meanwhile, USEPA continues to maintain overall enforcement authority.

State solid and hazardous waste management control regulations are codified in the HAR Title 11 Chapter 58.1 (Solid Waste Management Control, in draft), Chapters 260 through 271 and 280 (Hazardous Waste Management), Chapter 273 (Universal Waste Management), Chapter 279 (Management of Used Oil), Chapter 281 (Underground Storage Tanks), and Chapter 282 (Deposit Beverage Container Recycling). Functionally, the SHWB consists of three implementing sections (Hazardous Waste Section, Office of Solid Waste Management, and Underground Storage Tank Section), one support group (Pollution Prevention and Waste Minimization Program), and program administration.

A. Solid Waste Management Control - HAR Title 11 Chapter 58.1

The purpose of this chapter is to establish minimum standards governing the design, construction, installation, operation, and maintenance of solid waste disposal, recycling, reclamation, and transfer systems. These standards are intended to prevent pollution of the drinking water supply or waters of the State of Hawaii; prevent air pollution; prevent the spread of disease and the creation of nuisances; protect the public health and safety; conserve natural resources; and preserve and enhance the beauty and quality of the environment.

These regulations detail the following: general provisions (Subchapter 1); requirements for solid waste disposal facilities (Subchapter 2); requirements for solid waste storage, handling, and processing facilities (Subchapter 3); requirements for solid waste reclamation facilities (Subchapter 4); requirements for special waste management (Subchapter 5); solid waste management responsibilities (Subchapter 6); penalties, remedies, and severability (Subchapter 7).

B. Hazardous Waste Regulations - 40 CFR Parts 260 through 272 and HAR Title 11 Chapters 260 through 271 & 280

Enforced by USEPA, 40 CFR Parts 260 through 272 establishes regulations for hazardous waste management including identification and listing of hazardous waste; standards applicable for

generators of hazardous waste; standards applicable to transporters of hazardous waste; standards for owners and operators of hazardous waste treatment, storage, and disposal facilities; standards for the management of specific hazardous wastes and specific types of hazardous waste management facilities; standards for owners and operators of hazardous waste facilities operating under a standardized permit; land disposal restrictions; USEPA administered permit programs; and requirements for authorization and approval of state hazardous waste programs.

Enforced by HDOH, HAR Title 11 Chapters 260 through 271 and 280 establishes rules governing hazardous waste management in the State of Hawaii. HAR 11-260 through 11-270, are patterned after the regulations promulgated in 40 CFR 260 through 270, respectively. All references in tables and appendices to provisions of the CFR shall be construed to mean the state rule analogue of the referenced federal regulation (e.g., 40 CFR 260.1 shall be construed to mean section 11-260-1 of the HAR). The list of regulations applicable to Harbors is discussed below.

40 CFR Part 260 (HAR Title 11 Chapter 260) – Hazardous Waste Management System: General

This Part provides purpose, scope, applicability, definitions, references, general standards, and overview information applicable to the remainder of the hazardous waste rules.

40 CFR Part 261 (HAR Title 11 Chapter 261) – Identification and Listing of Hazardous Waste

These regulations can be used to determine whether the waste is a solid waste and then to determine if it is a hazardous waste based on the characteristics exhibited by the waste and listed wastes (i.e., ignitability, corrosivity, reactivity, and toxicity; 40 CFR Subpart C). List of hazardous wastes regulated by the USEPA is contained in 40 CFR Subpart D. They also specify special requirements for hazardous waste generated by Very Small Quantity Generator [VSQG], residues of hazardous waste in empty containers, polychlorinated biphenyls [PCB] wastes regulated under Toxic Substance Control Act [TSCA], recyclable materials, and universal waste.

40 CFR Part 262 (HAR Title 11 Chapter 262) – Standards Applicable To Generators of Hazardous Waste

This Part establishes standards for generators of hazardous waste including but not limited to hazardous waste determination; USEPA identification numbers; general requirements for hazardous waste manifest; pre-transportation requirements for hazardous waste packaging, labeling, marking, placarding, and accumulation time; recordkeeping and reporting; and imports/exports of hazardous waste.

These standards can be utilized to make a hazardous waste determination, identifying the operator's generator status based on quantity of hazardous waste generated per calendar month, and managing the hazardous waste in accordance with the requirements for different generators. The hazardous waste generators are classified into Large Quantity Generator [LQG], Small Quantity Generator [SQG], and Very Small Quality Generator [VSQG]. A generator's "status" is

defined by the type of hazardous waste created and the quantity of waste that is generated and stored onsite. It is important that container weight and universal waste weight is not included in the total. Detailed discussion for each type of generator is listed below:

VSQGs generate ≤ 100 kilograms (220 pounds) of hazardous waste and ≤ 1 kilogram (2.2 pounds) of acutely hazardous waste, and ≤ 100 kilograms (220 pounds) of acute spill residue or soil in one calendar month. VSQGs must identify all the hazardous waste generated. VSQGs may not accumulate more than 1,000 kilograms (2,205 pounds) of hazardous waste and more than 1 kilogram (2.2 pounds) of acute hazardous waste at any time. VSQGs must ensure that hazardous waste is delivered to a person or facility who is authorized to manage it. VSQGs are not required to acquire an USEPA RCRA identification number. Use of a Hazardous Waste Manifest form is not required but recommended.

SQGs generate > 100 kilograms (220 pounds) and $< 1,000$ kilograms (2,205 pounds) of hazardous waste in one calendar month. SQGs may accumulate hazardous waste on site for 180 days without a permit (or 270 days if shipping a distance greater than 200 miles). SQGs cannot accumulate more than 6,000 kilograms (13,228 pounds) of hazardous waste any time. SQGs must comply with the hazardous waste manifest requirements at 40 CFR part 262, subpart B and the pre-transport requirements at 40 CFR part 262.30 through 262.33. SQGs must manage hazardous waste in tanks or containers subject to the requirements found at 40 CFR part 262.16(b)(2) and (3). SQGs must comply with the preparedness and prevention requirements at 40 CFR part 262.16(b)(8) and (9), and the land disposal restriction requirements at 40 CFR part 268. SQGs need to acquire an USEPA RCRA identification number, and needs to use a Hazardous Waste Manifest form. There must always be at least one employee available to respond to an emergency. This employee is the emergency coordinator responsible for coordinating all emergency response measures. SQGs are not required to have detailed, written contingency plans.

LQGs generate $\geq 1,000$ kilograms (2,205 pounds) of hazardous waste or > 1 kilogram (2.2 pounds) of acute hazardous waste, or > 100 kilograms (2,205 pounds) of acute spill residue or soil in one calendar month. LQGs do not have a limit on the amount of hazardous waste accumulated on site, but may store hazardous waste on-site for up to 90 days. Certain exceptions apply. LQGs need to acquire an USEPA RCRA ID Number, must comply with the hazardous waste manifest requirements (at 40 CFR part 262 subpart B and the pre-transport requirements at 40 CFR part 262.30 through 262.33), and must submit a biennial hazardous waste report. LQGs must comply with the preparedness, prevention and emergency procedure requirements at 40 CFR part 262 subpart M and the land disposal restriction requirements at 40 CFR part 268. Hazardous waste generated must be managed in tanks, containers, drip pads or containment buildings subject to the requirements found at 40 CFR part 262.17(a)(1)-(4) and, specifically for drip pads and containment buildings, 40 CFR part 265, subparts W and DD, respectively. There must always be at least one employee available to respond to an emergency. This employee is the emergency coordinator responsible for coordinating all emergency response measures. Furthermore, an LQG needs to comply with the requirements for personnel training, preparedness

and prevention, detailed contingency plans and emergency procedures.

40 CFR Part 263 (HAR Title 11 Chapter 263) – Standards Applicable To Transporters of Hazardous Waste

This Part establishes standards which apply to persons transporting hazardous waste within the United States if the transportation requires a manifest under 40 CFR Part 262 (or HAR 11-262). Note that these regulations do not apply to on-site transportation of hazardous waste by generators/owners/operators of permitted hazardous waste management facilities. A transporter of hazardous waste must also comply with other applicable Parts within 40 CFR (and/or HAR Title 11), where applicable. This Part also describes the standards for transporter; USEPA identification numbers; transfer facility requirements; compliance with the manifest system and recordkeeping; and immediate action and clean up.

C. Universal Waste Management – 40 CFR Part 273 and HAR Title 11 Chapter 273

This Part establishes requirements for managing of acceptable universal wastes, including batteries, pesticides, mercury-containing equipment, and lamps (bulbs). This Part provides an alternative set of management standards in lieu of regulation under 40 CFR Parts 260 through 272. It lists definitions of universal waste; standards for small and large quantity handlers of universal waste (e.g., applicability, prohibitions, notification, waste management, labeling and marking, accumulation time limits, employee training, response to releases, off-site shipments, tracking universal waste shipments, exports, etc.); standards for universal waste transporters; standards for destination facilities; import requirements, and petitions to include other wastes under 40 CFR Part 273. The universal waste regulations discussed within this paragraph are not applicable to the conditionally exempt small quantity generators of hazardous waste (40 CFR Part 273.8).

D. Standards for the Management of Used Oil - 40 CFR Part 279 and HAR Title 11 Chapter 279

On July 30, 2003, USEPA established standards for the management of recycled used oil. These standards were further corrected and published on July 14, 2006, as a final rule. This Part establishes used oil management requirements including definitions of used oil; applicability, specifications, prohibitions; standards for used oil generators, transporter and transfer facilities, processors, burners who burn off-specification used oil for energy recovery, fuel marketers (e.g., applicability, hazardous waste mixing, storage, on-site burning, off-site shipments, restrictions, notification, transportation, rebuttable presumption, storage, tracking, residue management, reporting); standards for used oil collection centers and aggregation points; standards for disposal of used oil; and used oil and used oil fuel permitting system.

E. UST Regulations - 40 CFR Part 280 and HAR Title 11 Chapter 281

This Part applies to all owners and operators of a UST system as defined in 40 CFR 280.12 except as otherwise provided in paragraphs (b), (c), and (d) of 40 CFR 280.10. This Part establishes UST regulations including:

- ❖ Program scope and interim prohibition (i.e., applicability, definitions, and interim prohibition for deferred UST systems);
- ❖ Design, construction, installation and notification (i.e., performance standards for new UST systems, upgrading of existing UST systems, and notification requirements);
- ❖ General operating requirements for spill and overfill control, operation and maintenance of corrosion protection, compatibility, repairs allowed, and reporting and recordkeeping;
- ❖ Release detection (i.e., general requirements for all UST systems, requirements for petroleum and hazardous substance UST systems, methods of release detection for tanks and piping, and release detection recordkeeping);
- ❖ Release reporting, investigation, and confirmation (reporting of suspected releases, investigation due to off-site impacts, release investigation and confirmation steps, and reporting and cleanup of spills and overfills);
- ❖ Release response and corrective action for UST systems containing petroleum or hazardous substances (i.e., initial response, initial abatement measures, initial site characterization, free product removal, investigations for soil and groundwater cleanup, corrective action plan, and public participation);
- ❖ Out-of-service UST systems and closure (i.e., temporary closure, permanent closure and change-in-service, assessing the site at closure or change-in-service, applicability to previously closed UST systems, and closure records); and
- ❖ Financial responsibility.

F. HAR Title 11 Chapter 104.1 - Management & Disposal of Infectious Waste

This chapter establishes minimum requirements for the management, treatment, transport, storage, and disposal of infectious waste and treated infectious waste in order to ensure practices that will protect the health and safety of persons living in the State of Hawaii. This chapter includes definition of infectious waste and storage, prohibited acts, categories of infectious waste; handling, transportation, and disposal requirements of untreated infectious waste within a generating facility; treatment and storage of treated infectious waste within a generating facility; transportation of infectious waste for treatment away from the generating facility and disposal of treated/untreated infectious waste, required elements of infectious waste management plan, exemption for placenta; and enforcement, penalties and severability.

4. Emergency Planning and Community Right-To-Know Act

The EPCRA of 1986 (42 USC §§ 11002 and 11003), a federal law, was created to help communities plan for emergencies involving hazardous substances. It establishes requirements for federal, state, local governments, and industry regarding emergency planning and “Community Right-to-Know” reporting on hazardous and toxic chemicals. The EPCRA provisions help increase

the public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment, States and communities, working with facilities, can use the information to improve chemical safety and protect public health and the environment. There are four major provisions of EPCRA, including:

- ❖ Emergency Planning (EPCRA Sections 301 through 303; 40 CFR Part 355)
- ❖ Emergency and Accidental Release Notification (EPCRA Section 304; 40 CFR Part 355)
- ❖ Hazardous Chemical Storage Reporting (EPCRA Sections 311 and 312 (Tier II); 40 CFR Part 370)
- ❖ Toxic Chemical Release Inventory (commonly referred to as TRI or Form R; EPCRA Section 313; 40 CFR Part 372)

In 1993, the Hawaii Emergency Planning and Community Right-to-Know Act [HEPCRA] became law (HRS 128E). It promulgated the federal EPCRA requirements in the State of Hawaii. This statute establishes planning, reporting, emergency notification, and public information access requirements related to hazardous chemicals. It also creates the Hawaii State Emergency Response commission [HSERC], which is established within the HDOH, as well as Local Emergency Planning Committees [LEPC], which are located in each county of Hawaii to implement emergency response planning and related actions. If a facility stores extremely hazardous substances [EHS] above threshold planning quantities [TPQs] published in 40 CFR 355 Appendices A and B, or if the facility stores 10,000 pounds or more of a hazardous material, the facility is subject to HEPCRA.

A. 40 CFR Part 355 – Emergency Planning and Notification

This Part establishes the list of EHS, TPQs, and facility notification responsibilities necessary for the development and implementation of state and local emergency response plans. These regulations include purpose, definition, emergency planning, emergency release notifications, penalties, and the regulated list of extremely hazardous substances and their TPQs.

B. 40 CFR Part 370 – Hazardous Chemical Reporting: Community Right-to-Know

This Part establishes reporting requirements which provide the public with important information on the hazardous chemicals in their communities for the purpose of enhancing community awareness of chemical hazards and facilitating development of state and local emergency response plans. These regulations include purpose, definitions, penalties; reporting requirements (i.e., applicability, material safety data sheets [MSDS] reporting, inventory reporting, and mixtures); public access and availability of information (i.e., request and provision for information; and inventory forms (i.e., Tier I emergency and hazardous chemical inventory form, and Tier II emergency and hazardous chemical inventory form).

C. 40 CFR Part 372 – Toxic Chemical Release Reporting: Community Right-to-Know

This Part sets forth requirements for the submission of information relating to the release of toxic chemicals under Section 313 of Title III of the Superfund Amendments and Reauthorization Act [SARA] of 1986. The information collected under this Part is intended to inform the general public and the communities surrounding covered facilities about releases of toxic chemicals, to assist research, to aid in the development of regulations, guidelines, and standards, and for other purposes. These regulations also set forth requirements for suppliers to notify persons to whom they distribute mixtures or trade name products containing toxic chemicals that they contain such chemicals.

These regulations include scope and purpose, definitions, persons subject to this part, recordkeeping, and compliance and enforcement; reporting requirements (i.e., covered facilities for toxic chemical release reporting, and North American Industry Classification System [NAICS] codes (also refers to as Standard Industrial Codes [SIC]) to which this Part applies, thresholds for reporting, alternate thresholds and certification, lower thresholds for chemicals of special concern, reporting requirements and schedule for reporting, and exemptions); supplier notification requirements (i.e., notification about toxic chemicals); specific toxic chemical listings; and toxic chemical release reporting forms and instructions.

D. HAR Title 11 Chapter 451 – State Contingency Plan

Adopted on August 2, 1995, this chapter establishes the Hawaii State Contingency Plan [SCP] in order to implement, administer, and enforce the HRS chapter 128D (Hawaii Environmental Response Law [HERL]). These regulations are based on the National Contingency Plan [NCP] (administrative rules under Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA], which is also known as “Superfund”). The SCP identifies hazardous substances, pollutants, or contaminants, which are subject to the requirements and procedure. It also designates any release of hazardous substances, pollutants, or contaminants in quantities equal to or exceeding their reportable quantities, or any threat of release of hazardous substances, pollutants, or contaminants which poses or which may pose a substantial endangerment to public health or welfare, the environment, or natural resources, and all action taken pursuant to HRS chapter 128D, or these rules. The SCP details notification of releases, hazardous substance response, natural resources, activities by other persons, administrative records, and entry and access.

Attachment 11

Training Materials for Inspector

INSPECTION DESCRIPTION

The risk ranking process determines the list of tenants to be inspected and appropriate inspection frequency. The primary purpose of the inspection is to evaluate how facility operations comply with Harbors stormwater management program, major environmental laws, applicable BMPs, pollution prevention [P2], and relevant clauses contained within a lease agreement (or revocable permit). Environmental compliance, BMP, and P2 information for each of the fourteen inspection criteria are discussed in Section I.

The second purpose for the inspection is to develop and maintain an accurate inventory of environmental assets owned and/or operated by each tenant. These assets are discussed in Section II. The third purpose for the inspection is to confirm compliance with environmental laws regulated by USEPA, HDOH, HDOT, and other agencies. In addition, these routine inspections will identify any potential violation and assist in providing any corrective action, if necessary. Inspections are conducted under the following circumstances:

- **Routine Inspections** are required under stormwater management program and based on individual tenant's risk ranking;
- **Follow-up Inspections** are to be conducted, after investigation inspection, to verify that necessary corrective actions are implemented;
- **Initial Site Inspections** or **New Tenant Inspections** are conducted to evaluate new tenant operations;
- **Final Site Inspections** are conducted to evaluate environmental conditions in tenant areas subject to lease (or revocable permit) termination.
- **Reconnaissance Inspections** are conducted at low risk-ranked tenant facilities as an annual evaluation tool.
- **Investigation Inspections** are to investigate reported illicit discharges to state water and/or Harbors stormwater drainage system;

Other inspections include **Joint Inspections**, which are conducted jointly with HDOH and/or USEPA representatives. The above-listed inspections are further discussed below.

Section I - Compliance, BMP, and P2 Information

Compliance is the state of being in accordance with the relevant federal and regional authorities and their requirements. In order to assist tenants to remain in compliance with Harbors stormwater management program, major environmental laws, and relevant clauses (or Terms and Conditions) contained within lease agreement and/or revocable permit, Harbors has identified and implemented several means of disseminating related information to tenants. These means include, but are not limited to, providing *Annual Storm Water Pollution Prevention Awareness Training*, sending out informative brochures, providing technical support and assistance during inspections, and mailing out the inspection reports to keep tenants informed of their compliance status.

BMPs are defined as a schedule or schedules of activities, prohibitions or designations of practices, maintenance procedures, and other management practices to prevent or reduce the pollution to state water and/or Harbors stormwater drainage system. BMPs include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BMPs related to treatment control utilize physical devices or systems that remove pollutants from stormwater. BMPs related to operational practices intend to prevent pollutants from entering surface waters and/or Harbors stormwater drainage system, by altering activities to eliminate and minimize the pollution. BMPs related to spill response rely on a combination of structural controls, employee awareness, and relevant training to be effective methods for protection of environment.

Harbors always encourages the tenants to implement applicable BMPs and P2 measures to further aid in preventing discharge of pollutants. The tenants should be aware of the requirements of the inspection checklist and understand how their operations could impact the environment. Applicable BMPs associated with the fifteen inspection criteria are included in Attachment 3. Some of them are based on the November 2011 City and County of Honolulu [CCH] publication (CCH, 2011), "*Storm Water Best Management Practice Manual for Construction*." Brief descriptions of typical operations and the accompanying key inspection criteria are discussed below.

1. Elimination of Non-Stormwater Discharges to Stormwater Drainage System

This is a general BMP applicable to all tenants. Non-stormwater discharges can be classified as 1) activity-based (subtle) or 2) overt (hard-pipe connection). Activity-based non-stormwater discharges may include wash water, tank overflows, and spillage. Overt non-stormwater discharges are flows piped to Harbors stormwater drainage system. These flows may include processed wastewater, treated cooling water, and treated sanitary wastewater. Non-stormwater discharges can be detected during storm drains and tenant routine inspection. In addition, overt connections can also be detected during the outfall reconnaissance inspection and engineering plan review process. The key inspection criteria for activity-based and overt discharges are listed in Table 1.

Certain non-stormwater discharges are permitted by regulations, and therefore, exempted from the program. The discharge of pollutants to Harbors stormwater drainage system shall be reduced to the MEP. The following non-stormwater discharges may be discharged into Harbors stormwater drainage system, provided that such discharges do not contain pollutants in amounts that will cause or contribute to a violation of an applicable water quality standard.

- Water line flushing;
- Landscape irrigation;
- Diverted stream flows;
- Rising ground waters;

- Uncontaminated ground water infiltration;
- Uncontaminated pumped ground water;
- Discharges from potable water sources and foundation drains;
- Air conditioning condensate;
- Irrigation water;
- Springs;
- Water from crawl space pumps and footing drains;
- Lawn watering runoff;
- Water from individual residential car washing;
- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Residual street wash water;
- Discharges flows resulted from firefighting activities.

Table 1
Elimination of Non-Stormwater Discharges to Stormwater Drainage System

Subject	Key Inspection Criteria
Activity-based	<ul style="list-style-type: none"> • Identify facility areas exposed to stormwater which are wet during dry weather, or are stained. • Inspect discharge points to the stormwater drainage system to identify uncharacteristic volume, color, turbidity, odor, floatables, or foaming.
Overt	<ul style="list-style-type: none"> • Inspect each discharge point to the stormwater drainage system during dry weather. • Ask the tenant to identify the discharge pathway of all floors and drains. Review as-built drawings as needed to verifying piping schematics.

2. Vessel, Equipment, and Vehicle Maintenance and Repair

The outstanding features of Hawaii’s climate include mild temperatures throughout the year (70s to 90s degrees of Fahrenheit [°F]), moderate humidity, persistence of northeasterly trade winds, significant differences in rainfall within short distances, and infrequent severe storms. Generally, weather in Hawaii is very consistent, with only minor changes in temperature throughout the year. For the majority of Hawaii, there are only two seasons – summer (from May to October) and winter (from November to April).

Due to the mild climate in Hawaii, vessel, equipment, and vehicle maintenance and repair activities are usually conducted in uncovered areas. Accordingly, the potential for discharge of pollutants to the environment from these activities is very high. Therefore, conducting maintenance and repair activities in authorized areas are critical to the success of this BMP.

Additional state and federal regulations apply to some aspects of maintenance operations. These include, but are not limited to, federal and state solid and hazardous waste regulations, sewer use

ordinances, and the Uniform Fire Code. Issues related to maintenance areas can be addressed with a combination of these regulatory tools. The key inspection criteria related to vessel (dry-docked or on-land ONLY), equipment, and vehicle maintenance and repair are listed in Table 2.

Table 2
Vessel, Equipment, and Vehicle Maintenance and Repair

Subject	Key Inspection Criteria
Work Area	<ul style="list-style-type: none"> • Verify that maintenance/repair works occur in an authorized area. • Verify that storm drain inlets are protected from potential discharge of pollutants, and cleaned on a regular basis. • Verify that maintenance/repair areas are not hosed down; instead, the areas are cleaned using dry methods.
Equipment	<ul style="list-style-type: none"> • Verify that greasy and leaking equipment are stored under cover with oil drip pans or other secondary containment. • Verify that all fluids are drained and batteries are removed from salvage vessels, vehicles, and equipment.
Materials	<ul style="list-style-type: none"> • Evaluate hazardous materials (potentially hazardous substances) utilized and make suggestions for substitutions with recycled or less toxic products. • Verify recycling or proper disposal of grease, oils, antifreeze, brake fluid, cleaning solutions, hydraulic and transmission fluids, solvents, paints, batteries, and filters.
Training	<ul style="list-style-type: none"> • Verify that maintenance/repair employees have received proper awareness training on stormwater BMPs and a hazard communication [HAZCOM] course.

3. Vessel, Equipment, and Vehicle Fueling

Fuel transfer activities at Harbors tenant facilities occur at various locations and circumstances. Designated fueling areas are designed to prevent the run-on of stormwater and the run-off of spills. Certain fuel oil storage and transfer operations are regulated under 40 CFR Part 112 (Oil Pollution Prevention and Response; Non-Transportation-Related Onshore and Offshore Facilities, commonly known as the SPCC Program). USTs used for fuel oil storage are regulated under HAR Title 11 Chapter 281. Furthermore, it is very common that vessel fueling operations occur while the vessel is still in the water. Due to the great potential of release to immediate state waters, fueling operations in water must adhere to USCG regulations, which is not discussed in this section.

Some Harbors tenants are subject to 40 CFR Part 112 and will need to develop and implement a SPCC plan, which is further discussed in Section 4.1.11 (*Emergency Spill Cleanup Plan*). The key components of the BMPs related to fueling activities address some practical measures that should be followed independently and/or in conjunction with the tenant's SPCC plan. The key inspection

criteria related to vessel (dry-docked or on-land ONLY), equipment, and vehicle fueling are listed in Table 3.

Table 3
Vessel, Equipment, and Vehicle Fueling

Subject	Key Inspection Criteria
Fueling Area	<ul style="list-style-type: none"> • Ensure that the spill kits are readily available. • Assess fueling area design, and make recommendations for installing a cover, dead-end sump, berms, or impervious surfacing if appropriate. • Inspect sump or oil/water separator and query tenant on maintenance schedule. • Query tenant on fueling location of mobile equipment.
Operations	<ul style="list-style-type: none"> • Check for staining in fueling areas, and evaluate whether adequate spill cleanup methods are routinely implemented. • Evaluate cleanup practices (i.e., spent absorbent should be picked up and stored in an appropriate container, fueling areas should not be hosed down, and employees should be trained on fueling, spill cleanup practices, release notifications, and informed of SPCC plan if there is one).
Equipment	<ul style="list-style-type: none"> • Evaluate secondary containment devices (either portable or permanent used during fueling operations). • Inspect visible piping, tanks, and hoses for signs of leakage, wear, or malfunction.

4. Vessel, Equipment, and Vehicle Washing

Most of Harbors tenants are located in close proximity to the ocean, which would cause a relatively high rate of corrosion on metals. Therefore, there is an increased need to remove accumulated sediment from vessel (dry-docked or on-land), equipment, and vehicle. Wash racks equipped with oil/water separators and containment devices should be utilized for all washing operations on land, except for removal of salt from the exterior of the vessel using fresh water with low power, as noted in ***Tenant Inspection Manual - Section 4.3.3***.

Prior to conducting any vessel, equipment, or vehicle washing activity on site, the tenant must obtain a written consent from the Harbors. Unauthorized washing on Harbors property would result in an NAV or more severe enforcement.

All washing operations should be conducted in a manner that will contain potential pollutants. This can be accomplished through prohibiting the use of surfactants, using minimal water, utilizing secondary containments, and/or use less hazardous and more biodegradable materials. A list of alternative products is included in Attachment 8 (NOAA, 2005). If possible, after necessary pretreatment, wash water should be discharged to sanitary sewer through a permitted connection or to a permitted underground injection well. The key inspection criteria related to vessel (on-land

ONLY), equipment, and vehicle washing are listed in Table 4.

Table 4
Vessel, Equipment, and Vehicle Washing

Subject	Key Inspection Criteria
Washing Area	<ul style="list-style-type: none">• Evaluate area for optimal characteristics including cover, containment, surface integrity, slope, and run-on/run-off.
Wash Water Treatment	<ul style="list-style-type: none">• Assess maintenance, cleaning, and disposal of materials from sumps and oil/water separators.
Equipment	<ul style="list-style-type: none">• Inspect wash water collection, pretreatment, and reclamation system components for potential discharges.• Evaluate storage and use of cleaning agents.
Permits	<ul style="list-style-type: none">• Evaluate whether vessel or vehicle washing activity and related washing method is authorized by Harbors.• Evaluate whether discharges to the sanitary sewer or an underground injection well are authorized.
Operations	<ul style="list-style-type: none">• Evaluate whether all washing operations take place in approved areas.

5. Container Storage

Storage of chemical products and new/used oil on-site is subject to federal (EPCRA; 40 CFR Part 355, 370, and 372) and state regulations (HAR Title 11 Chapter 451). In addition, storage of used oil is subject to specific management standards under 40 CFR Part 279 and HAR Title 11 Chapter 279.

The SPCC regulations (40 CFR Part 112) specify certain secondary containment requirements for aboveground storage of oil. This BMP extends the secondary containment requirement to all containers used for storage of oil and potentially hazardous substances outdoors. Waste handling and disposal is discussed in 7 - *Waste Handling and Disposal*. The key inspection criteria related to container storage are listed in Table 5.

Table 5
Container Storage

Subject	Key Inspection Criteria
Storage Area	<ul style="list-style-type: none"> • Evaluate adequacy of secondary containment so that it is sufficient to hold the volume of the largest container plus additional 10% or greater capacity for accommodating precipitation. • Evaluate containers, aboveground tanks, and piping for protection guards, such as bollards, to prevent vehicle or forklift damage.
Equipment	<ul style="list-style-type: none"> • Verify that aboveground oil tanks are equipped with overflow protection devices, which will shut down transfer pumps automatically, and relevant warning signs for operators. • Inspect container integrity for signs of failure.
Operations	<ul style="list-style-type: none"> • Verify that all containers are clearly labeled to prevent misuse or accidental release. • Evaluate management of secondary containment structures to prevent accumulation of stormwater and/or free product, and verify that tenant maintains the log for discharge of uncontaminated stormwater from secondary containment.

6. Material Storage and Handling

This BMP related to the loading/unloading and temporary storage of non-petroleum materials and cargo. Fuel oil loading/unloading activities are covered in 3 - *Vessel, Equipment, and Vehicle Fueling*. Oil and potentially hazardous substance storage is covered in 5 - *Container Storage*.

Material storage and handling operations at a tenant's facility can include bilge servicing, sewage transfer, fire suppressant loading, cargo handling, neo-bulk cargo staging (e.g., construction materials such as lumber), dry-bulk handling (e.g., sand, aggregate, coal, scrap metal, Portland cement, etc.), other break-bulk cargo handling (e.g., miscellaneous general cargo), and associated temporary storage. Additionally, this BMP can also address pumping operations affiliated with the cleaning of tanks, sumps, piping, or pier areas. The key inspection criteria related to material storage and handling are listed in Table 6.

Table 6
Material Storage and Handling

Subject	Key Inspection Criteria
Loading Area	<ul style="list-style-type: none"> • Evaluate design and identify opportunities to improve cover, grading, berms, downspout and storm drain locations, and parking orientation. • Evaluate non-structural loading areas in proximity to storm drains, stains, or pavement degradation.
Bulk Storage	<ul style="list-style-type: none"> • Inspect all temporary storage areas and maintain good housekeeping in the areas.
Equipment	<ul style="list-style-type: none"> • Verify that adequate supplies of cleanup materials are readily available at material handling locations.
Operations	<ul style="list-style-type: none"> • Verify that leaks from transferring operation and spillage from hose disconnections are contained, absorbed, and disposed of properly. • Review written operation plans and/or emergency spill cleanup plans.
Training	<ul style="list-style-type: none"> • Query tenant on spill prevention and response training of employees. • Forklift drivers must receive proper training (Occupational Safety and Health Administration [OSHA] federal regulation 29 CFR 1910.178).

7. Waste Handling and Disposal

Solid waste storage and management is regulated under HAR Title 11 Chapter 58.1 (in draft). Storage of hazardous waste is subject to specific management standards under the federal RCRA (40 CFR Parts 260 to 272) and state regulations (HAR Title 11 Chapters 260 through 271 and 280). These standards include the requirement for secondary containment of all hazardous waste containers as a spill prevention measure. Universal waste management is regulated under 40 CFR Part 273 and HAR Title 11 Chapter 273. Management and disposal of infectious waste is regulated under HAR Title 11 Chapter 104.1.

This BMP is intended to prevent or reduce the discharge of pollutants to the environment from waste handling activities by tracking waste from generation and storage to disposal. It also intends to reduce waste generation and disposal through source control (i.e., reduction, reuse, and recycling). In addition, this BMP aims on preventing run-on and run-off at waste management areas.

Waste handling and disposal related activities are regulated by both federal and state laws (see 5 – *Container Storage*). The high cost and regulation pertaining to waste handling and disposal provide incentives for reducing waste generation and identifying opportunities for reuse and recycling. Components of this BMP target both the required waste management activities and waste reduction efforts. The key inspection criteria related to waste handling and disposal are listed in Table 7.

**Table 7
Waste Handling and Disposal**

Subject	Key Inspection Criteria
Storage Area	<ul style="list-style-type: none"> • Inspect all used oil and hazardous waste storage areas to assess integrity of secondary containment. • Inspect all waste storage areas to ensure that dumpsters are covered and not leaking. • Ensure that sediments and wastes are not tracked off site;
Operations	<ul style="list-style-type: none"> • Inspect all waste storage areas to ensure that incompatible wastes (such as acids and bases) are segregated and that all waste containers are labeled/marked and dated properly (refer to HAR Title 11 Chapters 260 through 280: Hazardous Waste Management for labeling requirements); • Inspect waste storage containers for integrity (must be covered when not being filled as well as rust and dent-free). • Inspect waste storage areas for signs of leaks or spills. • Verify that all wastes are disposed of properly, and if applicable, query tenants on their hazardous waste generator status (CESQG, SQG, or LQG), obtain related USEPA identification number, and verify that records related to waste generation and disposal are being kept. • Evaluate training of employees handling waste.
Waste Reduction	<ul style="list-style-type: none"> • Maintain minimal inventory of chemical products to reduce potential spill and waste generation. • Identify less toxic chemical substitutes to reduce hazardous waste generation. • Reuse or recycle materials whenever possible. • Evaluate processes generating wastes to identify modifications (e.g. double cleaning of parts, material substitutions or eliminations, etc.) that would minimize wastes.

8. Pier, Building, and Ground Maintenance

Pier maintenance includes pier and marine structure repairing, and routine maintenance works (i.e., painting, carpentry, plumbing, and cleaning of operational areas). Building maintenance includes activities such as painting, roofing, pressure washing, and construction of a building. Ground maintenance includes cleaning of operational areas and application of fertilizers, biocides, herbicides, and pesticides. It also includes maintenance of the stormwater drainage system. These activities generate debris and pollutants that could come into contact with stormwater run-on and run-off. The key inspection criteria related to pier, building, and ground maintenance are listed in Table 8.

Table 8
Pier, Building, and Ground Maintenance

Subject	Key Inspection Criteria
Pier Maintenance	<ul style="list-style-type: none"> • Evaluate temporary controls (such as tarps, booms, restricted use of wash water, and storm drain covers) to contain debris and pollutants. • Evaluate cleaning methods for paved surfaces (such as sweeping over washing, and proper storage and disposal of sweeper debris). • Evaluate cleaning schedule for the stormwater drainage system.
Building Maintenance	<ul style="list-style-type: none"> • Evaluate temporary controls (such as tarps, booms, restricted use of wash water, and storm drain covers) to contain debris and pollutants.
Ground Maintenance	<ul style="list-style-type: none"> • Evaluate cleaning methods for paved surfaces (such as sweeping over washing, and proper storage and disposal of sweeper debris). • Encourage conservative utilization of fertilizers, biocide, herbicides, and pesticides with intention of maximizing absorption and minimizing run-off to stormwater drainage system. • Recommend leaving or planting native vegetation to reduce irrigation, fertilizer, biocide, herbicide, and pesticide needs. When applying biocide, herbicide, or pesticide, follow the manufacturer’s recommendations and instructions, and avoid spray in high winds or when rainfall is imminent to reduce overspray and run-off. • Encourage collecting and composting of green waste to prevent blockages in the stormwater drainage system. • Evaluate cleaning schedule for the stormwater drainage system.

9. Stormwater Pollution Prevention Education and Outreach

The SWMP has been developed and implemented for harbors covered under the NPDES program. The plan includes sections on tenant education and outreach related to stormwater pollution prevention and good housekeeping. Tenants covered under their own NPDES permit are required to have their own Storm Water Pollution Control [SWPC] or similar plan and to provide training for their employees, which is often a part of their corporate policy. In addition, Harbors provides *Annual Storm Water Pollution Prevention Awareness Training* to the tenants. The tenants are required to attend this annual training, share the information with their employees, and provide feedback.

This section identifies potential components of stormwater pollution prevention training programs. Inspection criteria would be limited to confirmation of employee training and review of stormwater training materials and recordkeeping. The key inspection criteria related to stormwater pollution prevention education and outreach are listed in Table 9.

Table 9
Stormwater Pollution Prevention Education and Outreach

Subject	Key Inspection Criteria
Education	<ul style="list-style-type: none"> • Increase awareness of what is (or is not) allowed to enter the storm drains. • Increase awareness of the detrimental environmental impacts resulted from fuel, antifreeze, lubricants, pesticides, detergents, paint, and waste residue. • Identify stormwater collection system components.
BMP	<ul style="list-style-type: none"> • Encourage labeling/stenciling of storm drains to discourage illicit discharges or illegal dumping. • Promote the proper storage, use, and disposal of potentially harmful chemicals. • Promote the proper storage and disposal of wastes. • Encourage acquisition of alternative and less toxic chemicals (such as short shelf-life pesticides, non-chlorinated solvents, water-based paints, and non-aerosol products). • Encourage waste minimization and recycling. • Provide mechanism for reporting of apparent violations and enhance awareness of possible penalties affiliated with illicit discharge/dumping. • Encourage efficient and safe BMPs in areas with industrial activity.

10. Oil/Water Separator

An oil/water separator [OWS] is a device designed to separate gross amounts of oil and suspended solids from stormwater or wastewater effluents (from restaurants, oil refineries, petrochemical plants, chemical plants, natural gas processing plant, or other industrial sources). It is installed as a pretreatment device for wastewater, prior to discharge to a sanitary sewer, cesspool, recycling system, treatment plant, or other collection points. OWS can also be installed at locations with high fuel recovery potential, such as fuel truck loading areas where spilled product can be recovered for proper use or disposal.

In terms of stormwater, an OWS is typically installed in operational areas prone to frequent small spills and drips that have a significant cumulative impact on stormwater quality. The stormwater OWS is utilized as a flow-through polishing device rather than a reclamation device.

The OWS comes in a range of sizes and designs, depending on the volume of flow and characterization of the influent. All OWSs warrant regular maintenance in order to be effective and efficient in wastewater treatment. The key inspection criteria related to OWS are listed in Table 10.

Table 10
Oil/Water Separator

Subject	Key Inspection Criteria
Performance	<ul style="list-style-type: none"> • Regularly inspect effluent from OWS for sheen, odor, clarity, floatables, and/or other abnormal observations
Operations	<ul style="list-style-type: none"> • Query tenant on OWS inspection, cleaning frequency, and waste disposal. • Query tenant on major maintenance activities or routine parts replacement. • Query tenant on employee training, particularly with OWS that requires valves or switches.
Permits	<ul style="list-style-type: none"> • Evaluate whether discharges to the sanitary sewer is authorized.
Document Review	<ul style="list-style-type: none"> • Review the permit for basic components, including expiration date, permit conditions, discharge limits, and general provisions contained in the permit. • Verify that permit is renewed as necessary. • Review the Operation and Maintenance Records.

11. Emergency Spill Cleanup Plan

An Emergency Spill Cleanup Plan is developed in support of other BMPs, including those that are focused on maintenance and repair, fueling, washing, outdoor material storage and handling, outdoor container storage, and waste handling and disposal (see 2 to 7). Owners and operators of facilities, which store/process petroleum or petroleum-based products in certain quantities, may be subject to 40 CFR Part 112 and will need to develop and implement an SPCC plan (see 2 – *Oil Pollution Prevention*).

For tenants that store use oil in quantities under the threshold (not subject to SPCC regulations) and conduct operations with high potential of spilling any potentially hazardous substances, an Emergency Spill Cleanup Plan should be developed, which is tailored to the activities conducted by the tenants as a pollution prevention tool. The key inspection criteria related to an Emergency Spill Cleanup Plan are listed in Table 11.

Table 11
Emergency Spill Cleanup Plan

Subject	Key Inspection Criteria
Program Evaluation	<ul style="list-style-type: none"> • Evaluate whether or not the tenant is subject to the SPCC program; if so, verify that they have submitted a copy of the current SPCC plan to Harbors. • Evaluate whether or not the tenant conducts operations which would warrant an Emergency Spill Cleanup Plan, and make recommendations.
Document Review	<ul style="list-style-type: none"> • Review the existing plan for basic components, including facility description, site plan, notification procedures, cleanup instructions, cleanup materials, and responsible parties. • Review spill response records, if there are any. • Verify that contingencies (such as spill kits) identified in the plan are present and stocked. • Verify that employees are trained in Emergency Spill Cleanup Plan components.
Training	<ul style="list-style-type: none"> • Query tenant on spill prevention and response training of employees. • Query tenant's employee on emergency spill cleanup.

Section II - Environmental Asset Inventory

The environmental asset consists of natural environment and built environment. The natural environment encompasses all living and non-living things occurring naturally on Earth or some region thereof. It can be distinguished by components, including complete ecological units, which function as natural systems without massive human intervention, and universal natural resources and physical phenomena that lack clear-cut boundaries (such as air, water, and climate). The built environment comprises the areas and components that are strongly influenced by humans.

During tenant routine inspections, an inventory of environmental assets will be verified and updated. A tenant database has been developed and maintained, in which operations and equipment having environmental significance are assessed and documented. Key environmental asset categories include aboveground storage tanks, mobile storage tanks, underground storage tanks, hazardous material storage areas, spill kits, waste storage areas, paint booths, paint shops, vehicle wash areas, pre-treatment systems, and maintenance areas for vessels, equipment, and vehicles.

Tracking environmental assets allows for a comprehensive evaluation of operations at each harbor, and more effective communication with tenants regarding changes in applicable regulations or policies. Database queries generate reports containing environmental assets are used during routine inspections, illicit discharge investigations, enforcement actions, and lease (or revocable permit) termination proceedings. Therefore, verifying and updating electronic records of environment assets is an essential component.

INSPECTION PROCEDURES

Inspection procedures are designed to maintain compliance with the applicable environmental regulations at Harbors.

Step 1: Pre-inspection Preparation

Prior to conducting routine inspections, inspectors (Environmental Section personnel or their designees) shall collect and analyze available background information of the tenant to be inspected. Prior to inspection, relevant property management files and layout maps, identifying leased areas, should be reviewed. In addition, past inspection records, other applicable files such as SPCC plans, SWPC plans, past enforcement actions, facility plans for improvement projects, and correspondence should be reviewed.

The key reviewing criteria include, but not limited to, the following:

- Compare facility diagrams with drainage maps for that area of the harbor to identify potential drainage pathways at and around the facility.
- Pay attention to changes that have occurred at the tenant's facility (either operations or the facility structures).
- Pay attention to changes in Harbors environmental policies since the previous inspection.
- Identify and review the BMPs that are applicable to the tenant's operations.
- Identify any special safety consideration and inspection scheduling limitations prior to contacting the tenant to arrange the inspection.

Upon finishing reviewing of background information, the inspectors should develop an inspection plan to highlight the key components of the inspection. The major purpose of the tenant inspection is to identify potential environmental concerns and provide outreach if necessary. In addition, the inspection also serves the purpose of acquiring specific information from the tenant (e.g., copies of permits, plans, and training records) and conveying specific information to the tenant in a direct fashion. The inspection plan should include following components at least:

1. Objectives - Define purpose of inspection and intended accomplishments.
2. Tasks - Identify specific tasks and information to be collected and/or reviewed.
3. Procedures - Identify any special procedure to be used.
4. Resources - Establish personnel and equipment needs.
5. Schedule - Given the inspection frequency, assess how much time will be needed.
6. Coordination - Determine whether this inspection warrants coordination with other Harbors personnel or regulatory agencies.

Step 2: Entry

Leases and revocable permits, issued by Harbors, provide inspectors the right to enter tenant's

facility for the purpose of inspection. Advanced notification of tenants to-be-inspected is recommended, as it does give tenants enough time to gather necessary records, make sure at least one tenant representative available to accompany the inspector, and prepare them to discuss environmental concerns or questions. Unannounced inspections could provide a more accurate sense of day-to-day operations, and are generally utilized when inappropriate corrective actions warrant a higher level of enforcement. The tenant inspections usually serve the dual purpose of environmental outreach and compliance. Therefore, scheduling the inspection a few days in advance may foster a more productive working relationship with Harbors tenants.

Usually, the inspection begins by the inspector introducing themselves to reception and asking for the point of contact with the tenant. When more than one inspector on site (either from Harbors, a combination of Harbors and their designees, or a combination of Harbors and HDOH/USEPA representatives), the inspectors should identify their respective roles in the inspection, as well as who will be leading the inspection for the team. This will ensure efficient communication between the tenant and the inspection team.

In the rare instance, when access to a tenant facility is denied, the inspector should notify Harbors Environmental Section supervisor and obtain a copy of the relevant lease agreement or revocable permit from Property Management Section, highlighting the *Inspection of Premises* section (contained within lease agreement) or *Entry by State* section (contained within revocable permit).

Lease language typically states:

“The LESSEE shall permit the LESSOR and its employees, representatives and agents, at all reasonable times during the said term of this lease, to enter the Premises for any governmental purpose, including, without limitation, examining the state of repair and condition.”

Revocable permit language typically states:

“The STATE or its agents and employees may enter the Premises at all reasonable hours to inspect the Premises and determine if the PERMITTEE is complying with the terms and conditions of this Permit or for any other proper purpose. The PERMITTEE shall not make any claim for damages or set off of rent, service charge or other charges by reason or on account of such entry.”

If the tenant exhibits hostile behavior, inspectors could request Harbor Police to provide escort during the inspection. At no time should an inspector feel compelled to conduct the inspection in an unsafe environment. Some tenant facilities may pose safety concerns and have specific safety protection requirements. Hence, the inspector should refrain from inspecting operational areas until a tenant representative could provide accompaniment.

Step 3: Tenant Conference

Depending on the size of the tenant's facility to-be-inspected, a tenant conference could be conducted onsite prior to the start and/or the end of the inspection if plausible. It may consist merely of the inspector describing the purpose and order of the inspection to the tenant representative. This will allow the tenant representative to locate additional documents or key personnel necessary to fulfill the objectives of the inspection. Pre-inspection preparation may have identified key areas and relevant issues. If so, the inspector should convey these concerns to the tenant representative to ensure that they are reviewed.

It is imperative that a tenant representative accompanies the inspector during the entire inspection to describe operations and answer questions, as well as address considerations related to safety, environment, and liability. Often the tenant representative will include other employees with specialized roles during specific portions of the inspection.

Records, such as monitoring results, waste disposal manifests, or SPCC documentation, may be reviewed before, during, or after the tenant inspection. Sometimes, a tenant inspection may result in one or more follow-up activities. Therefore, prior to the end of the inspection, it will be helpful to take a few minutes to review relevant records and recap any deficiency, violation, or concern, which may require follow-up by either the inspector or the tenant representative.

Step 4: Inspection

Conducting an effective inspection requires observing operations that have the potential to impact the environment, posing questions to the tenant as necessary to gain a clear picture of whether or not the operations are complying with relevant environmental regulations, and recording observations for future use.

The inspector should use the pre-inspection preparation to identify areas of concern requiring the most attention for each tenant, and communicate the inspection plan with the tenant representative. As each area is observed, the inspector should evaluate how operations conform to Harbors *Tenant Stormwater Compliance Inspection Form* (Attachment 4) and note deficiencies observed. In addition, the inspector should provide an oral guidance to the tenants concerning possible environmental improvements that may suit their operations (e.g., storage techniques, product substitutions, labeling requirements, or proper housekeeping protocols).

The tenant inspection provides an opportunity for the inspector to convey information to the tenants in the context of their operation, as well as a time for the tenants to ask for guidance on particular environmental concerns. Sometimes, follow-up activities are necessary following the tenant inspection, for both the inspector and the tenant, which contribute to the goal of achieving environmental compliance in tenant operations.

Step 5: Documentation and Recordkeeping

Accurate inspection documentation and recordkeeping are critical to the success of Harbors

environmental program. Photo documentation provides a simple and straightforward method to illustrate whether environmental compliance has been achieved and is essential in follow-up activities. If conducting multiple inspections on one day, the inspection should begin the photo documentation with a picture of an overview of tenant facility or an area where the operator of the facility can be easily identified. The inspector should record photo numbers on Harbors Tenant Stormwater Compliance Inspection Form (Attachment 4).

Environmental Compliance, BMP, and P2 Inspection Checklist for Tenants

Harbors Tenant Stormwater Compliance Inspection Form is the primary recordkeeping tool utilized during the inspection (Attachment 4). Inspectors may find it helpful to fill out portions of the form in advance, such as the tenant contact information and notes within each relevant section on the environmental assets or issues of concern. Additionally, some information collected during the inspection may be helpful for other Harbors sections, such as Property Management Section, to update their database.

As reviewing listed sections (e.g., Stormwater, Maintenance and Repair, Fueling, Washing, etc.), the inspector should take time to complete each section with comments and observations. Each lined item should be checked whether the item is “Y” (for yes), “N” (for no), or “N/A” (for not applicable). Any item checked with “N” require at a minimum comments, explanation, and/or further investigation. A copy of the inspection report will be sent to the tenant upon completion. It will become a part of the permanent Harbors tenant file.

Attachment 12

New Tenant Information Package

REPORT SUSPECTED ILLICIT DISCHARGES

Harbors Environmental Hotline: **808-587-1962**
Harbors Hawaii District Office: **808-933-8850**
Harbors Kauai District Office: **808-241-3751**
Harbors Maui District Office: **808-873-3350**
Harbors Oahu District Traffic Control Unit (24/7): **808-587-2076**
Hawaii Department of Health, Clean Water Branch: **808-586-4309**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

If your facility requires NPDES Permit coverage, refer to the Hawaii Department of Health Clean Water Branch website for information on permit application requirements at: <https://health.hawaii.gov/cwb/>

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC)

If the SPCC rule applies to your facility, you must develop and implement an SPCC Plan which describes the oil handling operations, spill prevention practices, discharge or drainage controls, and personal equipment and resources at the facility that are used to prevent spills from reaching navigable waters or adjoining shorelines.

For more information on the SPCC rule requirements: <https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations>

ENVIRONMENTAL COMPLIANCE

All tenants are required to comply with local, state, and federal environmental laws. Failure to comply constitutes a breach of the agreement, which may result in termination of the revocable permit or lease and legal remedies. For more information, contact the **HDOT Harbors Division Property Management at 808-587-1940**.

Non-compliance may also result in citations and fines issued by the Hawaii Department of Health and/or the United States Environmental Protection Agency.

HARBORS TENANT STORMWATER REQUIREMENTS



MAILING ADDRESS

Hawaii Department of Transportation, Harbors Division
Hale Awa Ku Moku Building
79 South Nimitz Highway
Honolulu, Hawaii 96813-4898



**PROTECT
OUR HARBOR
WATERS**

MĀLAMA I KE AWA KAI
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION



State of Hawaii
Department of Transportation
Harbors Division

STORMWATER RUNOFF POLLUTION

Stormwater pollution can come from a variety of sources, including, but not limited to the following:

- Oil, fuel, machinery fluids, etc.
- Chemicals such as pesticides and fertilizers,
- Construction materials, such as, cement, paints, detergents, metal, insulation, wood, etc.
- Bacteria from human and animal waste.
- Wash water from sinks, laundry, showers, vehicle washing, etc.

THE SOLUTION TO POLLUTION PREVENTION

It is our responsibility to make sure pollutants do not end up in our ocean. To prevent an “illicit discharge” into HDOT Harbors Division’s small municipal separate storm drain system (MS4), best management practices (BMPs) are required to be incorporated into daily operations.

ILLICIT DISCHARGE: Any non-stormwater discharge that poses a risk to the environment. Examples include oil, chemicals, sediment, and paint products.

MS4: Conveyance designed to collect or transport stormwater which eventually discharges to surface waters. Anything that enters the MS4 makes its way to our oceans without prior treatment.

BMP: Schedule of activity, prohibition of practices, maintenance procedures, and management practices used to prevent or reduce pollution from entering waters of the U.S.

Stormwater runoff is generated from rain the flows over land or impervious surfaces such as paved streets, parking lots, and building rooftops.

When selecting BMPs it is important to consider all activities at the facility that may affect stormwater runoff.

BMPs FOR TENANT ACTIVITIES



Good Housekeeping



Storm Drain Inlet Protection



Vehicle and Equipment Washing



Vehicle and Equipment Fueling



Material Delivery and Handling



Solid and Hazardous Waste Management



Outdoor Material Storage



Building Remodeling



Building Power Washing



Sidewalk and Walkway Power Washing

For information refer to the BMP Fact Sheets located on the the HDOT-Harbor website:

<http://hidot.hawaii.gov/harbors/malamaikeawakai/>

Stormwater runoff picks up pollutants like trash, chemicals, oil, dirt, and sediment before entering the MS4.



BMPs CAN BE FOLLOWED BY INCORPORATING THE FOUR C's:

CONTAIN:

Isolate your work area to prevent any potential flow or discharge. Examples of containment include, spill containment or wash water containment.

CONTROL:

Locate the nearest storm drain(s) and take measures to prevent pollutants from entering or discharging into them. Examples include drain inlet protection, booms, or stenciling.

CAPTURE:

Be prepared with clearly marked spill kits in appropriate areas to contain spills. Capture debris from rainwater runoff, sweep, rake, and vacuum debris. Properly dispose of debris in closed bins. Examples include drip protection measures, covering trash bins, and having spill kits.

COMMUNICATE:

Report illicit discharges, suspected illicit discharges, and pollution concerns to Harbors Environmental Section.

Stormwater drains to the ocean through outfalls **WITHOUT** prior treatment. Stormwater can also discharge directly to the ocean from the piers.



Attachment 13

VGP Requirement on Incidental Discharges from Vessels

The USEPA's NPDES vessel program regulates incidental discharges from the normal operation of all non-recreational, non-military vessels of 79 feet or greater in length which discharge in waters of the United States through the Vessel General Permit [VGP]. The USEPA has repealed the Small Vessel General Permit (sVGP) issued on September 10, 2014 and enacts the Vessel Incidental Discharge Act (VIDA) on December 4, 2018, for the control of incidental discharges for small vessels (less than 79 feet in length).

Small vessels and fishing vessels of all sizes are now exempt from permitting under NPDES for all incidental discharges except for ballast water. Small vessels and fishing vessels of any size must follow ballast water discharge requirements established in the USEPA 2013 VGP, the USCG ballast water regulations, and any applicable state and local government requirements.

According to the VGP, vessels, greater than or equal to 300 gross tons or having the capacity to hold or discharge more than 8 cubic meters (2,113 gallons) of ballast water, must submit a signed and certified, complete and accurate Notice of Intent [NOI] to the USEPA to obtain coverage, which permits discharges incidental to the normal operation of a vessel including, but not limited to:

- Deck washdown and runoff and above water line hull cleaning
- Bilgewater/Oily water separator effluent
- Ballast water
- Anti-fouling hull coatings/hull coating leachate
- Aqueous film forming foam [AFFF]
- Boiler or economizer blowdown
- Cathodic protection
- Chain locker effluent
- Controllable pitch propeller and thruster hydraulic fluid and other oil sea interfaces including lubrication discharges from paddle wheel propulsion, stern tubes, thruster bearings, stabilizers, rudder bearings, azimuth thrusters, and propulsion pod lubrication, and wire rope and mechanical equipment subject to immersion
- Distillation and reverse osmosis brine
- Elevator pit effluent
- Firemain systems
- Freshwater layup
- Gas turbine washwater
- Graywater
- Motor gasoline and compensating discharge
- Non-oily machinery wastewater
- Refrigeration and air condensate discharge
- Seawater cooling overboard discharge (including non-contact engine cooling water; hydraulic system cooling water, refrigeration cooling water)
- Seawater piping biofouling prevention
- Boat engine wet exhaust

- Sonar dome discharge
- Underwater ship husbandry
- Weldeck discharges
- Graywater mixed with sewage from vessels
- Exhaust gas scrubber wash water discharge
- Fish hold effluent

Note that if the vessel is less than 300 gross tons and has the capacity to carry less than 8 cubic meters of ballast water, but is larger than 79 feet, the owner of the vessel does not need to submit an NOI. However, the vessel must still comply with all applicable provisions of the VGP.

If the owner or operator of the vessel violates any of the limits in the VGP, s/he must conduct a corrective action assessment investigating the nature, cause, and potential options for eliminating the problems. Depending upon the extent of the problem, the VGP provides deadlines for resolving the issues. In addition, the owner or operator of the vessel must conduct routine visual inspections of all accessible areas of the vessel in order to verify that effluent limits are being met. On an annual basis, a more comprehensive inspection must be conducted. The findings of each routine visual inspection and annual inspection must be documented in the official ship logbook or as a component of other recordkeeping documentation.

As part of the reporting requirements, all vessel owners or operators subject to the VGP must submit an annual report to the USEPA. Cruise ships and vessels with ballast water treatment systems must submit laboratory report(s) containing analytical data to the USEPA and/or the USCG. If vessels have any instance of noncompliance, the owner or operator must report those instances of noncompliance to the USEPA on an annual basis.

Attachment 14

HDOT Harbors Division Wash Application Review Checklist

Wash Application Review Checklist

Approved. Expires _____.

Department of Transportation Harbors Division

Requires Revisions

Tenant		Facility Location	
Point of Contact		Phone Number:	

Yes	No	N/A	Requirements
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1. Vehicle/Equipment and quantities to be washed/ frequency of washing are given.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2. Wash area is impermeable (water is not absorbed by the ground), is not directly over a storm drain, and is not shared with a potentially polluting activity, such as maintenance.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3. Water source, spray equipment (e.g. mobile water truck, Harbors spigot, pressure washer, hose, etc.), and flow rate are given. <i>Note: To find the flow rate, measure the time it takes to fill up a 5-gallon bucket. Divide 5 by the time in seconds or minutes to give you "gallons per second" or "gallons per minute."</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4. A map illustrating berm configuration, water flow, and storm drain locations is provided.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5. Products to be used in wash procedure are within the pH range required by the City and County Revised Ordinance of Honolulu (required: 5.5-11.0; recommended 6.0-8.0) and a Safety Data Sheet (SDS) is provided. <i>Note: The pH of a product is typically found in the "physical and chemical properties" section of a SDS, which can usually be found on the manufacturer's website.</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. Berm is sufficient to hold wash water and does not leak.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. Nearby storm drains (if any) are covered during washing.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. Vacuum/collection equipment is acceptable. Vacuum or drainage flow rate is greater than flow rate of water source (the berm or wash rack will not overflow).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. The captured wash water container capacity (e.g. 55-gallon drums, tote, vacuum truck, etc.) is sufficient to hold wash water and prevent overflow.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. Wash procedures are clearly described and are protective of the environment.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11. The disposal method is acceptable. If sanitary sewer is utilized, the tenant has an Industrial Wastewater Permit or permit exemption from the County of Maui.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12. Disposal records of captured wash water will be kept.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13. Employees will be trained in company wash procedures that include the EPA Municipal Vehicle and Equipment Washing Procedures and records will be kept.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14. The wash area is covered or cleaned such that rain water will not carry away potential pollutants.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15. Wash equipment and cleaning products are stored under cover when not in use.

Comments

Reviewed By: _____

Date: _____

ATTACHMENT 2
OUTFALL RECONNAISSANCE INVENTORY AND INSPECTION
PROGRAM

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Final

Outfall Reconnaissance Inventory and Inspection Program Manual

Honolulu Harbor and Kalaeloa Barbers Point Harbor, Hawaii



State of Hawaii Department of Transportation
Harbors Division
Engineering Branch Environmental Section
79 South Nimitz Highway
Honolulu, HI 96813

November 2021

Version 3.0

Final

Outfall Reconnaissance Inventory and Inspection Program Manual

State of Hawaii
Department of Transportation
Harbors Division
79 South Nimitz Highway
Honolulu, Hawaii 96813-4898



“Mālama I Ke Awa Kai”
Protect Our Ocean Water

November 2021

Version 3.0

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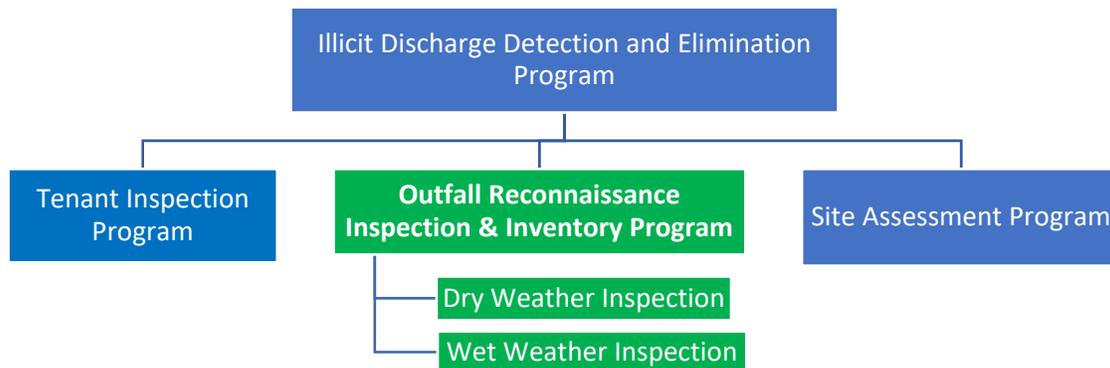
LIST OF ACRONYMS AND ABBREVIATIONS

ACR	Annual Compliance Report
AMS	Cityworks® Powered Asset Management System
amsl	Above Mean Sea Level
BMP	Best Management Practice
CAC	Common Access Card
CB	Citizens' Band
DHS	United States Department of Homeland Security
ERP	Enforcement Response Plan
GIS	Geographic Information System
HAR-E	State of Hawaii Department of Transportation, Harbors Division Engineering Branch
HAR-EE	State of Hawaii Department of Transportation, Harbors Division Engineering Branch Environmental Section
HAR-O	State of Hawaii Department of Transportation, Harbors Division Oahu District
HAR-OCM	State of Hawaii Department of Transportation, Harbors Division Oahu District Pier Utilization Unit
HAR-OCT	State of Hawaii Department of Transportation, Harbors Division Oahu District Harbor Traffic Control Unit
HASP	Health and Safety Plan
HDOH	State of Hawaii Department of Health
HDOT	State of Hawaii Department of Transportation
IDDE	Illicit Discharge Detection and Elimination
KBPH	Kalaheo Barbers Point Harbor
mllw	mean lower low water
MS4	Municipal Separate Storm Sewer System
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
ORI	Outfall Reconnaissance Inspection
ORIIP	Outfall Reconnaissance Inventory and Inspection Program
OSHA	Occupational Safety and Health Administration
PPE	Personal Protective Equipment
SSHASP	Site-Specific Health and Safety Plan
SSO	Site Safety Officer
SSS O&M	Storm Sewer System Operation & Maintenance
SWMP	Stormwater Management Program
TWIC	Transportation Worker Identification Card
USCG	United States Coast Guard
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

The Outfall Reconnaissance Inventory and Inspection Program (ORIIP) is an element of the State of Hawaii Department of Transportation (HDOT) Harbors Division (hereinafter referred to as “Harbors”) Stormwater Management Program (SWMP) Plan under Illicit Discharge Detection and Elimination (IDDE) Program. This program includes maintaining an outfall inventory and conducting dry and wet weather reconnaissance inspection (ORI) at Harbors small Municipal Separate Storm Sewer System (MS4) discharge points, and to eliminate potential illicit discharges. The results of inspections conducted as part of this program will be used to guide future outfall monitoring and pollution prevention efforts. Figure 1-1 shows the IDDE Program structure and highlights the ORIIP in green.

Figure 1-1 IDDE Structure Chart



This ORIIP establishes a framework for completing ORI in the Honolulu Harbor and Kalaehoa Barbers Point Harbor (KBPH), located on the island of Oahu, Hawaii. It includes wet and dry weather inspection procedures, training and equipment needs for field personnel, illicit discharge¹ detection and notification guidelines, documentation and tracking procedures, the relationship to the enforcement response plan, and other stormwater management related information.

1.1 APPLICABILITY

The ORIIP is implemented at all outfalls on Honolulu Harbor and KBPH as well as the adjacent Harbors’ properties associated with the National Pollutant Discharge Elimination System (NPDES) regulated small MS4s. Maps of the NPDES regulated

¹ Illicit Discharge shall mean any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities. 40 C.F.R. § 122.26(b)(2).

storm drain systems are maintained in Cityworks® Powered Asset Management System (AMS). A list of all the outfalls, current characterization, pictures, and construction details are provided as Appendix D.

The ORIIP is implemented under the direction of the Harbors Engineering Branch Environmental Section (HAR-EE). The organizational chart highlighting the groups involved with the ORIIP is provided in Appendix A.

2.0 OUTFALL INVENTORY

As part of the ORIIP, Harbors maintains a complete inventory of all stormwater outfalls at the Honolulu Harbor and KBPH, using an AMS integrated with Geographic Information System (GIS). This inventory is maintained and updated by Harbors Engineering Branch (HAR-E) and includes the following information associated with each outfall: type of material, size, condition, and date of installation (if known).

This inventory is used to support cleaning schedules for the Harbors Oahu District (HAR-O) small MS4 drain cleaning program. Details of the drain cleaning program are further detailed in the Storm Sewer System Operations and Maintenance (SSS O&M) Program Manual.

The data collected during wet and dry weather ORI help to create a more complete picture of the potential illicit discharges that may exist in the small MS4s. The data will allow Harbors to focus on problematic areas and to improve stormwater management efforts. Prioritized inspection areas will be developed on an annual basis to take into account previous annual ORIs, tenant activities, construction, and the likelihood that illicit discharges (that may occur). This will allow for field personnel to complete manageable areas of the Harbors. The prioritized inspection areas will be reported in the Annual Compliance Report (ACR).

The ORIIP Form is used to document the ORI. It is attached to this manual as Appendix C. Sections 4 and 5 of the ORIIP form present potential indicators of illicit discharges and Section 6 identifies the outfall characterization based on those indicators. A characterization of "Potential" is selected with the presence of two or more indicators. A characterization of "Suspect" is selected with one or more indicators with a severity of 3. An "Obvious" characterization is selected when an illicit discharge is determined to exist.

A database of tenants with contact information is maintained by HAR-EE and inventoried in the AMS. Some tenants may require notice prior to inspections (in certain locations to coordinate safely with site activities). ORIIP personnel shall familiarize themselves with the tenant notification requirements to ensure field schedules are maintained.

3.0 ORIIP INSPECTIONS

The following section provides procedures and reference information on planning, scheduling and safely performing dry and wet weather ORI at the applicable harbors. HAR-EE will conduct ORI, as described below. A flowchart depicting the ORIIP process is attached as Appendix G. A rain gauge installed at Harbors Administration Building (79 South Nimitz Highway), can be used to for both dry and wet weather ORIs at Honolulu Harbor.

3.1 PREPARATORY PROCEDURES

The following procedure is to be followed during dry weather ORI at Honolulu Harbor and KBPH. HAR-EE will schedule the outfall inspection with Harbors Oahu District Pier Utilization Unit (HAR-OCM) based on the weather conditions. HAR-EE will also confirm that all field personnel have access to both harbors and have applied and been approved for a Transportation Worker Identification Credential (TWIC) card or a Common Access Card (CAC). Access to these restricted areas is enforced by Harbors, United States Department of Homeland Security (DHS), and the United States Coast Guard (USCG). Field personnel should have identification documentation available upon request while working in these restricted areas. It is common for the USCG to approach personnel and ask questions about field activities. Large commercial shipping vessels and tug boat operators often notify the Harbors Oahu District Harbor Traffic Control Unit (HAR-OCT; also known as “the Aloha Tower”) about ORIIP inspector’s presence in the harbor.

HAR-EE will verify with HAR-OCM that there are no conflicts with the various commercial fueling activities in the harbor and notify the HAR-OCT of when the ORIIP activities will be taken place.

3.1.1 PREPARING FIELD EQUIPMENT

The challenges presented by the tidal fluctuation can complicate ORI scheduling and add another dimension to jobsite safety. For this reason, field personnel need to ensure that, all of the equipment to be used during ORIIP activities will be pre-inspected for defects to ensure they are in full working condition. The following sections describe the equipment and resources required to complete the ORIIP inspections.

3.1.2 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) is essential for the safe completion of ORIIP inspections. Appendix B attached to this ORIIP contains the PPE and equipment required to safely complete field activities. Field personnel shall familiarize themselves

with the proper operation and maintenance of all equipment needed to complete the ORIIP inspections.

3.1.3 INSPECTION EQUIPMENT

Field activities will require a variety of equipment. Wet and dry weather ORI require different equipment and different levels of effort. Appendix B attached to this ORIIP manual contains the list of equipment required to complete ORI.

3.2 FIELD LOGISTICS

This section describes the procedures that all field personnel should follow during ORI. Unexpected situations may arise in the harbor due to weather, other vessel movements, etc. that require deviations from procedures. In such cases, HAR-EE and its consultant will assess the situation and use discretion with safety of all field personnel in mind. Communication should be maintained between crew members and HAR-OCT (during activities in harbor waters).

3.2.1 PERSONNEL

All operations and personnel involved in conducting ORI are subject to the requirements of this ORIIP and the Site-Specific Health and Safety Plan (SSHASP). A Site Manager will be identified prior to mobilization and will be the highest-ranking personnel in the field. The Site Manager, designated by HAR-EE, will serve as the Site Safety Officer (SSO) for the activities and will be responsible for implementation of this ORIIP manual and oversight of the field personnel.

The Site Manager working under the task is responsible for the following:

- 1) Providing field personnel with appropriate training, and ensuring that personnel have read, understand, and will comply with this ORIIP;
- 2) Providing equipment that is safe for operations and free from any obvious hazards;
- 3) Providing and documenting inspections of equipment and tasks, as necessary, to comply with applicable regulations;
- 4) Providing documentation that field personnel have appropriate training and ensuring that personnel have read, understand, and will comply with this ORIIP;
- 5) Overseeing field personnel with respect to ensuring a safe work environment and that work practices are consistent with the provisions of this ORIIP, the Occupational Safety and Health Administration (OSHA), and standard industry practices; and
- 6) Conducting an initial project briefing and daily “tailgate” safety meetings.

HAR-EE and its consultant will pre-notify impacted parties, mobilize the required equipment, coordinate the loading and transportation of the kayak and other gear to one of the boat launch locations, and conduct the ORI. Following the completion of each ORI, HAR-EE and its consultant will demobilize all equipment and transport them all back to the office(s).

Inspections performed from the water must be supported by an on-shore crew. All movements through the harbor waters will be coordinated with HAR-OCT. Communication between the kayak and off-shore crews shall be maintained whenever possible to ensure the safety of all personnel. Kayak personnel will inspect each outfall and complete the ORIIP Form at each outfall location, as described by Section 3.3. As described in Section 3.3.2, upstream nodes will be observed by the on-shore crew when a suspected illicit discharge is observed. On-site personnel will use their best efforts to identify the source and contact the responsible party and/or the appropriate regulatory agencies. HAR-EE will follow up where necessary, as described by the Enforcement Response Plan (ERP; Harbors, 2020).

3.2.2 HARBORS TRAFFIC CONTROL COMMUNICATION

The ORIIP Site Manager shall coordinate with HAR-OCM and notify HAR-OCT prior to inspection and any movement in the harbor waters. Citizens' Band (CB) radios are used by field personnel to communicate with HAR-OCT (Channel 12). Their office phone number is also reachable at (808) 587-2076. Specific vernacular is used during these communications. ORIIP personnel will notify HAR-OCT of the plans to change location and to request a no wake zone. Wakes can be a danger to inspection personnel.

Typical communications about a change of location in the harbors are as follows:

ORIIP personnel: *"Aloha Tower, this is Harbors Engineering."*

HAR-OCT: *"Harbors Engineering, this is Aloha Tower."*

ORIIP personnel: *"Aloha Tower, Harbors Engineering would like to request to move from current location (e.g., Pier #51) to future location (e.g., Pier #38)."*

HAR-OCT: *Their response varies depending on other vessels' movements (e.g., "Okay, Harbors Engineering, proceed to Pier #38)."*

3.2.3 MOBILIZATION

Mobilizing the equipment to the various sites around the harbor will require personnel with a working knowledge of pier locations and restricted area locations. Personnel need to have TWIC or CAC cards (available at all times) and all required PPE and equipment. Dry weather ORI will require a much higher level of effort.

Boat launch locations for Honolulu Harbor are located at Piers 5, 23, 36, and at the Sand Island boat launch ramp adjacent to the Hawaiian Marine Educational and Training Center. And, the kayak launching locations at KBPH are located near the Finger Pier and north end of Pier 7. Outfall and Kayak Launching Location maps are included in Appendix E of this manual.

3.3 DRY WEATHER OUTFALL RECONNAISSANCE INSPECTION

Dry weather ORI is conducted for the purpose of illicit discharge detection and elimination. **For the ORIIP, dry weather is considered when there is less than 0.1” of rain during a 72-hour period preceding an inspection.** Dry weather inspections are to be conducted annually on outfalls with an overall outfall characterization of potential, suspect or obvious as determined by the previous year’s inspection findings. All outfalls (including those with an overall outfall characterization of unlikely, see Section 6 of the ORIIP form in Appendix C) are to be inspected every two years.

Dry weather ORI should coincide with low-tide conditions to increase the probability that the outfall will be exposed. Field events should be scheduled such that field personnel can safely enter areas beneath the piers, inspect outfall conditions, and exit the areas during tidal periods corresponding to water levels below one-foot above mean lower low water (mllw).



Areas under Piers 1, 2, 10, 11, 19, 20, 21, 29A, 30 to 35 of Honolulu Harbor and areas under Piers 5 to 7 of KBPH, have been assessed to be too dangerous to enter and will be inspected from the land-side by observing the upstream node or in way that does not require personnel to enter beneath the pier. At no time, regardless of tidal conditions, personnel will be allowed to enter under the pier when unsafe condition persists.

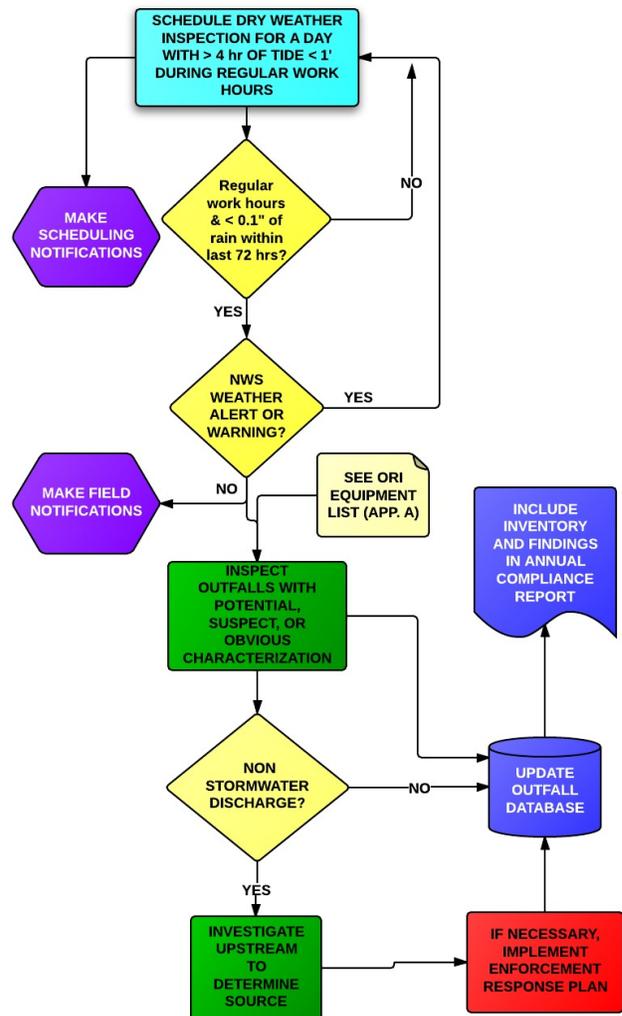
In addition to the identified areas, water levels higher than one-foot mllw are considered too dangerous for personnel to be under any piers. Schedules should indicate time frames where inspections of outfalls beneath the piers can be conducted and field crews should plan accordingly to efficiently complete the ORIIP. Equipment should be inspected prior to field activities to maximize operations during extreme low tide condition. ORI cannot be scheduled in areas where vessels are being actively fueled. HAR-OCM will be contacted to further verification upon schedule finalization.

Inspections will be accomplished during daylight hours. Other harbor activity can affect the schedule, including loading and unloading of cargo ships, storms, high surf

condition, etc. These and other unsafe factors need to be considered during the ORI scheduling.

Field personnel need to be able to recognize conditions that could pose a safety threat during inspections. ORIIP activities should be postponed if any situation arises that poses an unacceptable safety threat to field personnel (e.g., tsunami warning, hurricane warning, etc.). Field personnel should make real time decisions about the conditions in the water, to ensure timely, but safe inspections. HAR-EE will be responsible for postponing and rescheduling any ORI.

ORI is conducted using the ORIIP Form, attached as Appendix C. The form has seven sections that cover both wet and dry inspection scenarios. Field personnel will use the form to describe flow conditions using physical factors like odor, turbidity, color, and the presence of floatables or sheen to identify illicit discharges. Information required to complete the ORIIP Form also includes background data, outfall description, quantitative flow characterization, and physical indicators of flowing and non-flowing outfalls. The current list of outfalls is attached as Appendices D and E.



3.3.1 OBSERVATION OF FLOWS

Suspected illicit discharges can be identified at outfalls when a flow is observed during dry weather and/or foul odors or discolored water in or around the outfall pipe. Common illicit discharges observed during past dry weather ORI include discharges of wash water, process water, sewage, contaminated condensate runoff, or other forms of waste. Not all non-stormwater discharges are illicit. For example, non-contaminated landscape irrigation runoff or air conditioner condensate discharges are allowable non-stormwater discharges. As described below, any discharge observed during dry weather ORI should be documented.

When flows are observed, ORIIP personnel will attempt to first determine the source of the flow, while considering groundwater or tidal influence. Field crews will photograph and/or video the discharge, estimate the flow volume, and, if necessary, collect a sample. Field crews will document the source after conducting a quick visual inspection of the surrounding area. If the source cannot be easily observed, field crews should follow the procedure described in Section 3.3.2. If further investigation is needed, HAR-EE will follow up, identify the source, and contact the responsible party and the appropriate regulatory agencies where necessary, as described in the ERP.

3.3.2 SOURCE IDENTIFICATION

This section outlines the basic tools to be used to trace the source of a suspected illicit discharge. Source tracing begins when an unknown dry weather flow is observed through the ORIIP, field assessment/testing, or a complaint call. When the source of the non-stormwater discharge is not known, one of two primary methods described below, will be used to locate the source of an illicit discharge:

- *Method A – Drainage Area Investigations* or
- *Method B – Storm Drain Network Investigations.*

The method used will depend on the type of information collected or reported, level of understanding of the drainage network, and existing knowledge of operations and activities on the surrounding properties.

Method A – Drainage Area Investigations

The source of some suspected illicit discharge can be determined through a survey or analysis of the drainage area of the outfall with flow. Drainage area investigations are particularly useful when the discharge observed at the outfall has a distinct or unique characteristic that can allow field crews to quickly determine the type of activity or non-point source that is generating the discharge. One-time illegal discharges (such as a surface spill or intentional dumping into the storm drain system) are usually best investigated using Method A, given the short-term nature of the discharge.

Drainage area investigations should begin with a discussion between the field crews, inspectors, engineers, and other knowledgeable staff to identify the type of site most likely to produce the observed discharge. The table below shows some of the activities or land uses most likely associated with specific discharge problems.

Staff will make a list of likely discharge sources and then field crews will conduct a windshield survey of the drainage area to confirm and identify potential sources of the discharge. Once potential discharge sites are identified, staff will conduct individual site inspections to locate the specific source of the discharge. In some cases, dye testing may be needed to confirm that a suspected illicit discharge is actually draining into the

storm drain network. All drainage area investigations will be documented on the ORIIP Form in Appendix C.

COMMON DISCHARGES AND POTENTIAL SOURCES	OBSERVED DISCHARGE POTENTIAL CAUSES
Sediment	Construction activity without proper erosion and sediment controls Outdoor work areas or material storage areas
Oil	Fueling operations Vehicle or machinery maintenance activities
Sudsy discharge	Power washing of buildings Vehicle or equipment washing operations Mobile cleaning crew dumping Laundry or Cleaner greywater discharge
Grease	Restaurant sink drain connection to stormwater system
Sewage	Failing or leaking septic systems

Method B – Storm Drain Network Investigations

The source of some illicit connections or discharges can be located by systematically isolating the area from which the polluted discharge originates. This method involves progressive investigation at manholes in the storm drain network to narrow down the location where the illegal discharge is entering the drainage system. Field crews should work progressively upstream from the outfall and inspect manholes until indicators reveal the discharge is no longer present. Manhole observation can be time consuming, but it is generally a necessary step before conducting other tests.

Storm drain network investigations include the following steps.

1. Consult the drainage system map and identify the major branches. If the drainage map is incomplete, sketches of the system shall be made, and the system shall be identified for adding to Harbors drainage system map.
2. Starting from the outfall, observe the next upstream manhole or junction to see if there is evidence of polluted discharge. As with the ORIIP inspections, field crews are looking for the presence of flow during dry weather, foul odors, colors or stained deposits, oily sheen, floatable materials, and/or other unusual observations.
3. Repeat observations at each upstream manhole or junction until a junction is found with no evidence of discharge; the discharge source is likely located between the junction with no evidence of discharge and the next downstream junction.
4. Work downstream from the “clean” manhole or junction to isolate the location where the polluted discharge is entering the storm drain system.

5. Document all findings.

If the flow is assessed to be an illicit discharge and originates within the Harbors property, Harbors shall ensure the connection is disconnected or flow from the source is identified. If the flow originates outside of Harbors jurisdiction, Harbors will inform the adjoining jurisdiction or property owner in writing that the flow is entering Harbors small MS4 and copy the State of Hawaii Department of Health (HDOH).

When visual inspections are not enough to isolate the source of the illegal discharge, additional field tests can be performed. These include: dye testing, video recording, smoke testing. When a dry weather flow is observed, and the source of the flow cannot be determined via Method A or B above, Harbors will pursue alternative methods necessary to identify the source of the dry weather flow within 90 days.

Forms and information will be included in the ACR as well as reviewed prior to the following ORIIP event. Any illicit discharges which are assessed to be coming from a tenant or construction site will initiate a re-evaluation of the tenant or construction site in accordance with the **Tenant Inspection Program** or the **Construction Site Runoff Control Program**.

3.4 WET WEATHER OUTFALL RECONNAISSANCE INSPECTION

The goal for wet weather ORI is to assess in-place Best Management Practice (BMP) performance. **Wet weather ORI are only conducted during regular business hours when rainfall greater than 0.1" per hour is recorded.** Personnel must field verify that adequate precipitation has occurred to initiate sufficient flow through the drainage system to make useful observations.

The weather station located at Honolulu International Airport (Station ID 91182, PHNL) as reported by the National Oceanic and Atmospheric Administration (NOAA) is in proximity of Honolulu Harbor might potentially be representative of the actual rainfall. The weather station located at Kalaeloa Airport (PHJR) as reported by NOAA is in proximity of KBPH might potentially be representative of the actual rainfall. Field observations can be conducted using PHJR rainfall data.

HAR-EE (and its consultant) will conduct wet weather ORI of the identified high-risk outfalls each year, provided appropriate wet weather events occur during regular business hours. High-risk outfalls are those associated with drainage from high risk tenants or those that drain from areas under construction.

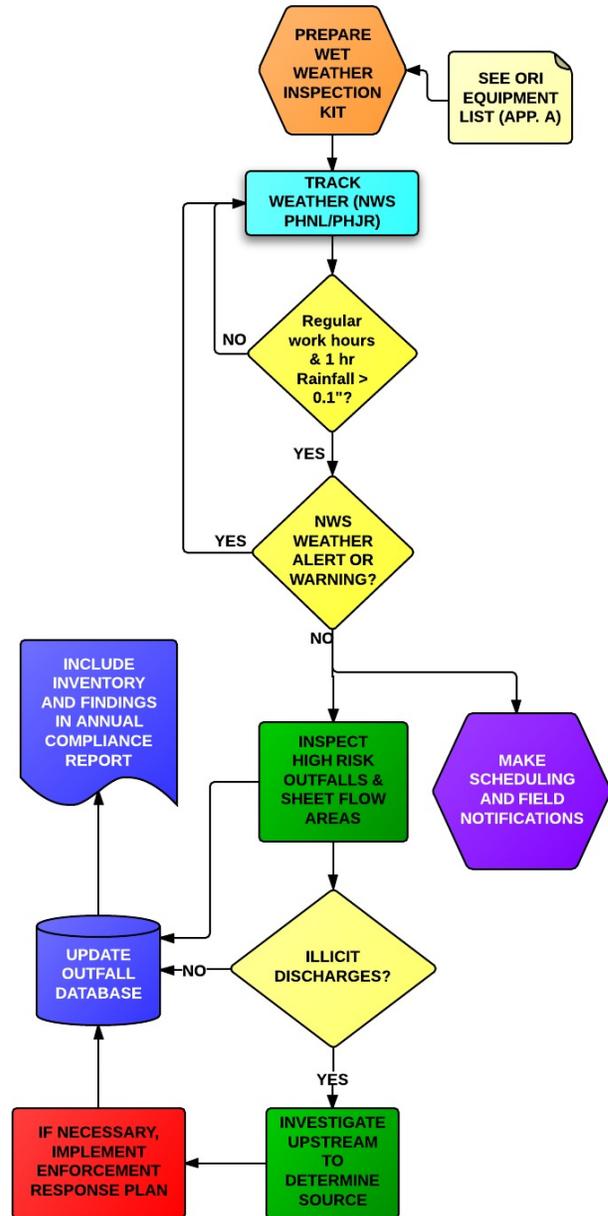
Wet weather ORI must be completed from the land side. Due to high safety hazard conditions under the piers, no personnel shall attempt to conduct under pier inspections during wet weather condition. These inspections need to be completed during raining

events, so scheduling the event ahead of time is not practical. Inspection personnel need to be flexible based on weather conditions.

In addition, wet weather ORI will not be conducted during emergency situations such as hurricanes, tsunamis, or during severe storm conditions that may cause high safety risk to field personnel.

During a raining event, field personnel will notify impacted parties, mobilize required equipment, and conduct a wet weather ORI using the ORIIP Form (Appendix C). If criteria such as rainfall intensity, duration, and occurrence during regular work hours are met, HAR-EE (and its consultant) will conduct wet weather ORI at the identified high-risk outfalls each year.

Wet weather observation of sheet flows over the pier edge and from undeveloped areas will also be conducted. Field personnel will be standing on the pier or nearest landside location. Upstream nodes will be observed if necessary. The annual wet weather ORI shall include visual inspection of color, odor, clarity, solids, foam, oil sheen and other abnormal signs of stormwater discharges. Photo and/or video documentation shall be collected at each high-risk outfall. If a suspected illicit discharge is observed, investigative techniques detailed in Section 3.3.2 will be used to track down and eliminate the source.



4.0 ENFORCEMENT

Enforcement will be conducted upon discovery of an illicit discharge and will follow different paths depending on the source of the discharge.

4.1 TENANTS

If the source of an illicit discharge is coming from a Harbors Tenant site, Harbors will follow the procedures and guidelines as detailed in the Harbors ERP (Section 5.0).

4.2 CONSTRUCTION SITE

If the source of an illicit discharge is coming from a Harbors construction site, Harbors will respond and follow the procedures and guidelines detailed in the Harbors ERP (Section 4.0).

4.3 NON-TENANT/CONSTRUCTION INCLUDING OUTSIDE AGENCY

If an illicit discharge is assessed to be coming from a public or other non-tenant/non-construction entity, the inspector will attempt to find out if the person or source is associated with an entity having any type of contract with Harbors and then follow other procedures in the ERP (Section 3.3). If they have no contractual affiliation with Harbors, HAR-EE will collect available evidential documentation and report the illicit discharge to HDOH.

4.4 STORM DRAINAGE SYSTEM OPERATIONS AND MAINTENANCE

If an illicit discharge is observed due to accumulated sediment, trash or other pollutant related to drainage system cleaning, Harbors will follow the procedures in Oahu District SSS O&M Program Manual to create a service request.

5.0 TRAINING

Inspector training will be provided to all personnel responsible for conducting ORI, so that they are aware of the process and safety precautions required during the inspections. The training starts with a pre-mobilization meeting where photos, documents, and schedules are reviewed, and all field personnel have the opportunity to ask questions about this ORIIP and the SSHASP. The pre-mobilization meeting will include:

- 1) Harbors illicit discharge definition;
- 2) procedures to be used when conducting ORI;
- 3) procedures to be used to track non-stormwater discharges to their source.

5.1 ON-THE-JOB TRAINING

In addition to attending the pre-mobilization meeting, new inspectors will gain inspection experience by spending at least one work day on-the-job conducting outfall inspections with experienced inspectors. During the inspection, the new inspectors will observe how the experienced inspectors conduct ORI as well as conduct their own inspections with assistance from the experienced personnel. New inspectors will continue to have frequent interactions with the experienced inspectors to discuss inspection issues as they arise.

5.2 DOCUMENTATION

Attendance at the pre-mobilization meeting will be documented using the signature pages at the front of this document and the SSHASP. On-the-job training will be documented using the ORIIP form (in Appendix C) during the outfall inspections by listing both the experienced mentor and the trainee in the “Investigators” section of the form.

6.0 HEALTH AND SAFETY

The safety of ORIIP personnel is of the highest priority. All personnel performing field work related to the ORIIP shall familiarize themselves with the SSHASP. All project activities shall be performed in accordance to the SSHASP, applicable local policies and procedures, and OSHA regulations. Unforeseeable site conditions or changes in the scope of work may warrant a reassessment of protection levels and controls stated.

The SSHSP has been attached to this document as Appendix F.

7.0 REFERENCES

Harbors, *Hawaii Administrative Rules, Title 19 Chapters 41 to 44*: State of Hawaii Department of Transportation - <https://hidot.hawaii.gov/harbors/library/admin-rules/>.

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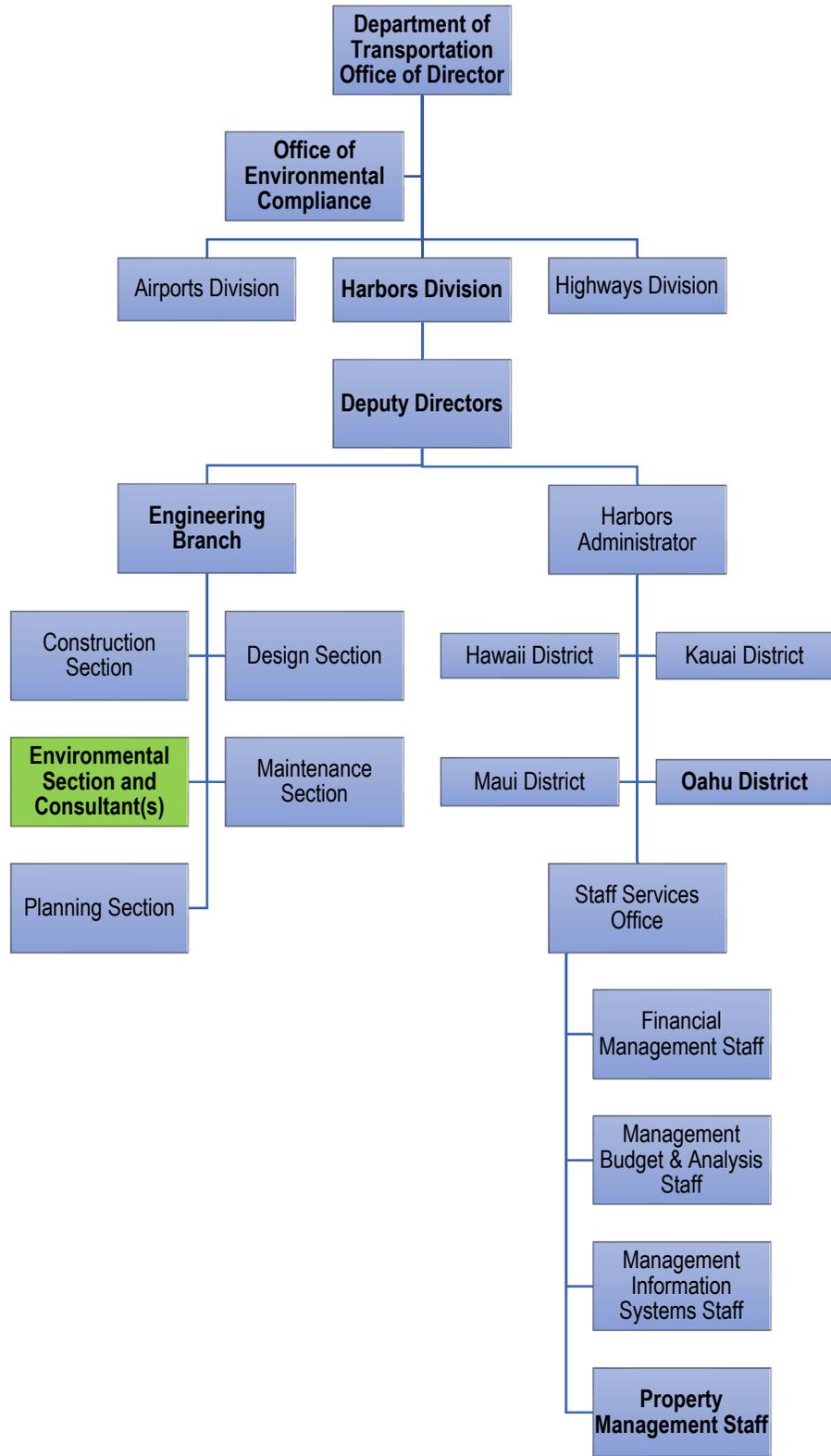
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ORIIP APPENDIX A

ORIIP ORGANIZATIONAL CHART



ORIIP APPENDIX B

ORIIP PPE AND EQUIPMENT LIST

PPE AND EQUIPMENT LIST

For Dry-Weather Outfall Reconnaissance Inspection and Inventory

- All inspectors shall have required identification including but not limited to a Transportation Worker Identification Card (TWIC) and a Hawaii Driver's License. Each inspector is responsible for retaining their own identification throughout the inspection.
- At least one inspector shall be FirstAid / CPR Certified, ideally one that will be in the kayak conducting inspections.

PERSONAL PROTECTIVE EQUIPMENT

EQUIPMENT	RESPONSIBLE PARTY	QUANTITY	NEEDS PREP (I.E. CALIBRATION)	PREPARED AND PACKED? (Y/N)
Land Based Inspection Crew				
Reflective vest	ETC / HDOT Harbors	1 ea	No	
Steel Toed Boots	ETC / HDOT Harbors	1 pair ea	No	
Sunglasses	ETC/ HDOT Harbors	1 ea	No	
Sunblock	ETC/ HDOT Harbors	1	No	
Hardhat	ETC/ HDOT Harbors	1 ea	No	
Parking Cone(s)	ETC	2	No	
First Aid Kit	ETC	1	No	
Nitrile Gloves	ETC	8	No	
Life Saving Float	HDOT Harbors	1	No	
Water Based Inspection Crew				
Personal Floatation Device	HDOT Harbors	1 ea	No	
Reef shoes	ETC/ HDOT Harbors	1 pair ea	No	
Sunglasses	ETC/ HDOT Harbors	1 ea	No	
Sunblock	ETC/ HDOT Harbors	1	No	
Hardhat w/ Strap	ETC/ HDOT Harbors	1 ea	No	
Headlight	HDOT Harbors	1 ea	No	
Nitrile Gloves	ETC	8	No	
PID Controller	ETC	1	Yes	

INSPECTION EQUIPMENT

EQUIPMENT	RESPONSIBLE PARTY	QUANTITY	NEEDS PREP (I.E. CALIBRATION)	PREPARED AND PACKED? (Y/N)
Land Base Inspection Crew				
Walkie Talkie	HDOT Harbors	1	Yes	
Citizens' Band (CB) Radio	ETC/ HDOT Harbors	1	Yes	
Clipboard	ETC	1	No	
Field Notebook	ETC	1 ea	No	
Manhole Puller	ETC	1	No	
Tape Measure (25ft)	ETC	1	No	
Sample Jars	ETC	2	No	
Water Based Inspection Crew				
2 Person Kayak w/ paddles	HDOT Harbors	1	No	
Walkie Talkie	ETC	1	Yes	
Field Notebook	ETC	1	No	
Waterproof Bag	HDOT Harbors	1	No	
Camera	ETC	1	No	
Pen / Sharpie	ETC	<5	No	
Paperwork (ORI Manual, Outfall maps, Outfall Lists, Outfall Photo sheets)	ETC	1	No	
Sample Jars	ETC	2	No	
Watch / Timer	ETC	1	No	

ORIIP APPENDIX C

ORIIP FORM

OUTFALL RECONNAISSANCE INVENTORY FORM

Section 1: Background Data

Outfall ID:		Today's date / Time (Military):	
Investigators:			
Temperature (°F):		Rainfall (in.): Last 24 hours: _____ Last 72 hours: _____	
Latitude:	Longitude:	GPS Unit:	GPS Landmark:
Camera:		Photo #s:	
Land Use in Drainage Area (Check all that apply):		Known Industries: _____	
<input type="checkbox"/> Industrial <input type="checkbox"/> Commercial Other: _____		_____ _____ _____	

Section 2: Outfall Description

LOCATION	MATERIAL	SHAPE	DIMENSIONS (IN.)	SUBMERGED
<input type="checkbox"/> Closed Pipe	<input type="checkbox"/> RCP <input type="checkbox"/> CMP <input type="checkbox"/> PVC <input type="checkbox"/> HDPE <input type="checkbox"/> Steel <input type="checkbox"/> Other: _____	<input type="checkbox"/> Circular <input type="checkbox"/> Single <input type="checkbox"/> Elliptical <input type="checkbox"/> Double <input type="checkbox"/> Box <input type="checkbox"/> Triple <input type="checkbox"/> Other: _____	Diameter/Dimensions: _____	In Water: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully With Sediment: <input type="checkbox"/> No <input type="checkbox"/> Partially <input type="checkbox"/> Fully
	<input type="checkbox"/> Open drainage	<input type="checkbox"/> Concrete <input type="checkbox"/> Earthen <input type="checkbox"/> rip-rap <input type="checkbox"/> Other: _____	<input type="checkbox"/> Trapezoid <input type="checkbox"/> Parabolic <input type="checkbox"/> Other: _____	Depth: _____ Top Width: _____ Bottom Width: _____
<input type="checkbox"/> In-Stream	(applicable when collecting samples)			
Flow Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If No, Skip to Section 5</i>			
Flow Description (If present)	Constant: <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial Tidal: <input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial			

Section 3: Quantitative Characterization

FIELD DATA FOR FLOWING OUTFALLS				
PARAMETER	RESULT	UNIT	EQUIPMENT	
<input type="checkbox"/> Flow #1	Volume			
	Time to fill			
<input type="checkbox"/> Flow #2	Flow depth		In	
	Flow width	0' "	Ft, In	
	Measured length	0' "	Ft, In	
	Time of travel		Sec	

Outfall Reconnaissance Inventory Form

Section 4: Physical Indicators for Flowing Outfalls Only

Are Any Physical Indicators Present in the flow? Yes No *(If No, Skip to Section 5)*

INDICATOR	CHECK if Present	DESCRIPTION	RELATIVE SEVERITY INDEX (1-3)		
Odor	<input type="checkbox"/>	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/sour <input type="checkbox"/> Petroleum/gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint	<input type="checkbox"/> 2 – Easily detected	<input type="checkbox"/> 3 – Noticeable from a distance
Color	<input type="checkbox"/>	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Faint colors in sample bottle	<input type="checkbox"/> 2 – Clearly visible in sample bottle	<input type="checkbox"/> 3 – Clearly visible in outfall flow
Turbidity	<input type="checkbox"/>	See severity	<input type="checkbox"/> 1 – Slight cloudiness	<input type="checkbox"/> 2 – Cloudy	<input type="checkbox"/> 3 – Opaque
Floatables -Does Not Include Trash!!	<input type="checkbox"/>	<input type="checkbox"/> Sewage (Toilet Paper, etc.) <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (oil sheen) <input type="checkbox"/> Other:	<input type="checkbox"/> 1 – Few/slight; origin not obvious	<input type="checkbox"/> 2 – Some; indications of origin (e.g., possible suds or oil sheen)	<input type="checkbox"/> 3 – Some; origin clear (e.g., obvious oil sheen, suds, or floating sanitary materials)
Upstream Investigation	<input type="checkbox"/>	Description of discharge source:			<input type="checkbox"/> Illicit Discharge (Trigger to Obvious)
Other Observations					

Section 5: Physical Indicators for Both Flowing and Non-Flowing Outfalls

Are physical indicators that are not related to flow present? Yes No *(If No, Skip to Section 6)*

INDICATOR	CHECK if Present	DESCRIPTION	COMMENTS
Outfall Damage	<input type="checkbox"/>	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Peeling Paint <input type="checkbox"/> Corrosion	
Deposits/Stains	<input type="checkbox"/>	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Sediment <input type="checkbox"/> Trash <input type="checkbox"/> Other:	
Abnormal Vegetation	<input type="checkbox"/>	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited	
Poor pool quality	<input type="checkbox"/>	<input type="checkbox"/> Odors <input type="checkbox"/> Colors <input type="checkbox"/> Floatables <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Suds <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other:	
Pipe benthic growth	<input type="checkbox"/>	<input type="checkbox"/> Brown <input type="checkbox"/> Orange <input type="checkbox"/> Green <input type="checkbox"/> Other:	
Other Observations			

Section 6: Overall Outfall Characterization

<input type="checkbox"/> Unlikely <input type="checkbox"/> Potential (presence of two or more indicators) <input type="checkbox"/> Suspect (one or more indicators with a severity of 3) <input type="checkbox"/> Obvious

Section 7: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?

ORIIP APPENDIX D

OUTFALL INVENTORY



Photo #: 1 **Pier:** 01
Outfall ID: SDDHO010100
Previous ID: P01-01
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 2 **Pier:** 01
Outfall ID: SDDHO010102
Previous ID: N/A
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: Partially



Photo #: 3 **Pier:** 01
Outfall ID: SDDHO010104
Previous ID: N/A
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 1"
Submerged: Partially



Photo #: 4 **Pier:** 01

Outfall ID: SDDHO010106

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 42"

Submerged: Fully



Photo #: 5 **Pier:** 01

Outfall ID: SDDHO010108

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: (to be verified)

Submerged: No



Photo #: 6 **Pier:** 01

Outfall ID: SDDHO010109 (**Inaccessible**)

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: (to be verified)

Submerged: Fully



Photo #: 7 **Pier:** 01

Outfall ID: SDDHO010110

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 16"

Submerged: No



Photo #: 8 **Pier:** 02

Outfall ID: SDDHO020500

Previous ID: P02-05

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24"

Submerged: No



Photo #: 9 **Pier:** 02

Outfall ID: SDDHO020600 (**Inaccessible**)

Previous ID: P02-06

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24"

Submerged: Partially



Photo #: 10 **Pier:** 02
Outfall ID: SDDHO020630
Previous ID: P02-13
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24"
Submerged: Partially



Photo #: 11 **Pier:** 02
Outfall ID: SDDHO020700 (**Inaccessible**)
Previous ID: P03-02
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24"
Submerged: Partially



Photo #: 12 **Pier:** 02
Outfall ID: SDDHO020720 (**Inaccessible**)
Previous ID: 24" Outfall
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24"
Submerged: Partially



Photo #: 13 **Pier:** 02
Outfall ID: SDDHO020800
Previous ID: N/A
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24"
Submerged: No



Photo #: 14 **Pier:** 04
Outfall ID: SDDHO047662
Previous ID:
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: Concrete
Shape: Box
Grouping: Single
Dimensions: 114" x 48"
Submerged: Partially



Photo #: 15 **Pier:** 05
Outfall ID: SDDHO051000
Previous ID: P05-02
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 8"
Submerged: No



Photo #: 16 **Pier:** 05

Outfall ID: SDDHO051010

Previous ID: P05-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 8"

Submerged: No



Photo #: 17 **Pier:** 05

Outfall ID: SDDHO051040

Previous ID: P05-03

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 16"

Submerged: No



Photo #: 18 **Pier:** 06

Outfall ID: SDDHO061160

Previous ID:

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24"

Submerged: Partially



Photo #: 19 **Pier:** 06

Outfall ID: SDDHO067622

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping:

Dimensions: 18" (to be verified)

Submerged: Fully



Photo #: 20 **Pier:** 06

Outfall ID: SDDHO067624

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type:

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: (to be verified)

Submerged: Partially



Photo #: 21 **Pier:** 07

Outfall ID: SDDHO074474

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24" (to be verified)

Submerged: Fully



Photo #: 22 **Pier:** 08
Outfall ID: SDDHO081230
Previous ID: P07-03
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: Concrete
Shape: Box
Grouping: Double
Dimensions: (to be verified)
Submerged: Fully



Photo #: 23 **Pier:** 08
Outfall ID: SDDHO081235
Previous ID: P05-HECO5
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: Concrete
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: Partially



Photo #: 24 **Pier:** 08
Outfall ID: SDDHO081500
Previous ID: N/A
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: Concrete
Shape: Box
Grouping: Double
Dimensions: (to be verified)
Submerged: Fully



Photo #: 25 **Pier:** 08

Outfall ID: SDDHO081512

Previous ID: P08-03

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24" (to be verified)

Submerged: No



Photo #: 26 **Pier:** 09

Outfall ID: SDDHO091570

Previous ID: P09-04

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24"

Submerged: Partially



Photo #: 27 **Pier:** 09

Outfall ID: SDDHO091600

Previous ID: P09-05

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12" (to be verified)

Submerged: No



Photo #: 28 **Pier:** 11
Outfall ID: SDDHO111730
Previous ID: P10-03
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24" (to be verified)
Submerged: Partially



Photo #: 29 **Pier:** 11
Outfall ID: SDDHO111732
Previous ID: N/A
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 8" (to be verified)
Submerged: No



Photo #: 30 **Pier:** 11
Outfall ID: SDDHO111734
Previous ID: P11-08
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 8"
Submerged: No

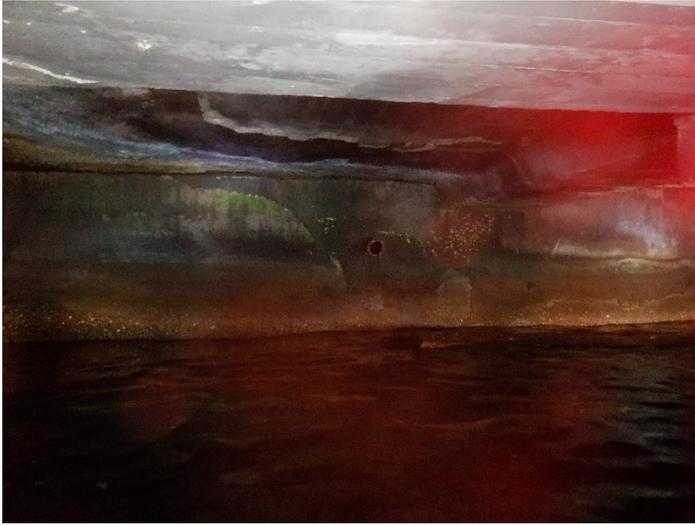


Photo #: 31 **Pier:** 11

Outfall ID: SDDHO111736

Previous ID: P11-09

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 8"

Submerged: No



Photo #: 32 **Pier:** 11

Outfall ID: SDDHO111738

Previous ID: P11-10

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: Steel (to be verified)

Shape: Circular

Grouping: Single

Dimensions: 8"

Submerged: No



Photo #: 33 **Pier:** 11

Outfall ID: SDDHO111740

Previous ID: P11-11

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: Steel (to be verified)

Shape: Circular

Grouping: Single

Dimensions: 8"

Submerged: No



Photo #: 34 **Pier:** 11

Outfall ID: SDDHO111742

Previous ID: P11-12

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 8"

Submerged: No



Photo #: 35 **Pier:** 15

Outfall ID: SDDHO152200

Previous ID: P15-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 8"

Submerged: Partially



Photo #: 36 **Pier:** 18

Outfall ID: SDDHO182300

Previous ID: P19-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 36"

Submerged: Partially



Photo #: 37 **Pier:** 19

Outfall ID: SDDHO192400

Previous ID: P19-08

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 30" (to be verified)

Submerged: No



Photo #: 38 **Pier:** 19

Outfall ID: SDDHO192480

Previous ID: P19-07

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 30" (to be verified)

Submerged: No



Photo #: 39 **Pier:** 20

Outfall ID: SDDHO202482

Previous ID: P20-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: Steel (to be verified)

Shape: Circular

Grouping: Single

Dimensions: 12" (to be verified)

Submerged: No



Photo #: 40 **Pier:** 21

Outfall ID: SDDHO212600

Previous ID: P21-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24" (to be verified)

Submerged: No



Photo #: 41 **Pier:** 21

Outfall ID: SDDHO212610

Previous ID: P21-02

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 42 **Pier:** 21

Outfall ID: SDDHO212640

Previous ID: P21-03

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Box

Grouping: Single

Dimensions: 48" x 30"

Submerged: No



Photo #: 43 **Pier:** 21
Outfall ID: SDDHO212790 (**Inaccessible**)
Previous ID: P21-06
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Box
Grouping: Single
Dimensions: 10" x 10" (to be verified)
Submerged: No



Photo #: 44 **Pier:** 21
Outfall ID: SDDHO212794
Previous ID: P21-04
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 30"
Submerged: Partially



Photo #: 45 **Pier:** 21
Outfall ID: SDDHO212798
Previous ID: N/A (Could not locate in the past)
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: Fully



Photo #: 46 **Pier:** 22
Outfall ID: SDDHO222800
Previous ID: P22-01
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: Steel
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 47 **Pier:** 23
Outfall ID: SDDHO233000
Previous ID: P23-01
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 48 **Pier:** 24
Outfall ID: SDDHO243070
Previous ID: P23-02
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 49 **Pier:** 24

Outfall ID: SDDHO243200

Previous ID: P23-03

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: PVC

Shape: Circular

Grouping: Single

Dimensions: 18"

Submerged: No



Photo #: 50 **Pier:** 24

Outfall ID: SDDHO243240

Previous ID: P24-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: PVC

Shape: Circular

Grouping: Single

Dimensions: 30"

Submerged: No



Photo #: 51 **Pier:** 24

Outfall ID: SDDHO243242

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24" x 6" (to be verified)

Submerged: No



Photo #: 52 **Pier:** 24

Outfall ID: SDDHO243244

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 36"

Submerged: No



Photo #: 53 **Pier:** 25

Outfall ID: SDDHO253550

Previous ID: P25-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24"

Submerged: No



Photo #: 54 **Pier:** 26

Outfall ID: SDDHO263610

Previous ID: P26-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 30" (to be verified)

Submerged: No



Photo #: 55 **Pier:** 26

Outfall ID: SDDHO263612

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 36"

Submerged: No



Photo #: 53 **Pier:** 25

Outfall ID: SDDHO253550

Previous ID: P25-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 24"

Submerged: No



Photo #: 54 **Pier:** 26

Outfall ID: SDDHO263610

Previous ID: P26-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 30" (to be verified)

Submerged: No



Photo #: 55 **Pier:** 27
Outfall ID: SDDHO273630
Previous ID: P27-01
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 36" (to be verified)
Submerged: Partially



Photo #: 56 **Pier:** 29
Outfall ID: SDDHO293650
Previous ID: P29-02
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 36" (to be verified)
Submerged: No



Photo #: 57 **Pier:** 29
Outfall ID: SDDHO293670
Previous ID: P29-03
Characterization: Unlikely
Land use: Commercial
Type: Open Drainage
Materials: RCP
Shape: Box
Grouping: Single
Dimensions: 60" x 24" (to be verified)
Submerged: No



Photo #: 58 **Pier:** 31

Outfall ID: SDDHO313900

Previous ID: P31-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping:

Dimensions: 18"

Submerged: No



Photo #: 59 **Pier:** 31

Outfall ID: SDDHO313920

Previous ID: P31-02

Characterization: Unlikely

Land use: Commercial

Type:

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 18"

Submerged: No



Photo #: 60 **Pier:** 31

Outfall ID: SDDHO313950

Previous ID: P31-03

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 36" (to be verified)

Submerged: No

Photo #: 61 **Pier:** 31



Outfall ID: SDDHO314000
Previous ID: P32-01
Characterization: Could not locate
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 36"
Submerged: No



Photo #: 62 **Pier:** 31
Outfall ID: SDDHO314010
Previous ID: P32-02
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 63 **Pier:** 31
Outfall ID: SDDHO314150
Previous ID: P32-03
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24"
Submerged: No



Photo #: 64 **Pier:** 32
Outfall ID: SDDHO324180
Previous ID: P32-04
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 65 **Pier:** 32
Outfall ID: SDDHO324200
Previous ID: P33-01
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 66 **Pier:** 34
Outfall ID: SDDHO344300
Previous ID: P34-01
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: Partially (to be verified)



Photo #: 67 **Pier:** 34

Outfall ID: SDDHO344310

Previous ID: P34-02

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 18"

Submerged: No

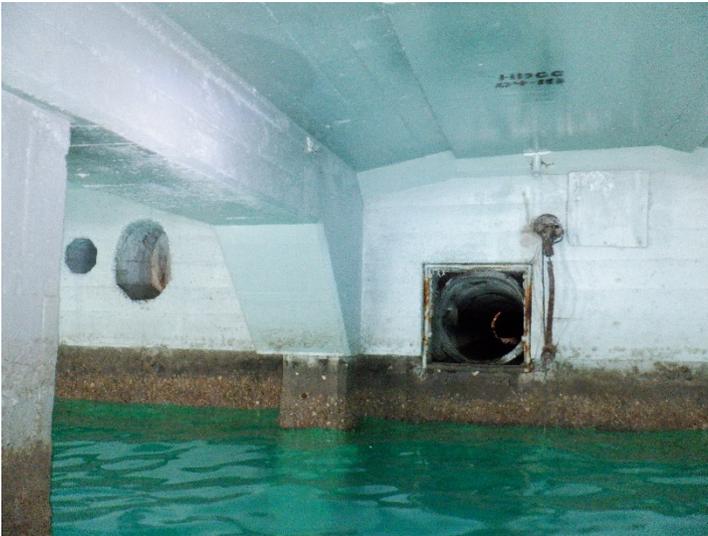


Photo #: 68 **Pier:** 34

Outfall ID: SDDHO344320

Previous ID: P34-03

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 18"

Submerged: No



Photo #: 69 **Pier:** 34

Outfall ID: SDDHO344350

Previous ID: P34-04

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 18"

Submerged: No

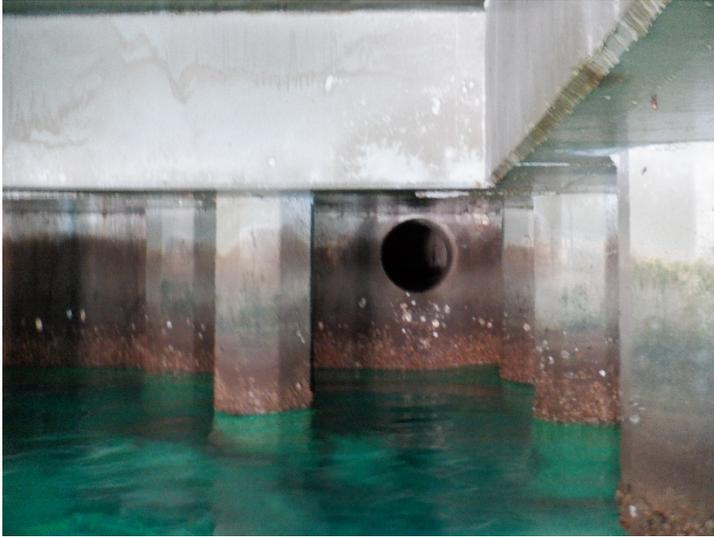


Photo #: 70 **Pier:** 34

Outfall ID: SDDHO344360

Previous ID: P34-05

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 18"

Submerged: No



Photo #: 71 **Pier:** 35

Outfall ID: SDDHO354450

Previous ID: P35-01

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: To be verified.

Submerged: No



Photo #: 72 **Pier:** 35

Outfall ID: SDDHO354460

Previous ID: P35-02

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 73 **Pier:** 35

Outfall ID: SDDHO354470

Previous ID: P35-03

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12" (to be verified)

Submerged: No



Photo #: 74 **Pier:** 35

Outfall ID: SDDHO354472

Previous ID:

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: To be verified

Submerged: Fully

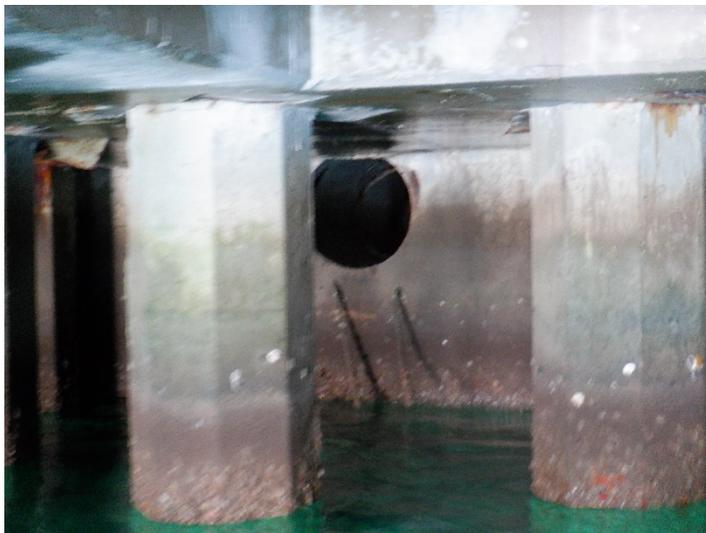


Photo #: 75 **Pier:** 36

Outfall ID: SDDHO354474

Previous ID:

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions:

Submerged: No



Photo #: 76 **Pier:** 36
Outfall ID: SDDHO364500
Previous ID: P35-04
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 36"
Submerged: Fully



Photo #: 77 **Pier:** 37
Outfall ID: SDDHO364600
Previous ID: P35-05
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: PVC
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 78 **Pier:** 37
Outfall ID: SDDHO374700
Previous ID: P36-01
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: PVC
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 79 **Pier:** 37
Outfall ID: SDDHO374900
Previous ID: P37-01
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: PVC
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 80 **Pier:** 37
Outfall ID: SDDHO375000
Previous ID: P37-02
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: PVC
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 81 **Pier:** 38
Outfall ID: SDDHO385050
Previous ID: P38-01
Characterization: Commercial
Land use: Closed Pipe
Type: PVC
Materials: Circular
Shape: Single
Grouping: 12"
Dimensions: Commercial
Submerged: No



Photo #: 82 **Pier:** 38
Outfall ID: SDDHO385100
Previous ID: P38-02
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: CMP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: Partially



Photo #: 83 **Pier:** 38
Outfall ID: SDDHO385150
Previous ID: P38-04
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 30"
Submerged: No



Photo #: 84 **Pier:** 39
Outfall ID: SDDHO395745
Previous ID:
Characterization: Unlikely
Land use: Industrial
Type: N/A
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12" (to be verified)
Submerged: No



Photo #: 85 **Pier:** 40

Outfall ID: SDDHO405800

Previous ID:

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 18"

Submerged: No



Photo #: 86 **Pier:** 41

Outfall ID: SDDHO416500

Previous ID: P41-03

Characterization: Unlikely

Land use: Other

Type: Closed Pipe

Materials: RCP

Shape: Box

Grouping: Single

Dimensions: 108" x 96"

Submerged: Partially



Photo #: 87 **Pier:** 41

Outfall ID: SDDHO416970

Previous ID: P41-01

Characterization: Unlikely

Land use: Other

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12" (to be verified)

Submerged: Partially



Photo #: 88 **Pier:** 41

Outfall ID: SDDHO416980

Previous ID: P41-02

Characterization: Unlikely

Land use: Other

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 16" (to be verified)

Submerged: No

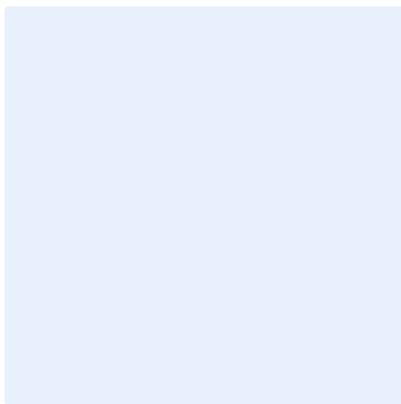


Photo #: 89 **Pier:** 41

Outfall ID: SDDHO416990 **(Missing)**

Previous ID: (to be physically removed)

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12" (to be verified)

Submerged: No



Photo #: 90 **Pier:** 41

Outfall ID: SDDHO417662

Previous ID: (to be physically removed)

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 91 **Pier:** 41

Outfall ID: SDDHO417664

Previous ID: (to be physically removed)

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping:

Dimensions: 24" (to be verified)

Submerged: Partially



Photo #: 92 **Pier:** 42

Outfall ID: SDDHO427030

Previous ID: P42-01 (to be physically removed)

Characterization: Unlikely

Land use: Other

Type: Closed Pipe

Materials:

Shape: Circular

Grouping: Single

Dimensions: 18"

Submerged: No

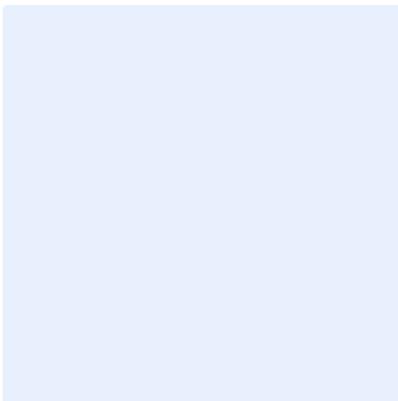


Photo #: 93 **Pier:** 42

Outfall ID: SDDHO427060 **(Missing)**

Previous ID: P42-PSI

Characterization: Unlikely

Land use: Industrial

Type: Open Drainage

Materials: Steel

Shape: Circular

Grouping: Single

Dimensions: 4"

Submerged: No



Photo #: 94 **Pier:** 42
Outfall ID: SDDHO427560
Previous ID: P44/45-04
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24" (to be verified)
 No



Photo #: 95 **Pier:** 42
Outfall ID: SDDHO427580
Previous ID:
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24" (to be verified)
Submerged: No



Photo #: 96 **Pier:** 42
Outfall ID: SDDHO427600
Previous ID: P44/45-01
Characterization: Unlikely
Land use: Other
Type: Closed Pipe
Materials: Steel
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 97 **Pier:** 51

Outfall ID: SDDHO517800

Previous ID: P51A-01

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 36"

Submerged: Partially



Photo #: 98 **Pier:** 51

Outfall ID: SDDHO517850

Previous ID: P51A-07

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 18" (to be verified)

Submerged: No



Photo #: 99 **Pier:** 51

Outfall ID: SDDHO517880

Previous ID: P51A-05

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 42" (to be verified)

Submerged: Partially



Photo #: 100 **Pier:** 51
Outfall ID: SDDHO517960
Previous ID: P51A-04
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18" (to be verified)
Submerged: No

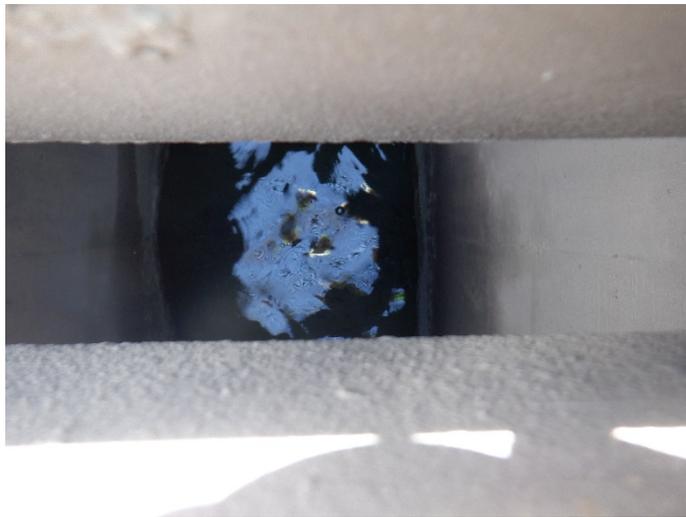


Photo #: 101 **Pier:** 51
Outfall ID: SDDHO518000
Previous ID: P51B-07
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 48" (to be verified)
Submerged: Partially



Photo #: 102 **Pier:** 51
Outfall ID: SDDHO518070
Previous ID: N/A
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18" (to be verified)
Submerged: No



Photo #: 103 **Pier:** 51
Outfall ID: SDDHO518080
Previous ID: P51B-05
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18" (to be verified)
Submerged: No

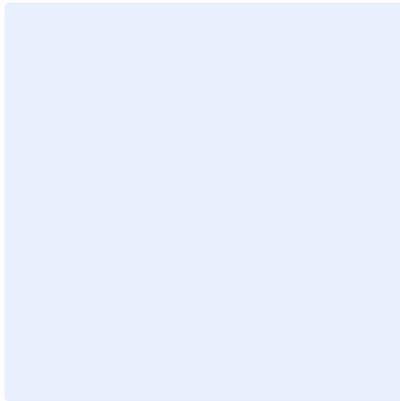


Photo #: 104 **Pier:** 51
Outfall ID: SDDHO518090 (**Missing**)
Previous ID: P51B-03
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: No



Photo #: 105 **Pier:** 51
Outfall ID: SDDHO518130
Previous ID: P51C-01
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 36" (to be verified)
Submerged: Partially



Photo #: 106 **Pier:** 51
Outfall ID: SDDHO518182
Previous ID: P51B-04
Characterization: Unlikely
Land use: Industrial
Type: Open Drain
Materials: Concrete
Shape: Trapezoid
Grouping:
Dimensions: Depth: 20", Top Width: 14",
Bottom Width: 14"
Submerged: No



Photo #: 107 **Pier:** 51
Outfall ID: SDDHO518190
Previous ID: P51C-05
Characterization: Unlikely
Land use: Industrial
Type:
Materials: Concrete
Shape: Trapezoid
Grouping: Single
Dimensions: Depth: 24", Top Width: 14",
Bottom Width: 14"
Submerged: No



Photo #: 108 **Pier:** 51
Outfall ID: SDDHO518194
Previous ID: P51C-06
Characterization: Unlikely
Land use: Industrial
Type: Open Drain
Materials: Concrete
Shape: Trapezoid
Grouping: Single
Dimensions: Depth: 23", Top Width: 14",
Bottom Width: 14"
Submerged: No



Photo #: 109 **Pier:** 51
Outfall ID: SDDHO518198
Previous ID: P51C-04
Characterization: Unlikely
Land use:
Type: Open Drain
Materials: Concrete
Shape: Trapezoid
Grouping: Single
Dimensions: Depth: 23", Top Width: 14",
Bottom Width: 14"
Submerged: No



Photo #: 110 **Pier:** 51
Outfall ID: SDDHO518206
Previous ID: P51C-02
Characterization: Unlikely
Land use: Industrial
Type: Open Drain
Materials: Concrete
Shape: Trapezoid
Grouping: Single
Dimensions: Depth: 14", Top Width: 21",
Bottom Width: 14"
Submerged: No



Photo #: 111 **Pier:** 51
Outfall ID: SDDHO518350
Previous ID: N/A
Characterization: Unlikely
Land use: Industrial
Type: Open Drain
Materials: Concrete
Shape: Trapezoid
Grouping: Single
Dimensions: Depth: 26", Top Width: 18",
Bottom Width: 18"
Submerged: No



Photo #: 112 **Pier:** 51
Outfall ID: SDDHO518380
Previous ID: N/A
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 24" (to be verified)
Submerged: No



Photo #: 113 **Pier:** 52
Outfall ID: SDDHO528210
Previous ID: P51C-03
Characterization: Unlikely
Land use: Industrial
Type: Open Drain
Materials: Concrete
Shape: Trapezoid
Grouping: Single
Dimensions: Depth: 14", Top Width: 21",
Bottom Width: 14"
Submerged: No



Photo #: 114 **Pier:** 52
Outfall ID: SDDHO528500
Previous ID: P52-01
Characterization: Unlikely
Land use: Industrial
Type: Open Drain
Materials: Concrete
Shape: Trapezoid
Grouping: Single
Dimensions: Depth: 26", Top Width: 12",
Bottom Width: 12"
Submerged: No



Photo #: 115 **Pier:** 52

Outfall ID: SDDHO528542

Previous ID: P52-05

Characterization: Unlikely

Land use: Industrial

Type: Open Drain

Materials: Concrete

Shape: Trapezoid

Grouping: Single

Dimensions: Depth: 26", Top Width: 12",
Bottom Width: 12"

Submerged: No



Photo #: 116 **Pier:** 52

Outfall ID: SDDHO528556

Previous ID: P52-04

Characterization: Unlikely

Land use: Industrial

Type: Open Drain

Materials: Concrete

Shape: Trapezoid

Grouping: Single

Dimensions: Depth: 23", Top Width: 12",
Bottom Width: 12"

Submerged: No



Photo #: 117 **Pier:** 52

Outfall ID: SDDHO538560

Previous ID: P52-03

Characterization: Unlikely

Land use: Industrial

Type: Open Drain

Materials: Concrete

Shape: Trapezoid

Grouping: Single

Dimensions: Depth: 24", Top Width: 12",
Bottom Width: 12"

Submerged: No



Photo #: 118 **Pier:** 53
Outfall ID: SDDHO538850
Previous ID: P52-02
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 96" (to be verified)
Submerged: Fully (tidal influenced)



Photo #: 119 **Pier:** 53
Outfall ID: SDDHO538894 (**Missing**)
Previous ID: P53-03
Characterization: Unlikely
Land use: Industrial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 120 **Pier:** 53
Outfall ID: SDDHO538900 (**Inaccessible**)
Previous ID: P53-02 (left)
Characterization: Unlikely
Land use: Industrial
Type: Open Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 36"
Submerged: N/A

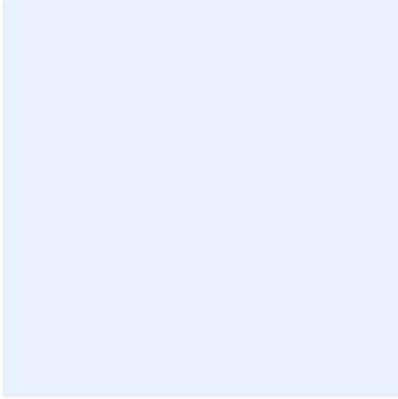


Photo #: 121 **Pier:** 53

Outfall ID: SDDHO538910 **(Missing)**

Previous ID: P53-02 (right)

Characterization: SEALED

Land use: Industrial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 122 **Pier:** 53

Outfall ID: SDDHO538930 **(Inaccessible)**

Previous ID: P53-01

Characterization: Unlikely

Land use: Industrial

Type: Closed Pipe

Materials: PVC

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 123 **Pier:** 53

Outfall ID: SDDOH607605

Previous ID: KIPA-00

Characterization: Unlikely

Land use: Commercial

Type: Open Drainage

Materials: Concrete, earthen

Shape: Sheet flow

Grouping:

Dimensions:

Submerged:



Photo #: 124 **Pier:** 60
Outfall ID: SDDOH607610
Previous ID: KIPA-01
Characterization: Unlikely
Land use: Commercial
Type: Open Drainage
Materials: Earthen
Shape: Sheet flow
Grouping:
Dimensions:
Submerged:



Photo #: 125 **Pier:** 60
Outfall ID: SDDOH607615
Previous ID: KIPA-02
Characterization: Unlikely
Land use: Commercial
Type: Open Drainage
Materials: Concrete, earthen
Shape: Trapezoid
Grouping:
Dimensions: Depth: 12", Top Width: 36",
Bottom Width: 24"
Submerged:



Photo #: 126 **Pier:** 60
Outfall ID: SDDOH607620
Previous ID: KIPA-03
Characterization: Unlikely
Land use: Commercial
Type: Open Drainage
Materials: Concrete, earthen
Shape: Box culvert to natural ditch
Grouping:
Dimensions: 36" each side
Submerged:



Photo #: 127 **Pier:** 60
Outfall ID: SDDOH607625
Previous ID: KIPA-04
Characterization: Unlikely
Land use: Commercial/Industrial
Type: Open Drainage
Materials: Earthen
Shape: Parabolic
Grouping: Single
Dimensions: Depth: 42", Top Width: 144",
 Bottom Width: 36"
Submerged: No



Photo #: 128 **Pier:** 04
Outfall ID: SDDBP043630
Previous ID: BP-01
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Box
Grouping: Single
Dimensions: 72" x 18"
Submerged: Partially

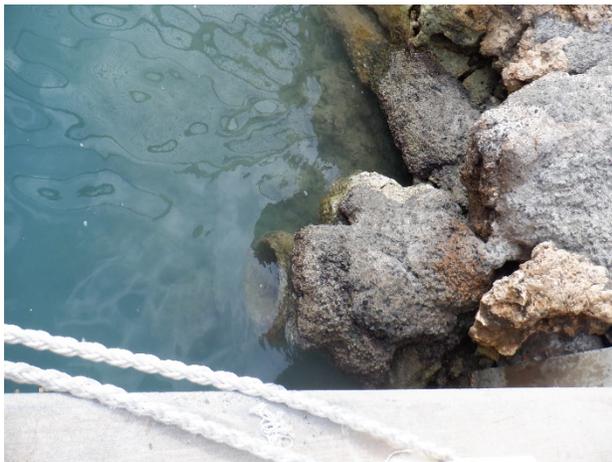


Photo #: 129 **Pier:** 04
Outfall ID: SDDBP043660
Previous ID: BP-29
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 18"
Submerged: Fully



Photo #: 130 **Pier:** 05
Outfall ID: SDDBP055000
Previous ID: BP-02
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 131 **Pier:** 05
Outfall ID: SDDBP055100
Previous ID: BP-03
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 36" (to be verified)
Submerged: Partially



Photo #: 132 **Pier:** 05
Outfall ID: SDDBP055200
Previous ID: BP-04
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 133 **Pier:** 05

Outfall ID: SDDBP055300

Previous ID: BP-05

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 134 **Pier:** 05

Outfall ID: SDDBP055400

Previous ID: BP-06

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 36" (to be verified)

Submerged: Partially



Photo #: 135 **Pier:** 05

Outfall ID: SDDBP055500

Previous ID: BP-07

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 136 **Pier:** 05
Outfall ID: SDDBP055700
Previous ID: BP-08
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 137 **Pier:** 05
Outfall ID: SDDBP055800
Previous ID: BP-09
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 36" (to be verified)
Submerged: Partially



Photo #: 138 **Pier:** 05
Outfall ID: SDDBP055900
Previous ID: BP-10
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 139 **Pier:** 06

Outfall ID: SDDBP066200 (**Inaccessible**)

Previous ID: BP-11

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 140 **Pier:** 05

Outfall ID: SDDBP066210

Previous ID: BP-12

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 18" (to be verified)

Submerged: No



Photo #: 141 **Pier:** 05

Outfall ID: SDDBP066500

Previous ID: BP-13

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 142 **Pier:** 06

Outfall ID: SDDBP066700

Previous ID: BP-14

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping:

Dimensions: 36"

Submerged: Partially



Photo #: 143 **Pier:** 06

Outfall ID: SDDBP066800

Previous ID: BP-15

Characterization: Unlikely

Land use: Commercial

Type:

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No



Photo #: 144 **Pier:** 07

Outfall ID: SDDBP077000

Previous ID: BP-16

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 12"

Submerged: No

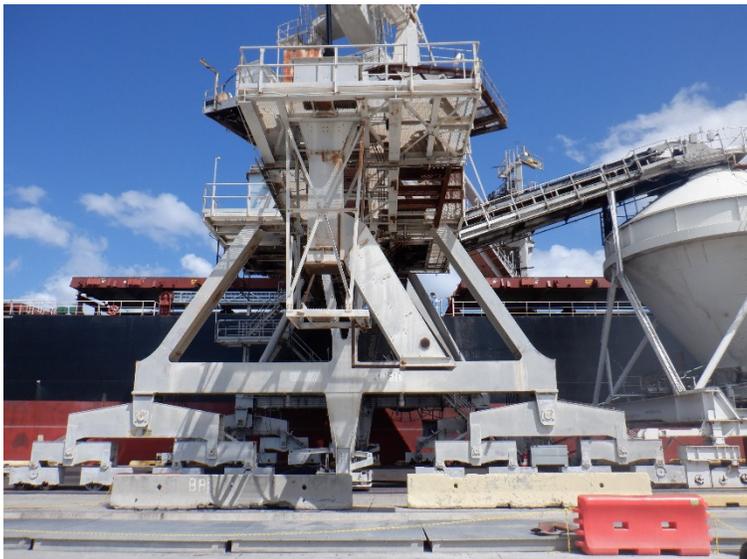


Photo #: 145 **Pier:** 07

Outfall ID: SDDBP077100 (**Inaccessible**)

Previous ID:

Characterization:

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions:

Submerged:



Photo #: 146 **Pier:** 07

Outfall ID: SDDBP077110

Previous ID: BP-17

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: RCP

Shape: Circular

Grouping: Single

Dimensions: 36" (to be verified)

Submerged: No



Photo #: 147 **Pier:** 07

Outfall ID: SDDBP077112

Previous ID: N/A

Characterization: Unlikely

Land use: Commercial

Type: Closed Pipe

Materials: Concrete

Shape: Box

Grouping: Single

Dimensions: 36" x 10" (to be verified)

Submerged: No



Photo #: 148 **Pier:** 07
Outfall ID: SDDBP077200
Previous ID: BP-19
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No



Photo #: 149 **Pier:** 07
Outfall ID: SDDBP077300
Previous ID: BP-20
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No

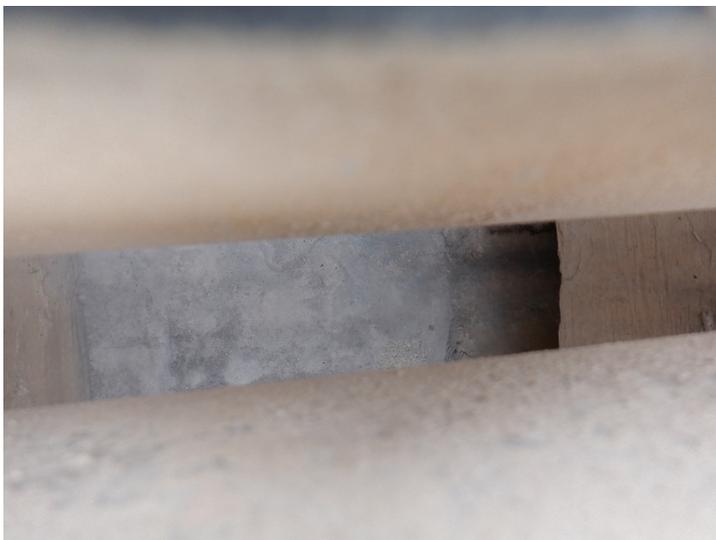


Photo #: 150 **Pier:** 07
Outfall ID: SDDBP077400
Previous ID: BP-21
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: 12"
Submerged: No

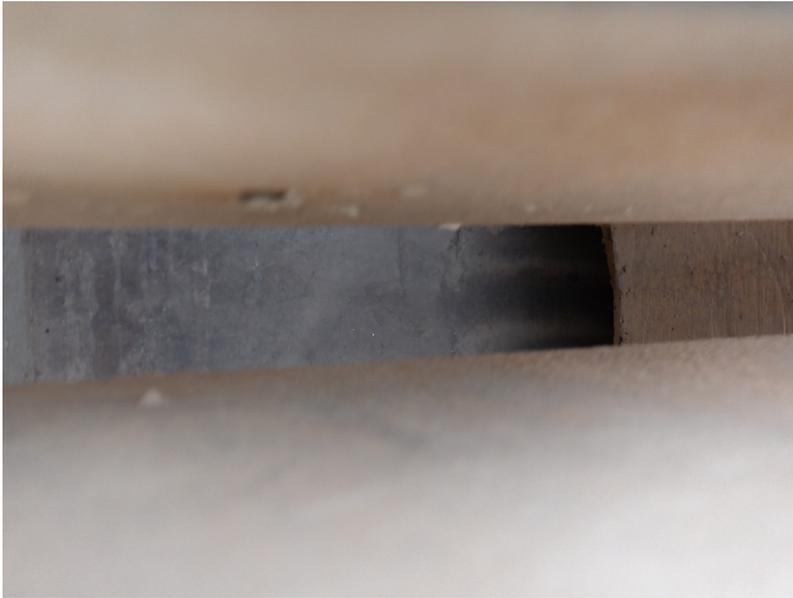


Photo #: 151 **Pier:** 07
Outfall ID: SDDBP077600
Previous ID: BP-17
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping:
Dimensions: 12"
Submerged: No



Photo #: 152 **Pier:** 07
Outfall ID: SDDBP077700 (**Inaccessible**)
Previous ID:
Characterization: Unlikely
Land use: Commercial
Type:
Materials: RCP
Shape: Box
Grouping: Single
Dimensions: 8" x 4" (to be verified)
Submerged: No



Photo #: 153 **Pier:** 26
Outfall ID: SDDHO263612
Previous ID: N/A
Characterization: Unlikely
Land use: Commercial
Type: Closed Pipe
Materials: RCP
Shape: Circular
Grouping: Single
Dimensions: To Be Verified
Submerged: No



Photo #: 154 **Pier:** 53

Outfall ID: SDDHO538870

Previous ID: N/A

Characterization: Unlikely

Land use: Industrial

Type: Open Pipe

Materials: Concrete

Shape: Trapezoid

Grouping: Single

Dimensions: Depth: 24", Top Width: 12",
Bottom Width: 12"

Submerged: No

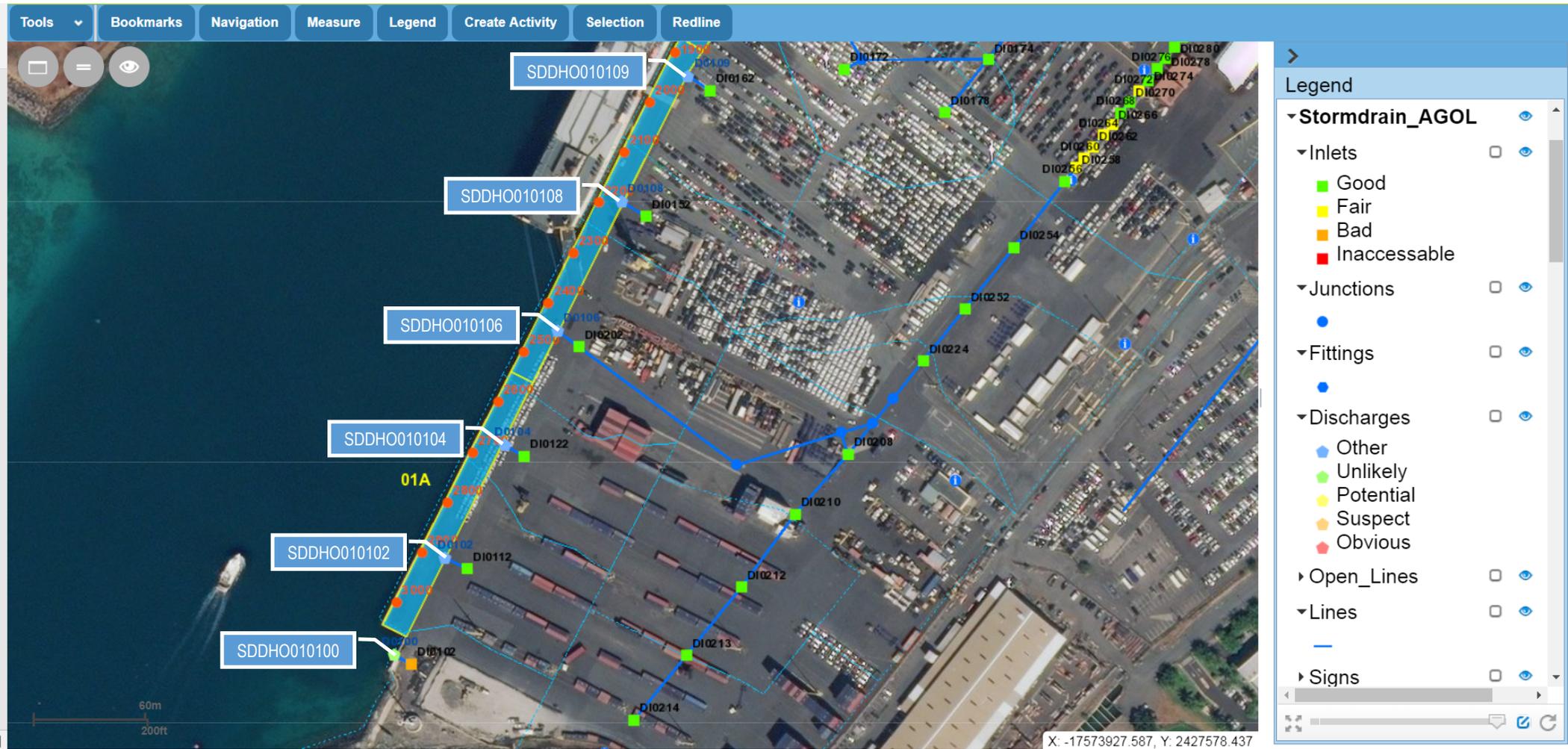
ORIIP APPENDIX E

OUTFALL AND KAYAK LAUNCHING LOCATION MAPS



★
Kayak Launching
Location at
Honolulu Harbor

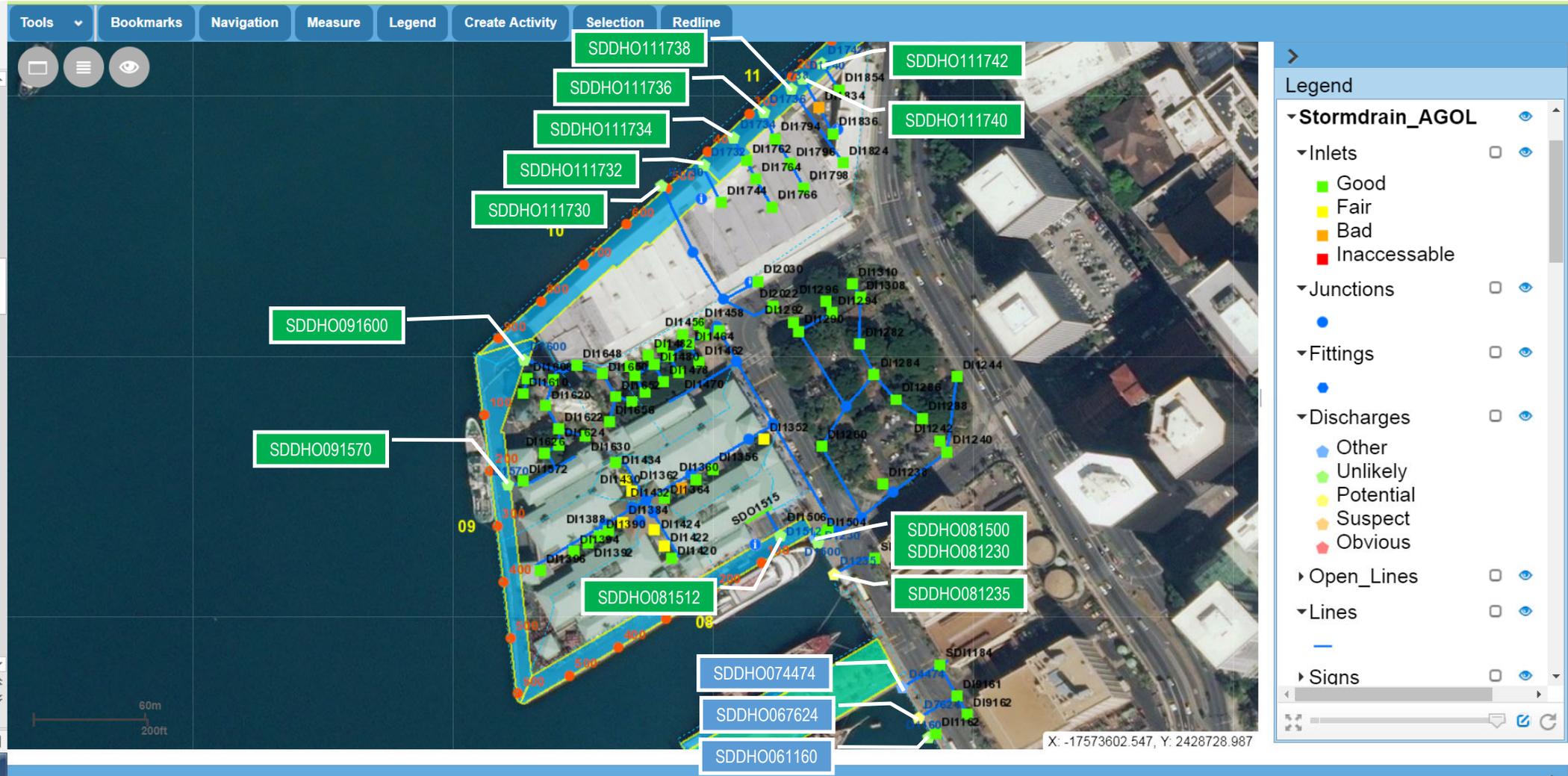
Outfall Location Map – Pier 1A and 1B



Outfall Location Map – Pier 2A and 2B



Outfall Location Map – Piers 7 to 11



Outfall Location Map – Piers 15 to 20



Legend

- Stormdrain_AGOL
 - Inlets
 - Good
 - Fair
 - Bad
 - Inaccessible
 - Junctions
 - Fittings
 - Discharges
 - Other
 - Unlikely
 - Potential
 - Suspect
 - Obvious
 - Open_Lines
 - Lines
 - Signs

Outfall Location Map – Piers 19 to 29A

Tools | Bookmarks | Navigation | Measure | Legend | Create Activity | Selection | Redline

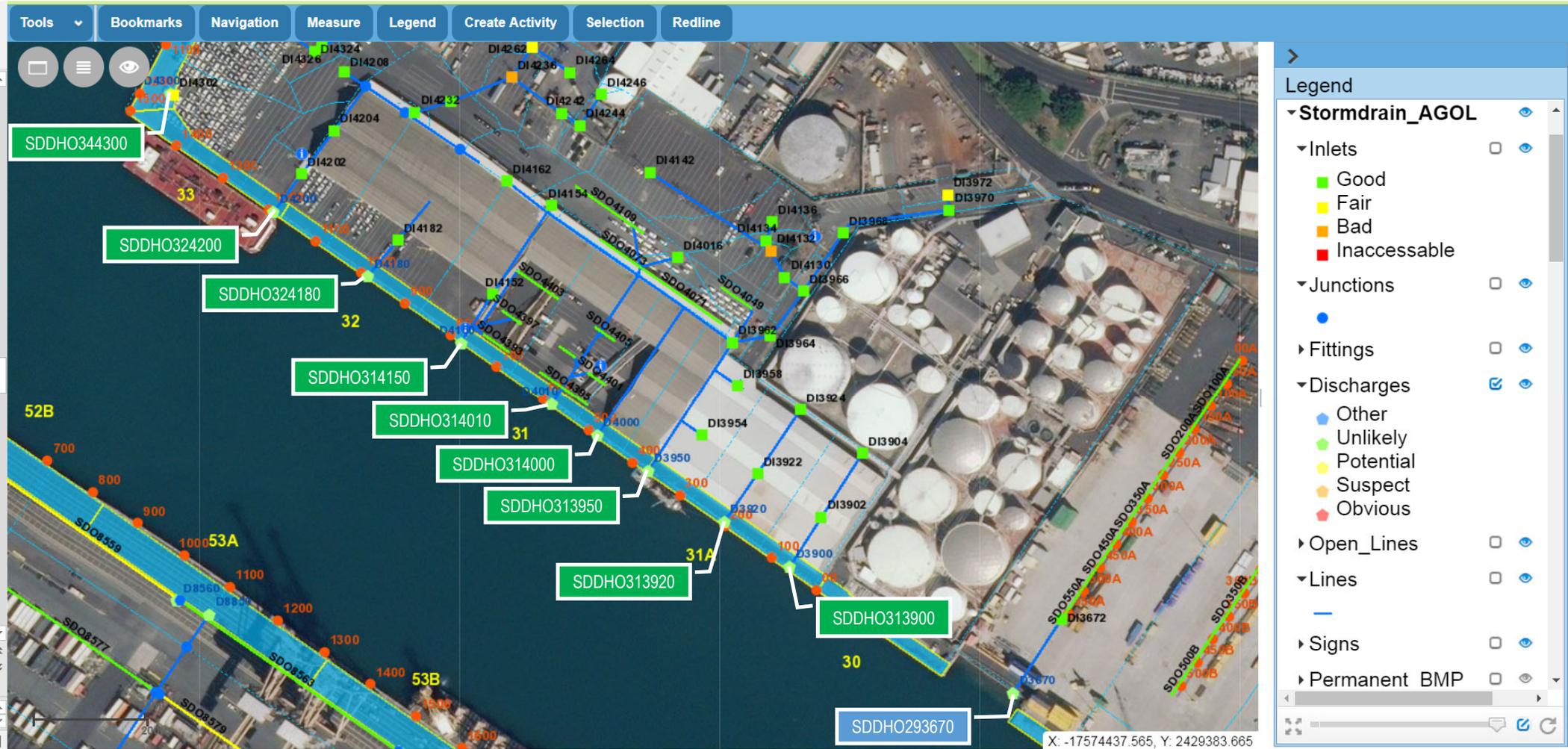


Legend

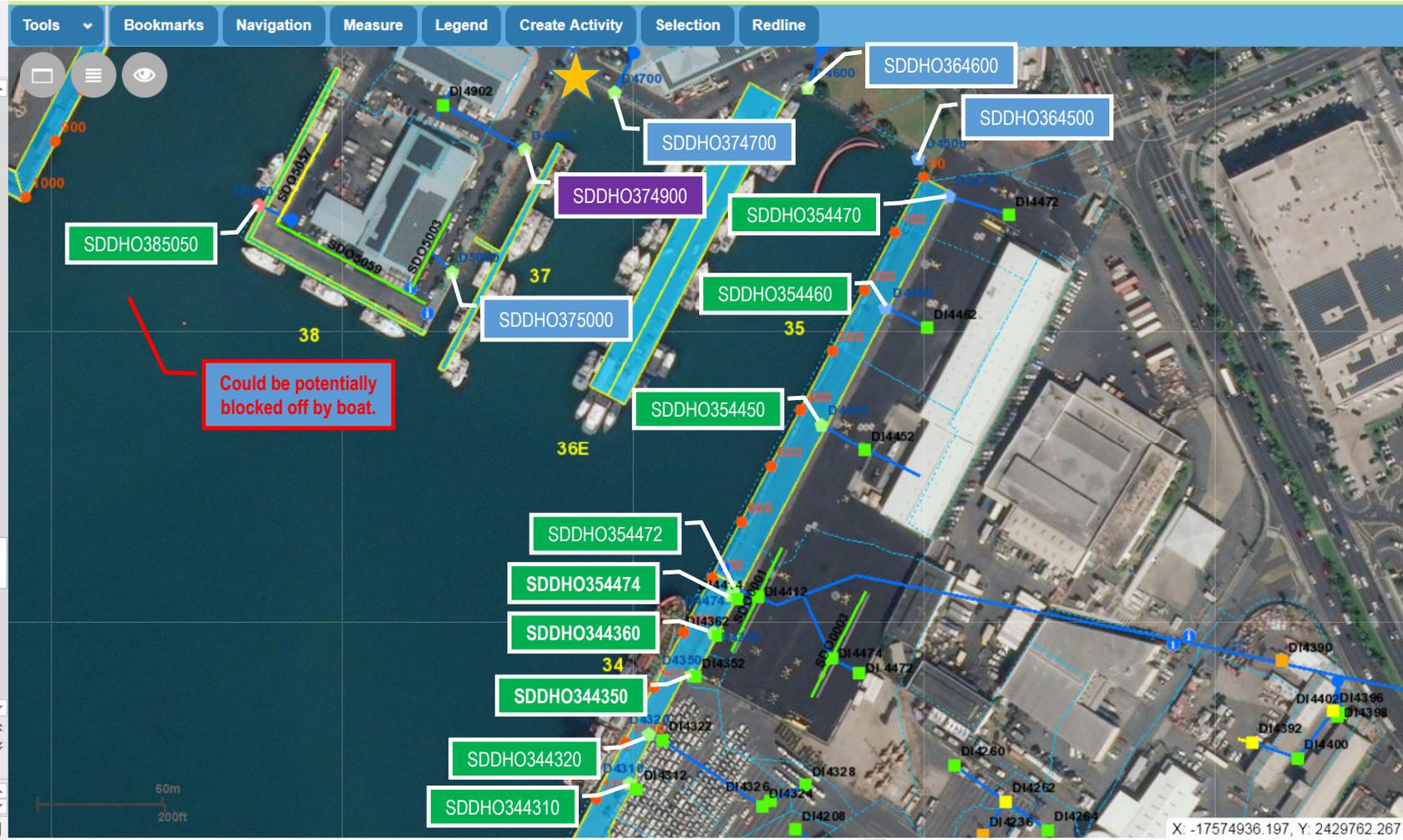
- Stormdrain_AGOL
 - Inlets
 - Good (Green square)
 - Fair (Yellow square)
 - Bad (Orange square)
 - Inaccessible (Red square)
 - Junctions (Blue circle)
 - Fittings (Blue circle)
 - Discharges
 - Other (Blue diamond)
 - Unlikely (Green diamond)
 - Potential (Yellow diamond)
 - Suspect (Orange diamond)
 - Obvious (Red diamond)
 - Open_Lines (Blue line)
 - Lines (Blue line)
 - Signs (Blue line)

X: -17573841.413, Y: 2429223.439

Outfall Location Map – Piers 29 to 33



Outfall Location Map – Piers 34 to 38



★ Kayak Launching Location

Legend

- Stormdrain_AGOL
 - Inlets
 - Good
 - Fair
 - Bad
 - Inaccessible
 - Junctions
 - Fittings
 - Discharges
 - Other
 - Unlikely
 - Potential
 - Suspect
 - Obvious
 - Open_Lines
 - Lines
 - Signs
 - Permanent BMP

X: -17574936.197, Y: 2429762.267

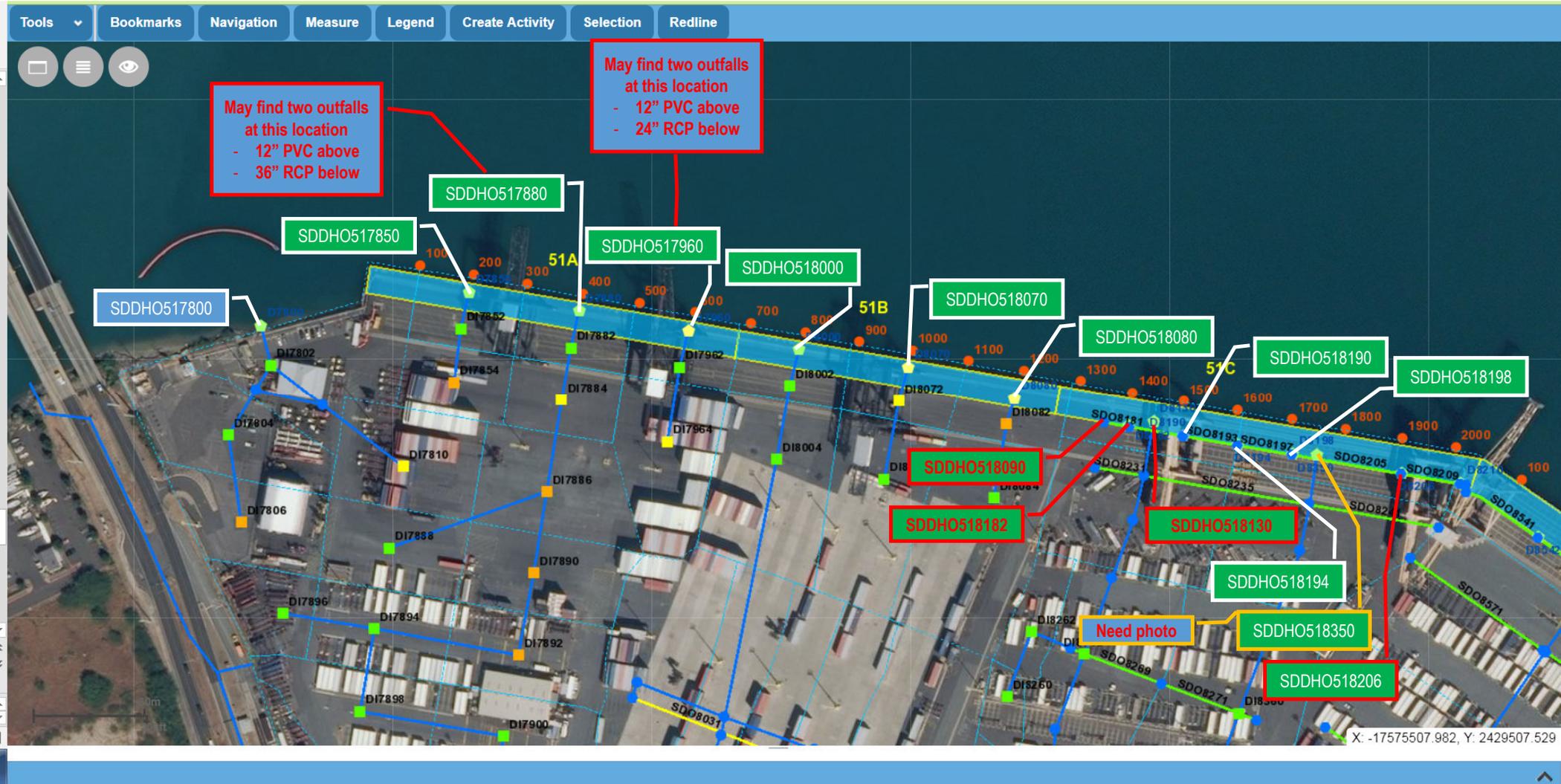
Outfall Location Map – Piers 38 to 41



Outfall Location Map – Piers 42 to 43



Outfall Location Map – Piers 51A to 51C



Outfall Location Map – Piers 51C to 53C

May have trouble finding this one

Tools | Bookmarks | Navigation | Measure | Legend | Create Activity | Selection | Redline



SDDHO528210

SDDHO528542

SDDHO528556

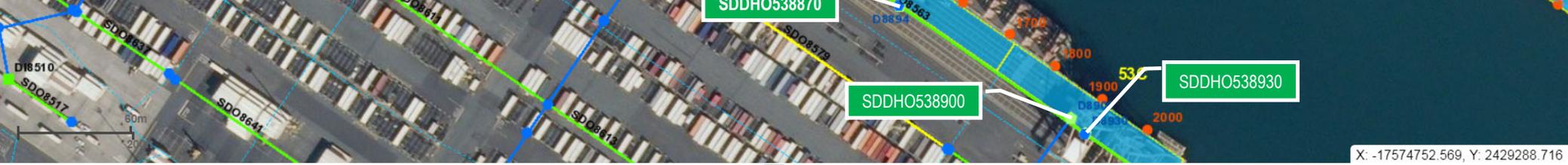
SDDHO538560

SDDHO538850

SDDHO538870

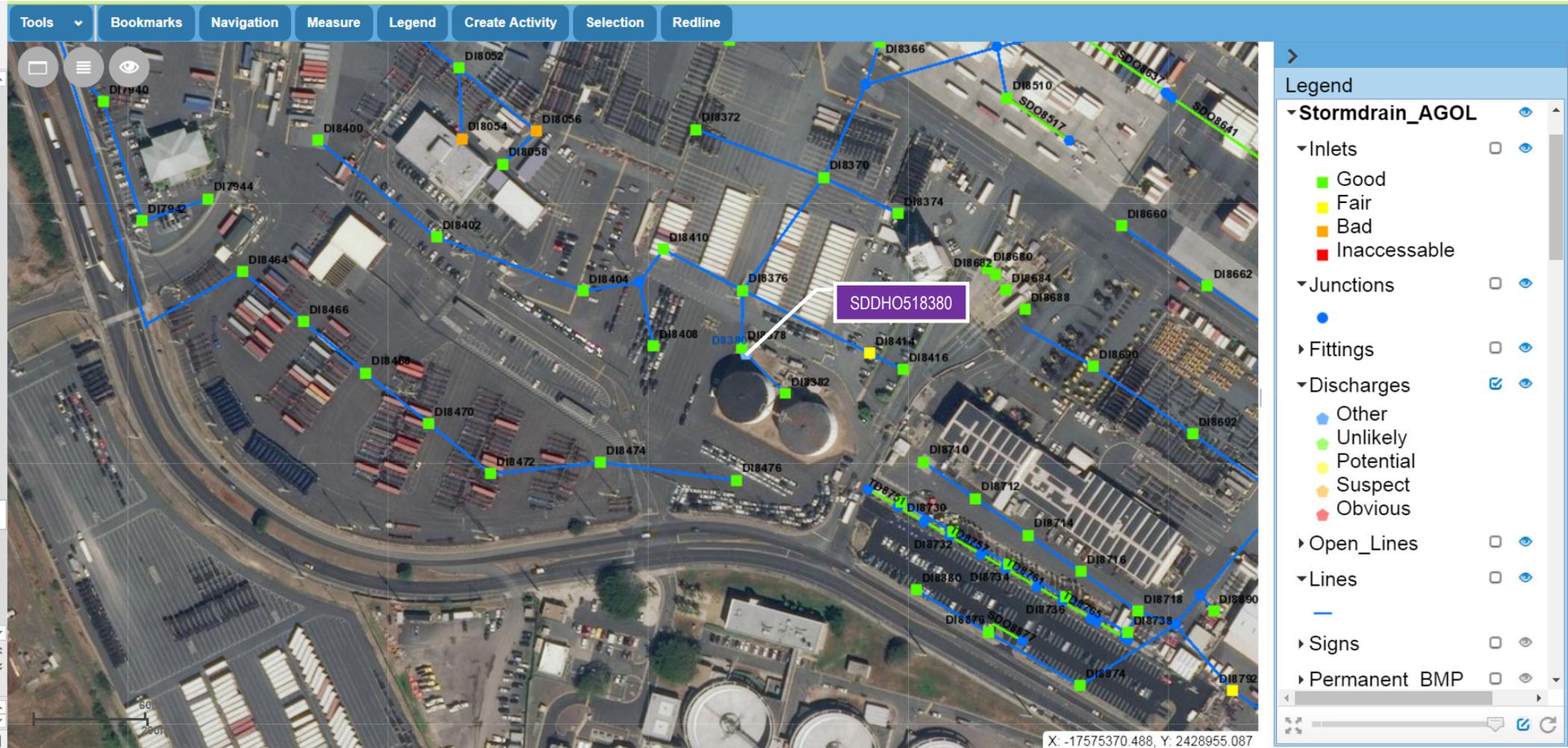
SDDHO538900

SDDHO538930



X: -17574752.569, Y: 2429288.716

Outfall Location Map – Honolulu Harbor (Inside Matson Facility)



Outfall Location Map – Keehi Industrial Lots





**Kayak Launching
Location at
KBPH**

Outfall Location Map – Kalaeloa Barbers Point Harbor (Piers 4 and 5)



X: -17601227.848, Y: 2430430.792

Outfall Location Map – Kalaeloa Barbers Point Harbor (Piers 6 and 7)



X: -17600721.452, Y: 2430791.479

ORIIP APPENDIX F

SITE SPECIFIC HEALTH AND SAFETY PLAN



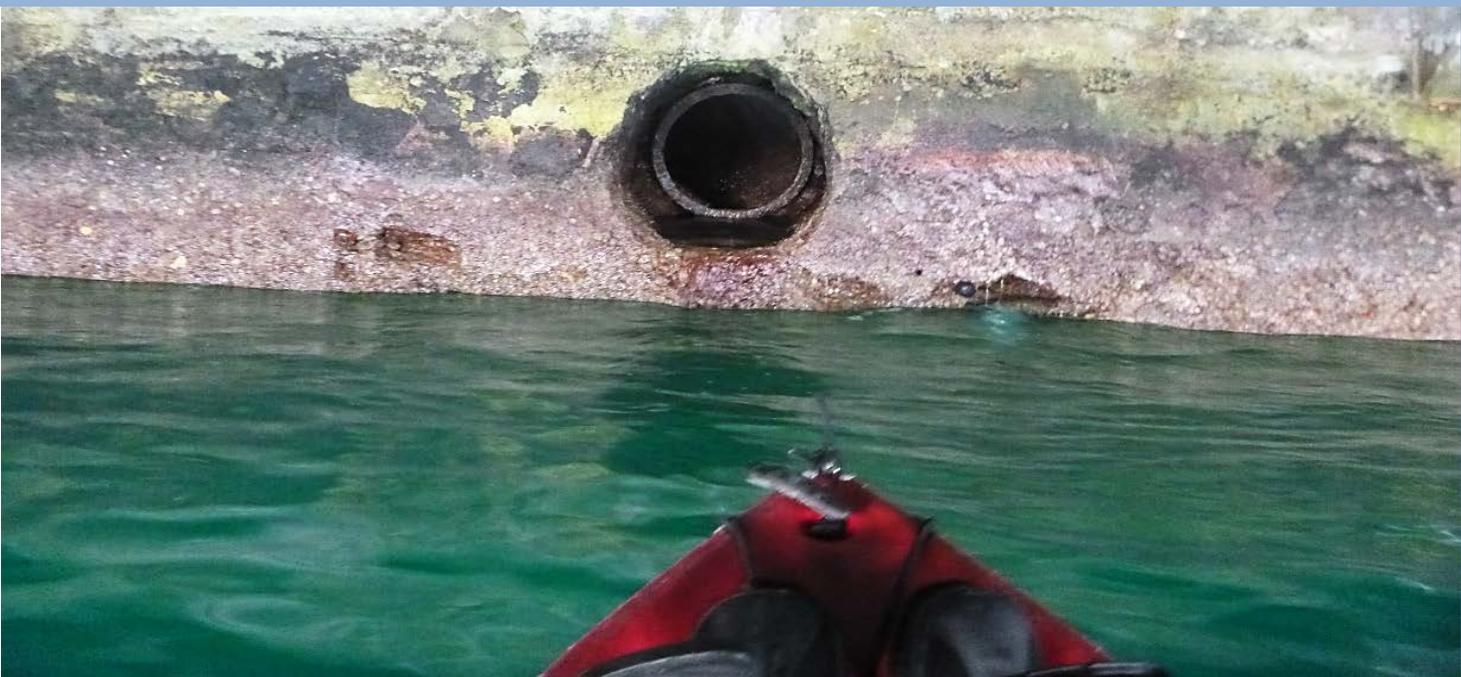
PROTECT
OUR HARBOR WATERS

Mālama I Ke Awa Kai
Department of Transportation, Harbors Division

2020

Site-Specific Health & Safety Plan

Honolulu Harbor and Kalaeloā Barbers Point Harbor Outfall Reconnaissance Inventory



Prepared by:



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Honolulu, Hawaii 96814
tel: (808) 839-7222

ETC Project No. 13-6009

March 2020

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1.0 HEALTH AND SAFETY PLAN ACKNOWLEDGEMENT

This project-specific Health and Safety Plan acceptance form is required for all, EnviroServices & Training Center, LLC (ETC) staff and Department of Transportation, Harbors Division (HDOT Harbors) personnel on site.

I have received site-specific information and orientation regarding project safety and health management system and the identified physical, chemical, and biological hazards recognized or anticipated at this site and their proper control. I am aware of, understand, and agree to comply with all applicable requirements, safety rules, policies and procedures for the Outfall Reconnaissance Inventory (ORI) dry-weather inspections. My signature certifies that I understand the procedures, equipment and restrictions applicable to this project site, and agree to abide by them.

PRINT NAME	SIGNATURE	COMPANY	DATE

2.0 INTRODUCTION

The purpose of this Health and Safety Plan is to establish standard safety and health procedures for ETC personnel and any other personnel involved in the performance of ORI activities. All project activities shall be performed in accordance with this Health and Safety Plan. Specific hazard control methodologies have been evaluated and selected in an effort to minimize the potential for accident or injury. This Health and Safety Plan is a dynamic document, and is subject to change based on review and implementation of additional tasks.

All site activities will be performed in accordance with this Health and Safety Plan, applicable ETC policies and procedures, and Occupational Safety and Health Administration (OSHA) guidelines. The levels of personal protection and the procedures specified in this Health and Safety Plan are based on the best information available from reference documents and current site data. Therefore, these recommendations represent the minimum health and safety requirements to be observed by all personnel engaged in this project. Unforeseeable site conditions or changes in the scope of work may warrant a reassessment of protection levels and controls stated. ETC's on-site Health & Safety Officer must approve all adjustments to this Health and Safety Plan.

2.1 Regulations and Guidelines

The regulations listed in this section provide employers and employees with information, and outline the minimum training necessary to accomplish the purpose and objectives of this Health and Safety Plan. Title 29 of the Code of Federal Regulations (CFR) contains the principal set of rules and regulations issued by federal agencies regarding labor. The regulations are available online by referencing the Electronic Code of Federal Regulations (e-CFR) and selecting Title 29 – Labor. Within Title 29 and regulated by OSHA, Department of Labor are parts 1910 and 1926, both of which are applicable to ORI Inspections. Part 1910 outlines the OSHA standards, and Part 1926 outlines the Safety and Health Regulations for Construction. All on-site personnel will adhere to the following requirements and regulations:

- 1) 29 Code of Federal Regulations (CFR) 1910;
- 2) 29 CFR 1926; and
- 3) ETC's Health and Safety Program.

3.0 PROJECT INFORMATION

The Outfall Reconnaissance Inventory and Inspection Program (ORIIP) is part of HDOT Harbors Illicit Discharge Detection and Elimination (IDDE) Program. The ORIIP requires an annual visual inspection of Harbors outfalls performed during dry-weather conditions (less than 0.1” of rain during a 72-hour period). The dry-weather ORI will be conducted during low tide and will describe each outfall’s conditions, flow characteristics, and descriptions of the surrounding areas. Records of the ORI are kept for inclusion in the Annual Compliance Report (ACR).

The purpose of the ORI is to detect illicit discharges and illegal connections to the HDOT Harbors Small Municipal Separate Storm Sewer System (MS4) and to produce a greater understanding of the site-specific conditions at the harbors. Non-stormwater discharges will be tracked upstream in an attempt to determine the source. Illicit runoff conditions will be reported and, where a violation is identified, a warning or citation will be issued, recorded and included in the ACR.

3.1 Project Location

The project is located at the Honolulu Harbor on the south-central portion of the island of Oahu in the State of Hawaii and Kalaeloa Barbers Point Harbor on the western portion of the island of Oahu in the State of Hawaii.

4.0 PROJECT PERSONNEL AND RESPONSIBILITIES

All operations and personnel with potential exposure to site hazards are subject to the requirements of this Health and Safety Plan. ETC will appoint a Health & Safety Officer who is responsible for the implementation of the Health and Safety Plan and oversight of the on-site personnel. Table 1 provides a list of key participants, including organization names and telephone numbers.

TABLE 1: PROJECT PERSONNEL

NAME	ORGANIZATION	PROJECT TITLE	PHONE NUMBER
Ms. Ying Zhang	HDOT Harbors	Field Manager & Land and Water Technician	(808) 587-1960
Mr. Mitchell Martello	HDOT Harbors	Land and Water Technician	(808) 587-1969
Ms. Chelsea Iannaccio	EnviroServices & Training Center, LLC	Project Manager	(808) 839-7222 ext 236
Mr. Derek Yamane	EnviroServices & Training Center, LLC	Health and Safety Officer & Land and Water Technician	(808) 839-7222 ext 291
Mr. Chris Gallacher	EnviroServices & Training Center, LLC	Land and Water Technician	(808) 839-7222 ext 292

Site Health & Safety Officer: Reports jointly to the ETC Project Manager for all aspects of the project and is the primary contact for health and safety during field activities. Establishes evacuation routes and assembly areas. Has the authority to stop all work if conditions are judged to be dangerous to on-site personnel or the public. The Health & Safety Officer must carefully document the implementation of this Health and Safety Plan and the duties herein.

Field Manager: Has ultimate responsibility for the project health and safety, including correcting unsafe acts or conditions and enforcing procedures.

Technicians: All land and water technicians are responsible for compliance with this Health and Safety Plan in its entirety. They are responsible for taking all reasonable precautions to prevent injury to themselves and to their fellow employees. All technicians are expected to be alert for potential harmful situations and to perform only those tasks that they believe can be done safely and immediately report any accidents, near misses, and/or unsafe conditions to the Health & Safety Officer or the ETC Project Manager. They are also responsible for notifying the Health & Safety Officer of any special medical conditions.

5.0 EMERGENCY CONTACT INFORMATION

The site Health & Safety Officer and ETC Project Manager shall be notified immediately if worker exposure, accidents, or site conditions not anticipated in this document are encountered. The Health & Safety Officer will carry an operable cellular phone in case of emergencies. Table 2 contains a list of emergency contact numbers.

TABLE 2: EMERGENCY CONTACT INFORMATION

ORGANIZATION	PHONE NUMBER
Fire, Police, & Ambulance	911
US Occupational Safety and Health Administration	1-800-321-OSHA (6724)
Nearest Hospital to Honolulu Harbor: Queens Medical Center, 1301 Punchbowl Street, Honolulu, HI 96813	(808) 691-4311 (Emergency Department)
Nearest Hospital to Kalaeloa Barbers Point Harbor: Kapolei Health Care Center, 599 Farrington Highway Kapolei, HI 96707	(808) 697-3800
Harbors Traffic Control Unit	(808) 587-2076
U.S. Coast Guard, District 14	(808) 842-2970
National Response Center	1-800-424-8802

5.1 Medical Facility Information

The nearest medical facility to Honolulu Harbor is Queens Medical Center at 1301 Punchbowl Street, Honolulu, Hawaii 96813. The nearest medical facility to Kalaeloa Barbers Point Harbor is Kapolei Health Care Center at 599 Farrington Highway, Kapolei, Hawaii 96707. Maps including directions from the project site are included in this plan as Appendix IV, Medical Facility Routes Figures 1 & 2.

6.0 HAZARD IDENTIFICATION

This section of the Health and Safety plan addresses chemical, physical, and biological hazards anticipated during field activities. The following subsections identify the site-specific hazards of concern. Safety procedures to mitigate each identified risk are outlined in this section.

Job hazard analysis is an ongoing process from the initiation of the Health and Safety Plan preparation through the implementation and completion of the project. Modifications should be made in the field by the site Health and Safety Officer to account for changes in site conditions or the discovery of new hazards. The initial site-specific job hazard analysis is presented in Table 3.

6.1 Chemical Hazards

ORI activities may expose personnel to hazardous chemicals either in the actual stormwater discharge or the chemicals placed in sample containers for sample preservation. Therefore, direct contact with stormwater and preservatives should be avoided. The constituents of concern for ORI activities include: carbon monoxide (CO), sulfuric acid (H₂SO₄) and hydrogen sulfide (H₂S). The potential modes of exposure to these chemicals are ingestion, absorption and inhalation. The chemical data sheets for these potential hazards, which include chemical-specific hazard information (exposure limits, physical descriptions, etc.), obtained from published sources (OSHA, National Institute for Occupational Safety and Health [NIOSH]) are included in Appendix I. A summary of the initial site-specific job hazards and preventative measures is provided below in Table 3.

TABLE 3: POTENTIAL HAZARDS AND PREVENTATIVE MEASURES

Hazard	Preventative Measure
Unknown Illicit Discharges	<ul style="list-style-type: none"> Substances that personnel may encounter in manholes, drains or outfalls are unknown. Proper protection for the worst-case scenario must be used. Avoid direct contact with unknown substances.
Potential Hazardous Liquids (Including Sulfuric Acid)	<ul style="list-style-type: none"> Proper personal protective equipment (PPE) must be worn to prevent exposure to potentially hazardous chemicals. Always use gloves and safety goggles with splash protection when handling hazardous chemicals. Sample preservatives (sulfuric acid) will be added to sample jars on land after collection, so boat personnel are not exposed to unnecessary risk associated with preservation chemicals.
Potential Hazardous Gases	<ul style="list-style-type: none"> Personnel will be equipped with gas meter and take regular readings. Personnel must be alert to odors and symptoms, such as headache, nausea, dizziness, and central nervous deprecation. If any suspicion of hazardous gas should arise, relocate to a safe and well-ventilated area. Carbon monoxide and hydrogen sulfide are two gases known to be in manholes. Carbon monoxide is a colorless, odorless gas that is also poisonous and flammable. Inhalation causes headache, dizziness, weakness of limbs, confusion, nausea, unconsciousness and eventually death. If a person breathes large amounts of this chemical, move the exposed person to fresh air immediately. If breathing has stopped, perform cardiopulmonary resuscitation (CPR). Keep the affected person warm and at rest. Get medical attention as soon as possible. Hydrogen sulfide is a colorless gas having the odor of rotten eggs. It is flammable and

poisonous. Causes olfactory fatigue, making the sense of smell an unreliable indication of presence. Exposure to very high concentrations causes immediate death. Death or permanent injury may occur after very short exposure in small quantities. It acts directly upon the nervous system, resulting in paralysis of respiratory centers. If inhaled, move victim to fresh air. If breathing has stopped and/or if no pulse is detected, provide CPR. Seek immediate medical assistance.

- If the oxygen concentration is less than 20% or over 23%, ORI personnel will immediately cease work and move to a well-ventilated area.

The exposure limits, acute hazards, and symptoms of exposure are summarized in Table 4 below.

TABLE 4: EXPOSURE LIMITS AND SYMPTOMS TO EXPOSURE

Compound	PEL ^a	TLV ^b	STEL ^c	IDLH ^d	Acute Hazards/Symptoms
Carbon Monoxide	50 ppm	25 ppm	NA	1200 ppm	Inhalation: Headache. Confusion. Dizziness. Nausea. Weakness. Unconsciousness.
Hydrogen Sulfide	20 ppm	10 ppm	15 ppm	100 ppm	Inhalation: Headache. Dizziness. Cough. Sore throat. Nausea. Labored breathing. Unconsciousness. Symptoms may be delayed.
					Skin: Irritation.
					Eyes: Irritation.
Sulfuric Acid	1 mg/m ³	0.2 mg/m ³	NA	15 mg/m ³	Inhalation: Corrosive. Burning sensation. Sore throat. Cough. Labored breathing. Shortness of breath. Symptoms may be delayed.
					Skin: Corrosive. Redness. Pain. Blisters. Serious skin burns.
					Eyes: Pain. Severe deep burns.
					Ingestion: Burning sensation. Shock or collapse.

Notes:

^aPEL – An 8-hour time-weighted average or ceiling concentration above which unprotected workers may not be exposed.

^bTLV – The time-weighted average concentration for a normal 8-hour work day to which workers may be exposed without adverse effect.

^cSTEL – A 15-minute time-weighted average exposure that should not be exceeded at any time during the workday.

^dIDLH – The maximum level from which a worker could escape without any escape-impairing symptoms or any irreversible health effects.

NA – Not available.

6.2 Physical Hazards

Physical and operational safety hazards associated with this project are primarily due to heat stress and working in water. A summary of physical and safety hazards identified for this project and applicable preventative measures are as follows in Table 5.

TABLE 5: PHYSICAL HAZARDS AND PREVENTATIVE MEASURES

Hazard	Preventative Measure
Heat Stress	<p>When workers are wearing impervious or protective clothing, follow the NIOSH/OSHA/U.S. Coast Guard/U.S. Environmental Protection Agency protocol for the prevention of heat stress. Monitor for heat stress at temperatures greater than 70°F.</p> <p>Train workers to recognize the signs and symptoms of heat illness:</p> <ul style="list-style-type: none"> • Heat exhaustion – extreme weakness or fatigue, dizziness, nausea or headache, mood changes, such as irritability or confusion, vomiting, fainting, profuse sweating, clammy or moist skin, pale or flushed complexion. • Heat Stroke – Hot, dry, red or spotted skin, body temperature approximately 105°F, mood changes, such as irritability or confusion, seizures, loss of consciousness with no response, absence of sweating. • Other manifestations: Heat cramps, fainting, heat rash, transient heat fatigue. <p>First Aid:</p> <ul style="list-style-type: none"> • Place victim in cool, shaded area. Do not leave them alone. • If symptoms include dizziness or lightheadedness, lay victim on his or her back and elevate the legs 6-8". If symptoms include nausea or vomiting, lay the victim on their side. • If conscious, give cool fluids every 15 minutes. • Loosen and remove heavy clothing. • Fan victim and sponge with water. • For heat stroke, call 911 for emergency medical help immediately.
Back Injury (Improper Lifting)	<p>Back injuries can develop gradually due to repetitive activity over time or can be the product of a single traumatic event. Acute back injuries can be the result of improper lifting techniques and or lifting loads that are too heavy for the back to support. Injuries can arise in muscle, ligament, vertebrae and discs, either singly or in combination.</p> <ul style="list-style-type: none"> • Use proper lifting techniques. Lift with the legs, not the back. Keep loads close to the body and avoid twisting. • Loads heavier than 50 pounds (lbs) require a second person or mechanical device for lifting. • Use mechanical devices (if applicable), such as dollies, hand trucks and tool hoists whenever possible. • Request assistance with lifting heavy objects.
Slips, Trips, and Falls	<ul style="list-style-type: none"> • Be proactive, recognize a hazard before an incident occurs and be aware of your surroundings.
Mobilization & Demobilization	<p>Employees being struck by vehicles or mobile equipment lead to many work injuries or fatalities.</p> <ul style="list-style-type: none"> • Use traffic control devices and signals (use turn indicators and hazard lights if necessary). • Drive defensively and wear seatbelts. • Carry cell phone in case of emergencies. • Do not use cell phones while operating the vehicle. • Safely park off roadways and use traffic cones to warn oncoming traffic (if not in marked spot).

	<ul style="list-style-type: none"> Wear high visibility clothing with fluorescent background made of retro reflective material.
Falling Objects & Sharp Edges	<ul style="list-style-type: none"> Wear proper PPE at all times. Inspectors in the kayak will wear a hard hat at all times. Inspectors on land will wear a hardhat at designated areas where required at harbor tenant facilities or where there is a potential risk for falling objects. Gloves are optional but can be worn while underneath the pier. Be aware of surroundings.
Inclement Weather	<p>Hazardous weather conditions associated with ORI activities may include wind, lightning, flooding, heightened wave activity, etc. Personnel will review the weather forecast to ensure safety during ORI inspection.</p> <ul style="list-style-type: none"> If unanticipated weather occurs during ORI inspections and personnel deem it unsafe to continue the inspections, the Kayak Team will immediately head towards the designated loading and unloading areas to disembark. The inspection will be put on hold until the hazardous weather subsides.
Confined Space	<ul style="list-style-type: none"> A confined space is any space that is large enough for a worker to enter and perform work, not designed for continuous worker occupancy and is difficult to enter or exit. A confined space has one or more of the following characteristics: contains or has the potential to contain a hazardous atmosphere; contains a material that has the potential to engulf an entrant; contains any other recognized safety or health hazard, such as unguarded machinery, exposed live wires, or heat stress; or requires a permit before entry. DO NOT enter if any of these hazards are present. Entry is only permitted after obtaining permit and wearing Level B PPE. Confined spaces can subject personnel to accumulation of toxic or flammable contaminants, contain physical hazards, or have an oxygen-deficient atmosphere. Any entrant and entry supervisor must be present and properly trained. Entrants should be familiar with specific duties required of them. Know and understand the hazards of the specific confined space (all confined spaces are different and complex). Use the equipment required for safe entry. Communicate with attendant as necessary and/or required. Alert the attendant immediately if any warning signs or symptoms of exposure are detected, or any condition not allowed by the permit is detected. Exit from the space immediately if any order to evacuate is given by the attendant or entry supervisor, the entrant recognizes any warning signs or symptoms of exposure, the entrant detects a prohibited condition, or an evacuation alarm is activated. No task involving a confined space may begin until an initial evaluation is made of the hazards including: <ul style="list-style-type: none"> An evaluation of oxygen content, flammable/explosive atmosphere, and potential or known contaminants. An evaluation of potential sources of engulfment, internal configurations or conditions that could trap or asphyxiate entrants, or other recognizable safety or health hazards. ORI personnel will take atmospheric reading using a gas meter outside of the pier, at the midpoint, and at the outfall. ORI personnel will record gas monitor readings on the confined space permit.
Working in Water	<p>Working over water presents the risk of drowning, collision with boats in the harbor, being struck or cut by pier surfaces, and other water based hazards.</p> <ul style="list-style-type: none"> Wear proper PPE at all times. Inspectors in the kayak will be wearing a USCG-approved personal flotation device, hard hat, sun protection, and reef shoes. Gloves are optional but can be worn to prevent injury from touching the pier. Implement a “buddy system”. Be aware of your surroundings, especially underneath the pier, to prevent being stuck or cut by pier surfaces.

- Inspectors in the kayak and on land will have walkie talkies to stay in communication with each other. Inspectors on land will also be in communication with Harbors Control Tower to ensure safety when the Kayak Team travels from each pier.

6.3 Biological Hazards

ORI personnel may encounter biological hazards such as rodents, or insects like mosquitoes, bees, and wasps. Work over water also introduces the risk of exposure to ocean organisms, such as algae, urchins, jellyfish and sharks. Care must be taken to avoid areas known to be inhabited by dangerous organisms. Persons with any insect allergies should inform his or her supervisor prior to work and have the appropriate treatment on hand at all times. Blood borne pathogens are a potential concern during first aid procedures and ORI activities.

Illicit discharges to the stormwater system may exist from overflow or cross contamination of the sanitary sewer system. Personnel should don the proper PPE (e.g. gloves, goggles and aprons) to mitigate this concern.

Biological hazards and preventative measures for this project are identified in Table 6 below.

TABLE 6: BIOLOGICAL HAZARDS AND PREVENTATIVE MEASURES

Hazard	Preventative Measure
Animals	<ul style="list-style-type: none"> • Personnel should be aware of organisms in their area. • Do not touch organisms growing on piers. Pier-based organisms can cut the skin, secrete irritants and toxins and cause other harm to personnel.
Insects	<ul style="list-style-type: none"> • Inform Site Safety Officer of any allergies. • Be aware of surroundings and inspect area around storm drains before approaching.
Illicit Discharge (Sewage)	<ul style="list-style-type: none"> • Wear proper PPE. • Avoid contact with unknown illicit discharge.

7.0 FIELD ACTIVITIES

The field activities associated with this project are specifically laid out in Section 3 of the February 2014, Department of Transportation Harbors Divisions, *Outfall Reconnaissance Inventory and Inspection Program*, which has been attached to this document as Appendix II.

APPENDIX I
NIOSH Chemical Safety Sheets

International Chemical Safety Cards

HYDROGEN SULFIDE

ICSC: 0165



Sulfur hydride

H₂S

Molecular mass: 34.1

(cylinder)

ICSC # 0165

CAS # 7783-06-4

RTECS # [MX1225000](#)

UN # 1053

EC # 016-001-00-4

April 10, 2000 Validated



TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Extremely flammable.	NO open flames, NO sparks, and NO smoking.	Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out; in other cases extinguish with water spray, powder, carbon dioxide.
EXPLOSION	Gas/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding) if in liquid state. Do NOT use compressed air for filling, discharging, or handling.	In case of fire: keep cylinder cool by spraying with water.
EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
• INHALATION	Headache. Dizziness. Cough. Sore throat. Nausea. Laboured breathing. Unconsciousness. Symptoms may be delayed (see Notes).	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration may be needed. No mouth-to-mouth artificial respiration. Refer for medical attention.
• SKIN	ON CONTACT WITH LIQUID: FROSTBITE.	Cold-insulating gloves.	ON FROSTBITE: rinse with plenty of water, do NOT remove clothes. Refer for medical attention.
	Redness. Pain. Severe deep	Safety goggles, or eye protection	First rinse with plenty of water for

• EYES	burns.	in combination with breathing protection.	several minutes (remove contact lenses if easily possible), then take to a doctor.
• INGESTION		Do not eat, drink, or smoke during work.	

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area! Consult an expert! Remove all ignition sources. Ventilation. Remove gas with fine water spray. Personal protection: gas-tight chemical protection suit including self-contained breathing apparatus.	Fireproof. Separated from strong oxidants. Cool. Keep in a well-ventilated room. Install continuous monitoring system with alarm.	F+ symbol T+ symbol N symbol R: 12-26-50 S: 1/2-9-16-36-38-45-61 UN Hazard Class: 2.3 UN Subsidiary Risks: 2.1

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0165

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

HYDROGEN SULFIDE

ICSC: 0165

I	PHYSICAL STATE; APPEARANCE: COLOURLESS COMPRESSED LIQUEFIED GAS, WITH CHARACTERISTIC ODOUR OF ROTTEN EGGS.	ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation.
	M	PHYSICAL DANGERS: The gas is heavier than air and may travel along the ground; distant ignition possible. As a result of flow, agitation, etc., electrostatic charges can be generated.
P	CHEMICAL DANGERS: Heating may cause violent combustion or explosion. The substance decomposes on burning producing toxic gases (sulfur oxides). Reacts violently with strong oxidants, causing fire and explosion hazard. Attacks many metals and some plastics.	INHALATION RISK: A harmful concentration of this gas in the air will be reached very quickly on loss of containment.
O		EFFECTS OF SHORT-TERM EXPOSURE: The substance is irritating to the eyes and the respiratory tract. The substance may cause effects on the central nervous system. Exposure may result in unconsciousness. Exposure may result in death. Inhalation of gas may cause lung oedema (see Notes). The effects may be delayed. Medical observation is indicated. Rapid evaporation of the liquid may cause frostbite.
R		EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
T	OCCUPATIONAL EXPOSURE LIMITS: TLV: 10 ppm as TWA; 15 ppm as STEL; (ACGIH 2004). MAK: 5 ppm, 7.1 mg/m ³ ; Peak limitation category: I(2); Pregnancy risk group: C; (DFG 2006). OSHA PEL: C 20 ppm 50 ppm 10-minute maximum peak NIOSH REL: C 10 ppm (15 mg/m ³) 10-minute	
A		
T		
A		

	NIOSH IDLH: 100 ppm See: 7783064			
PHYSICAL PROPERTIES	Boiling point: -60°C Melting point: -85°C Solubility in water, g/100 ml at 20°C: 0.5 Relative vapour density (air = 1): 1.19	Flash point: Flammable Gas Auto-ignition temperature: 260°C Explosive limits, vol% in air: 4.3-46		
ENVIRONMENTAL DATA	The substance is very toxic to aquatic organisms.			
NOTES				
<p>The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available. The substance blocks the sense of smell. The odour warning when the exposure limit value is exceeded is insufficient. Card has been partly updated in October 2004: see sections Occupational Exposure Limits, EU classification, Emergency Response. Card has been partly updated in October 2006: see sections Occupational Exposure Limits.</p> <p style="text-align: right;">Transport Emergency Card: TEC (R)-20G2TF or 20S1053</p> <p style="text-align: right;">NFPA Code: H4; F4; R0;</p>				
ADDITIONAL INFORMATION				
<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>				
ICSC: 0165	HYDROGEN SULFIDE			
(C) IPCS, CEC, 1994				
IMPORTANT LEGAL NOTICE:	<p>Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.</p>			

International Chemical Safety Cards

CARBON MONOXIDE

ICSC: 0023



Carbon oxide
Carbonic oxide
CO

Molecular mass: 28.0
(cylinder)

ICSC # 0023
CAS # 630-08-0
RTECS # [FG3500000](#)
UN # 1016
EC # 006-001-00-2
April 19, 2007 Validated



TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Extremely flammable. Heating will cause rise in pressure with risk of bursting.	NO open flames, NO sparks, and NO smoking.	Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out; in other cases extinguish with carbon dioxide, water spray, powder.
EXPLOSION	Gas/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Use non-sparking handtools.	In case of fire: keep cylinder cool by spraying with water. Combat fire from a sheltered position.
EXPOSURE		A VOID EXPOSURE OF (PREGNANT) WOMEN!	IN ALL CASES CONSULT A DOCTOR!
• INHALATION	Headache. Confusion. Dizziness. Nausea. Weakness. Unconsciousness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention. See Notes.
• SKIN			
• EYES			
• INGESTION			
SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING	
Evacuate danger area! Remove all ignition sources. Consult an expert! Personal protection: self-contained breathing apparatus. Ventilation.	Fireproof. Cool. Keep in a well-ventilated room.	Note: E F+ symbol T symbol R: 12-23-48/23-61	

S: 53-45
 UN Hazard Class: 2.3
 UN Subsidiary Risks: 2.1
 Signal: Danger
 Flame-Cylinder-Skull-Health haz
 Extremely flammable gas
 Contains gas under pressure; may explode if heated
 Fatal if inhaled
 May damage fertility or the unborn child if inhaled
 Causes damage to blood if inhaled
 Causes damage to blood and central nervous system through prolonged or repeated exposure if inhaled

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0023

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

CARBON MONOXIDE

ICSC: 0023

<p>I M P O R T A N T D A T A</p>	<p>PHYSICAL STATE; APPEARANCE: ODOURLESS, TASTELESS, COLOURLESS COMPRESSED GAS.</p> <p>PHYSICAL DANGERS: The gas mixes well with air, explosive mixtures are easily formed. The gas penetrates easily through walls and ceilings.</p> <p>CHEMICAL DANGERS: May react vigorously with oxygen, acetylene, chlorine, fluorine, nitrous oxide.</p> <p>OCCUPATIONAL EXPOSURE LIMITS: TLV: 25 ppm as TWA BEI issued (ACGIH 2006). MAK: 30 ppm 35 mg/m³ Peak limitation category: II(1); Pregnancy risk group: B; BAT issued; (DFG 2008). OSHA PEL: TWA 50 ppm (55 mg/m³) NIOSH REL: TWA 35 ppm (40 mg/m³) C 200 ppm (229 mg/m³) NIOSH IDLH: 1200 ppm See: 630080</p>	<p>ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation.</p> <p>INHALATION RISK: A harmful concentration of this gas in the air will be reached very quickly on loss of containment.</p> <p>EFFECTS OF SHORT-TERM EXPOSURE: The substance may cause effects on the blood, resulting in carboxyhaemoglobinemia and cardiac disorders. Exposure at high levels may result in death. Medical observation is indicated.</p> <p>EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: The substance may have effects on the cardiovascular system and central nervous system. May cause toxicity to human reproduction or development.</p>
<p>PHYSICAL PROPERTIES</p>	<p>Boiling point: -191°C Melting point: -205°C Solubility in water, ml/100 ml at 20°C: 2.3 Relative vapour density (air = 1): 0.97</p>	<p>Flash point: Flammable Gas Auto-ignition temperature: 605°C Explosive limits, vol% in air: 12.5-74.2</p>

ENVIRONMENTAL DATA	
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NOTES

Carbon monoxide is a product of incomplete combustion of coal, oil, wood. It is present in vehicle exhaust and tobacco smoke. Depending on the degree of exposure, periodic medical examination is suggested. No odour warning if toxic concentrations are present. Specific treatment is necessary in case of poisoning with this substance; the appropriate means with instructions must be available.

Transport Emergency Card: TEC (R)-20S1016 or 20G1TF

NFPA Code: H3; F4; R0

Card has been partially updated in November 2008: see Occupational Exposure Limits.

ADDITIONAL INFORMATION

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ICSC: 0023	(C) IPCS, CEC, 1994	CARBON MONOXIDE
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International Chemical Safety Cards

SULFURIC ACID

ICSC: 0362



Sulfuric acid 100%
Oil of vitriol
 H_2SO_4
Molecular mass: 98.1

ICSC # 0362

CAS # 7664-93-9

RTECS # [WS5600000](#)

UN # 1830

EC # 016-020-00-8

February 10, 2000 Validated



TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Many reactions may cause fire or explosion. Gives off irritating or toxic fumes (or gases) in a fire.	NO contact with flammable substances. NO contact with combustibles .	NO water. In case of fire in the surroundings: powder, foam, carbon dioxide
EXPLOSION	Risk of fire and explosion on contact with base(s) , combustible substances , oxidants , reducing agents or water .		In case of fire: keep drums, etc., cool by spraying with water but NO direct contact with water.
EXPOSURE		PREVENT GENERATION OF MISTS! AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Corrosive. Burning sensation. Sore throat. Cough. Laboured breathing. Shortness of breath. Symptoms may be delayed (see Notes).	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.
•SKIN	Corrosive. Redness. Pain. Blisters. Serious skin burns.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
•EYES	Corrosive. Redness. Pain. Severe deep burns.	Face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
	Corrosive. Abdominal pain.	Do not eat, drink, or smoke	Rinse mouth. Do NOT induce

• INGESTION	Burning sensation. Shock or collapse.	during work.	vomiting. Refer for medical attention.
SPILLAGE DISPOSAL	STORAGE		PACKAGING & LABELLING
Consult an expert! Evacuate danger area! Do NOT absorb in saw-dust or other combustible absorbents. Personal protection: complete protective clothing including self-contained breathing apparatus. Do NOT let this chemical enter the environment.	Separated from combustible and reducing substances, strong oxidants, strong bases, food and feedstuffs, incompatible materials. See Chemical Dangers. May be stored in stainless steel containers. Store in an area having corrosion resistant concrete floor.		Unbreakable packaging; put breakable packaging into closed unbreakable container. Do not transport with food and feedstuffs. Note: B C symbol R: 35 S: 1/2-26-30-45 UN Hazard Class: 8 UN Packing Group: II
SEE IMPORTANT INFORMATION ON BACK			
ICSC: 0362	Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.		

International Chemical Safety Cards

SULFURIC ACID

ICSC: 0362

I M P O R T A N T D A T A	<p>PHYSICAL STATE; APPEARANCE: COLOURLESS, OILY, HYGROSCOPIC LIQUID, WITH NO ODOUR.</p> <p>PHYSICAL DANGERS:</p> <p>CHEMICAL DANGERS: The substance is a strong oxidant and reacts violently with combustible and reducing materials. The substance is a strong acid, it reacts violently with bases and is corrosive to most common metals forming a flammable/explosive gas (hydrogen - see ICSC 0001). Reacts violently with water and organic materials with evolution of heat (see Notes). Upon heating, irritating or toxic fumes (or gases) (sulfur oxides) are formed.</p> <p>OCCUPATIONAL EXPOSURE LIMITS: TLV: 0.2 mg/m³ Thoracic fraction A2 (suspected human carcinogen); (sulfuric acid contained in strong inorganic acid mists) (ACGIH 2005). MAK: (Inhalable fraction) 0.1 mg/m³; Peak limitation category: I(1); Carcinogen category: 4; Pregnancy risk group: C; (DFG 2004). OSHA PEL: TWA 1 mg/m³</p>	<p>ROUTES OF EXPOSURE: The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.</p> <p>INHALATION RISK: Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly on spraying.</p> <p>EFFECTS OF SHORT-TERM EXPOSURE: Corrosive. The substance is very corrosive to the eyes, the skin and the respiratory tract. Corrosive on ingestion. Inhalation of an aerosol of this substance may cause lung oedema (see Notes).</p> <p>EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: Lungs may be affected by repeated or prolonged exposure to an aerosol of this substance. Risk of tooth erosion upon repeated or prolonged exposure to an aerosol of this substance. Strong inorganic acid mists containing this substance are carcinogenic to humans.</p>
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	NIOSH REL: TWA 1 mg/m ³ NIOSH IDLH: 15 mg/m ³ See: 7664939	
PHYSICAL PROPERTIES	Boiling point (decomposes): 340°C Melting point: 10°C Relative density (water = 1): 1.8 Solubility in water: miscible	Vapour pressure, kPa at 146°C: 0.13 Relative vapour density (air = 1): 3.4
ENVIRONMENTAL DATA	The substance is harmful to aquatic organisms.	
NOTES		
<p>The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. NEVER pour water into this substance; when dissolving or diluting always add it slowly to the water. Other UN numbers: UN1831 Sulfuric acid, fuming, hazard class 8, subsidiary hazard 6.1, pack group I; UN1832 Sulfuric acid, spent, Hazard class 8, Pack group II. Card has been partly updated in October 2005. See sections Occupational Exposure Limits, Emergency Response.</p> <p style="text-align: right;">Transport Emergency Card: TEC (R)-80S1830 or 80GC1-II+III</p> <p style="text-align: right;">NFPA Code: H 3; F 0; R 2; W</p> <p style="text-align: right;">Card has been partially updated in January 2008: see Fire fighting.</p>		
ADDITIONAL INFORMATION		
		
ICSC: 0362	SULFURIC ACID	
(C) IPCS, CEC, 1994		
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APPENDIX II
Department of Transportation – Harbors Division’s
Outfall Reconnaissance Inventory and Inspection Program
(Section 3 Excerpt)

3.0 ORIIP INSPECTIONS

The following section provides procedures and reference information planning, scheduling and safely performing dry and wet weather outfall inspections at the applicable Harbors. Harbors Environmental Section will conduct dry and wet weather observations of outfalls, as described below. A flowchart presenting the ORIIP process is attached as Appendix E.

3.1 PREPARATORY PROCEDURES

The following procedure is to be followed for gaining access for dry weather inspections at Honolulu and Kalaeloa Barbers Point Harbor. Harbors Environmental Section will schedule the outfall inspection based on the environmental conditions required. Harbors Environmental Section will confirm that all field personnel have access to the Harbor, and have applied and been approved for a Transportation Worker Identification Credential (TWIC) card or a Common Access Card (CAC). Access to these restricted areas is enforced by Department of Transportation (DOT) Harbors, Department of Homeland Security, and the United States Coast Guard. Field personnel should have documentation and identification available upon request while in these restricted areas. It is common for the Coast Guard to approach personnel and ask questions about field activities. Large commercial shipping vessels and tug boat operators often notify the Harbors Traffic Control about ORIIP personnel's presence in the harbor.

Harbors Environmental Section will verify that there are no conflicts with the various commercial fueling activities in the harbor. They will also notify the Harbors Traffic Control of when the ORIIP activities will be implemented.

3.1.1 PREPARING FIELD EQUIPMENT

The challenges presented by the tidal fluctuation can complicate inspection scheduling and add another dimension to jobsite safety. For this reason, field personnel need to ensure that all of the equipment that will be used during ORIIP activities has been inspected for defects and is in full working order prior to field work. The following sections describe the equipment and resources required to complete the ORIIP.

3.1.2 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) is essential for the safe completion of ORIIP. Appendix D attached to this ORIIP contains the equipment required to safely complete field activities. Field personnel shall familiarize themselves with the proper operation and maintenance of all equipment needed to complete the ORIIP.

3.1.3 INSPECTION EQUIPMENT

Field activities will require a variety of equipment. Wet and dry weather require different equipment and different levels of effort. Appendix A attached to this ORIIP contains the equipment required to complete field activities.

3.2 FIELD LOGISTICS

This section describes the procedures that field personnel should observe during field activities. All inspections should follow these procedures. Unexpected situations may arise in the harbor due to weather, other vessel movements, etc. that require deviations from procedures. In such cases, the Site Manager will assess the situation and use discretion with safety of all field personnel in mind. Communication should be maintained between crew members and the Harbors Traffic Control (during activities in Harbor waters).

3.2.1 PERSONNEL

All operations and personnel having the potential for exposure to site hazards are subject to the requirements of this ORIIP and the Site Specific Health and Safety Plan (SSHSP). The Site Manager will be identified prior to mobilization and will be the highest ranking personnel in the field. The Site Manager will serve as the Site Safety Officer (SSO) for the activities and will be responsible for implementation of the ORIIP Plan and oversight of the field personnel. The Site Manager will be selected by Harbors Environmental Section prior to mobilization.

The Site Manager working under the task is responsible for the following:

- 1) Providing field personnel with appropriate training, medical certification, and ensuring that personnel have read, understand, and will comply with this ORIIP;
- 2) Providing equipment that is safe for operations and free from any obvious hazards;
- 3) Providing and documenting inspections of equipment and tasks, as necessary, to comply with applicable regulations;
- 4) Providing documentation that field personnel have appropriate training and medical certification and ensuring that personnel have read, understand, and will comply with this ORIIP;
- 5) Overseeing field personnel with respect to ensuring a safe work environment and that work practices are consistent with the provisions of this ORIIP, the Occupational Safety and Health Administration (OSHA), and standard industry practices; and
- 6) Conducting an initial project briefing and daily “tailgate” safety meetings.

Personnel will pre-notify impacted parties, mobilize the required equipment, and conduct the inspections. ORIIP personnel will need to coordinate the loading and transportation of the kayak and other gear to one of the boat launch locations.

Inspections performed from the water must be supported by an on-shore crew. All movements through the harbor waters will be coordinated with the Harbors Traffic Control. Communication between the kayak and off-shore crews shall be maintained whenever possible to ensure the safety of all personnel. Kayak personnel will inspect each outfall and complete the ORIIP Form for each location, as described by Section 3.3. As described in more detail in Section 3.3.2, and the Enforcement Response Plan, upstream nodes will be observed by the on-shore crew when an illicit discharge is suspected and personnel will use their best efforts to identify the source and contact the responsible party and/or the appropriate regulatory agencies. Harbors Environmental Section will follow up where necessary, as described by the Enforcement Response Plan.

3.2.2 HARBORS TRAFFIC CONTROL COMMUNICATION

The ORIIP Site Manager shall coordinate with DOT Harbors District Office to notify the Harbors Traffic Control prior to inspections and any movement in the Harbor waters. Citizens' Band (CB) radios are used by field personnel to communicate with the Harbors Traffic Control (Channel 12). Specific vernacular are used during these communications. ORIIP personnel will notify the Harbors Traffic Control of their plans to change location and to request a no wake zone. Wakes can be a danger to inspection personnel.

Typical communications about a change of location in the harbors are as follows:

ORIIP personnel: *"Aloha Tower, this is Harbors Engineering."*

Harbors Traffic Control: *"Harbors Engineering, this is Aloha Tower."*

ORIIP personnel: *"Aloha Tower, Harbors Engineering would like to request to move from current location (e.g., Pier #51) to future location (e.g., Pier #38).*

Harbors Traffic Control: *Their response varies depending on other vessels' movements (i.e., "Okay, Harbors Engineering, proceed to Pier #38).*

3.2.3 MOBILIZATION

Mobilizing the equipment to the various sites around the harbor will require personnel with a working knowledge of pier locations and restricted area locations. Personnel will have TWIC or CAC cards available and all required PPE and equipment. Dry weather inspections will require a much higher level of effort.

Boat launch locations for Honolulu Harbor are located at Piers 5, 23, 36, and at the Sand Island launch ramp adjacent to the Hawaiian Marine Educational and Training Center. Honolulu Harbor locations are located near Revetments P05-01, P23-03, and P36-01 (see Figure 1 for details). If necessary, Kalaeloa boat launch locations are located at the Kalaeloa Barbers Point Harbor Revetments BP-01 and BP-24 (see Figure 2 for details).

3.3 DRY WEATHER OUTFALL INSPECTIONS

Dry weather inspections are conducted for illicit discharge detection and assessment of the outfall structures. For the ORIIP, dry weather is considered when there is less than 0.1" of rain during a 72 hour period preceding an inspection. Dry weather inspections are to be conducted annually on outfalls with an overall outfall characterization of potential, suspect or obvious as determined by the previous year's inspection findings. All outfalls (including those with an overall outfall characterization of unlikely, see section 6 of the ORIIP form in Appendix B) are to be inspected every 2 years.

Dry weather inspections should coincide with low-tide conditions to increase probability that the outfall will be exposed. Field events should be scheduled such that field personnel can safely enter areas beneath the piers, inspect outfall conditions, and exit said areas during tidal periods corresponding to water levels



below 1-foot above mean lower low water (mllw). Areas that have been determined to be too dangerous to enter have been identified on the maps provided in Figures 1 and 2. Observations of these outfalls must be conducted at an upstream node or in way that does not require personnel to enter beneath the pier. At no time, regardless of tidal conditions, will personnel be allowed to enter under the pier in these areas.

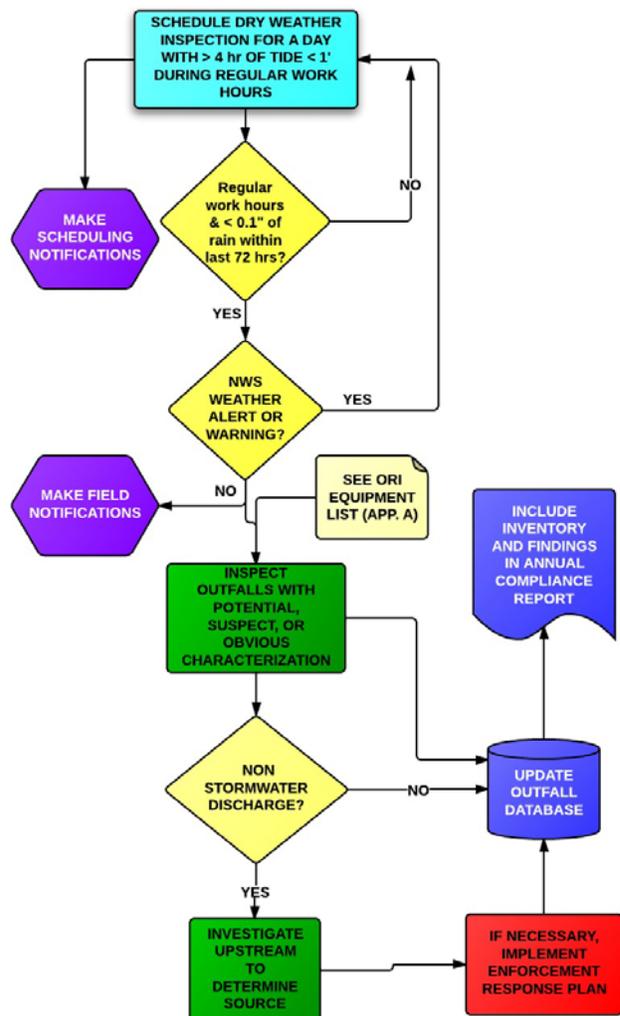
In addition to the identified areas, water levels higher than 1-foot mllw are considered too dangerous for personnel to be under any piers. Schedules should indicate time frames where inspections of outfalls beneath the piers can take place and field crews should plan accordingly to efficiently complete the ORIIP. Equipment should be inspected prior to field activities to maximize operations during extreme low tide.

Inspections cannot be scheduled in areas where vessels are being actively fueled. DOT Harbors District Office needs to be contacted once a draft schedule has been produced (based on tidal considerations), so fueling schedules can be reconciled with ORIIP activities.

Inspections should all be accomplished during daylight hours. Other harbor activity can affect the schedule, including loading and unloading of cargo ships, storms, high surf, etc. These and other factors all need to be considered during the scheduling production.

Field personnel need to be able to recognize scheduling conditions that could pose a safety threat during inspections. ORIIP activities should be postponed if any situation arises that poses an unacceptable safety threat to field personnel (e.g., tsunami warning, hurricane warning, etc.). Field personnel should make real time decisions about the conditions in the water, to ensure timely, but safe inspections. The Harbors Environmental Section will be responsible for postponing and rescheduling any ORIIP inspection.

Outfall inspections are conducted using the ORIIP Form, attached as Appendix B. The form has seven sections that cover both wet and dry inspection scenarios. Field personnel will use the form to describe flow conditions using physical factors like odor, turbidity, color, and the presence of floatables or sheen in order to recognize illicit discharges. Information required to complete the ORIIP Form includes background data, outfall description, quantitative flow



characterization, and physical indicators of flowing and non-flowing outfalls. The current list of outfalls is attached as Appendix C.

3.3.1 OBSERVATION OF FLOWS

Potential problems are indicated by outfalls that are flowing in dry weather and/or foul odors or discolored water in or around the outfall pipe. Common illicit discharges observed during dry weather include discharges of wash water, process water, sewage, contaminated condensate runoff, or other forms of waste. Not all non-stormwater discharges are illicit. For example, non-contaminated landscape irrigation runoff or air conditioner condensate discharges are allowable non-stormwater discharges. As described below, any dry weather discharge should be documented.

When flows are observed, ORIIP personnel will attempt to first determine the source of the flow, while considering groundwater or tidal influence. Field crews will photograph and/or video the discharge, estimate the flow volume, and, if necessary, collect a sample. Field crews will document the source after conducting a quick visual inspection of the surrounding area. If the source cannot be easily observed, field crews should follow the procedure described in Section 3.3.2. If further investigation is needed, Harbors Environmental Section will follow up, identify the source and contact the responsible party and the appropriate regulatory agencies where necessary, as described by the Enforcement Response Plan.

3.3.2 SOURCE IDENTIFICATION

This section outlines the basic tools to be used to trace the source of a suspected illicit discharge. Source tracing begins when an unknown dry weather flow is identified through the ORIIP, field assessment/testing, or a complaint call. When the source of the non-stormwater discharge is not known, one of two primary methods will be used to locate the source of an illicit discharge: Method A – Drainage Area Investigations or Method B – Storm Drain Network Investigations. The method used will depend on the type of information collected or reported, level of understanding of the drainage network, and existing knowledge of operations and activities on the surrounding properties.

Method A – Drainage Area Investigations

The source of some illegal discharges can be determined through a survey or analysis of the drainage area of the problem outfall. Drainage area investigations are particularly useful when the discharge observed at the outfall has a distinct or unique characteristic that can allow field crews to quickly determine the type of activity or non-point source that is generating the discharge. One-time illegal discharges (such as a surface spill or intentional dumping into the storm drain system) are usually best investigated using Method A, given the short-term nature of the discharge.

Drainage area investigations should begin with a discussion between the field crews, inspectors, engineers, and other knowledgeable staff to identify the type of site most likely to produce the observed discharge. The following table shows some of the activities or land uses most likely associated with specific discharge problems.

COMMON DISCHARGES AND POTENTIAL SOURCES	OBSERVED DISCHARGE POTENTIAL CAUSES
Sediment	Construction activity without proper erosion and sediment controls Outdoor work areas or material storage areas
Oil	Fueling operations Vehicle or machinery maintenance activities
Sudsy discharge	Power washing of buildings Vehicle or equipment washing operations Mobile cleaning crew dumping Laundry or Cleaner greywater discharge
Grease	Restaurant sink drain connection to stormwater system
Sewage	Failing or leaking septic systems

Staff will make a list of likely discharge sources and then field crews will conduct a windshield survey of the drainage area to confirm and identify potential sources of the discharge. Once potential discharge sites are identified, staff will conduct individual site inspections to locate the specific source of the illegal discharge. In some cases, dye testing may be needed to confirm that a suspected activity is actually draining into the storm drain network. All drainage area investigations will be documented on the ORIIP Form in Appendix B.

Method B – Storm Drain Network Investigations

The source of some illicit connections or discharges can be located by systematically isolating the area from which the polluted discharge originates. This method involves progressive investigation at manholes in the storm drain network to narrow down the location where the illegal discharge is entering the drainage system. Field crews should work progressively upstream from the outfall and inspect manholes until indicators reveal the discharge is no longer present. Manhole observations can be time consuming, but they are generally a necessary step before conducting other tests.

Storm drain network investigations include the following steps: 1. Consult the drainage system map and identify the major branches. If the drainage map is incomplete, sketches of the system shall be made and the system shall be identified for adding to DOT Harbor’s drainage system map. 2. Starting from the outfall, observe the next upstream manhole or junction to see if there is evidence of polluted discharge. As with the ORIIP inspections, field crews are looking for the presence of flow during dry weather, foul odors, colors or stained deposits, oily sheen, floatable

materials, and/or other unusual observations. 3. Repeat observations at each upstream manhole or junction until a junction is found with no evidence of discharge; the discharge source is likely located between the junction with no evidence of discharge and the next downstream junction. 4. Work downstream from the “clean” manhole or junction to isolate the location where the polluted discharge is entering the storm drain system. 5. Document all findings.

If the flow is illicit and originates within the Harbors property DOT Harbors shall ensure the connection is disconnected or flow from the source is identified. If the flow originates outside of DOT Harbors’ or DOT’s property, DOT Harbors will inform the adjoining jurisdiction or property owner in writing that the flow is entering DOT Harbors small Municipal Separate Storm Sewer System (MS4) and copy the Hawaii Department of Health (HDOH).

When visual inspections are not enough to isolate the source of the illegal discharge, a number of additional field tests can be performed. These include: Dye testing, Video Testing/Camera-ing/TVing, smoke testing. When a dry weather flow is observed and the source of the flow is not determined via Method A or B above, DOT Harbors will pursue alternative methods necessary to identify the source of the dry weather flow within 90 days.

Forms and information will be included in the Annual Compliance Report as well as reviewed prior to the following ORIIP event. Any illicit discharges which are determined to be coming from a tenant or construction site will initiate a re-evaluation of the tenant or construction site in accordance with the Tenant Inspection Manual or the Construction Site Runoff Control Program.

3.4 WET WEATHER OUTFALL INSPECTIONS

The goal for wet weather inspections is to assess HDOT Harbors’ Best Management Practice (BMP) performance. Wet weather inspections are only conducted during regular business hours when rainfall greater than 0.1” per hour is recorded. Personnel must field verify that adequate precipitation has occurred to initiate sufficient flow through the drainage system to make useful observations.

The weather station located at Honolulu International Airport (Station ID 91182, PHNL) as reported by the National Oceanic and Atmospheric Administration (NOAA) is in proximity of Honolulu Harbor but could potentially not be representative of the actual rainfall. Field observations must be conducted to support PHNL rainfall data.

The weather station located at Kalaeloa Airport (PHJR) as reported by NOAA is in proximity of Kalaeloa Barbers Point Harbor but could potentially not be representative of the actual rainfall. Field observations must be conducted to support PHJR rainfall data.

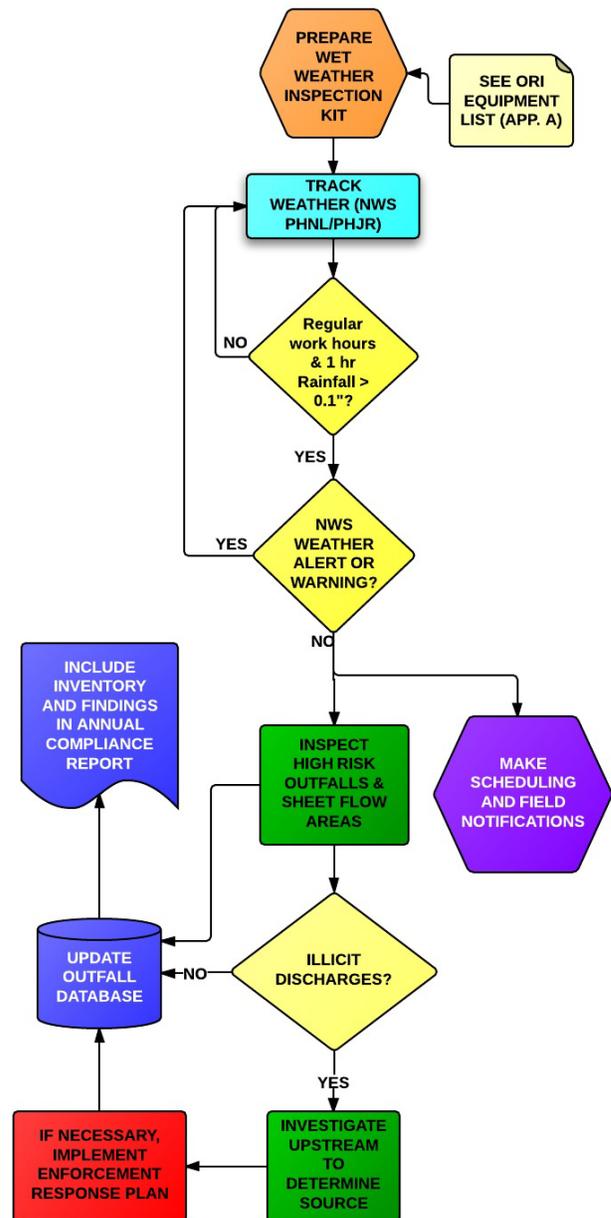
Harbors Environmental Section will conduct wet weather ORIIP inspections of the identified high risk outfalls each year, provided appropriate wet weather events occur during regular business hours. High risk outfalls are those associated with drainage from high risk tenants or those that drain from areas under construction.

Wet weather inspections must be completed from the pier side. Due to high hazard safety conditions under the piers, no personnel shall attempt to conduct under pier inspections during wet weather. These inspections need to be completed during rain events, so scheduling the event ahead of time is not practical. Inspection personnel need to be flexible based on weather conditions.

Inspections will not be conducted at night, on weekends, or on holidays. Wet weather inspections will not be conducted during emergency situations such as hurricanes, tsunamis, or during severe storm conditions that may cause risk to field personnel.

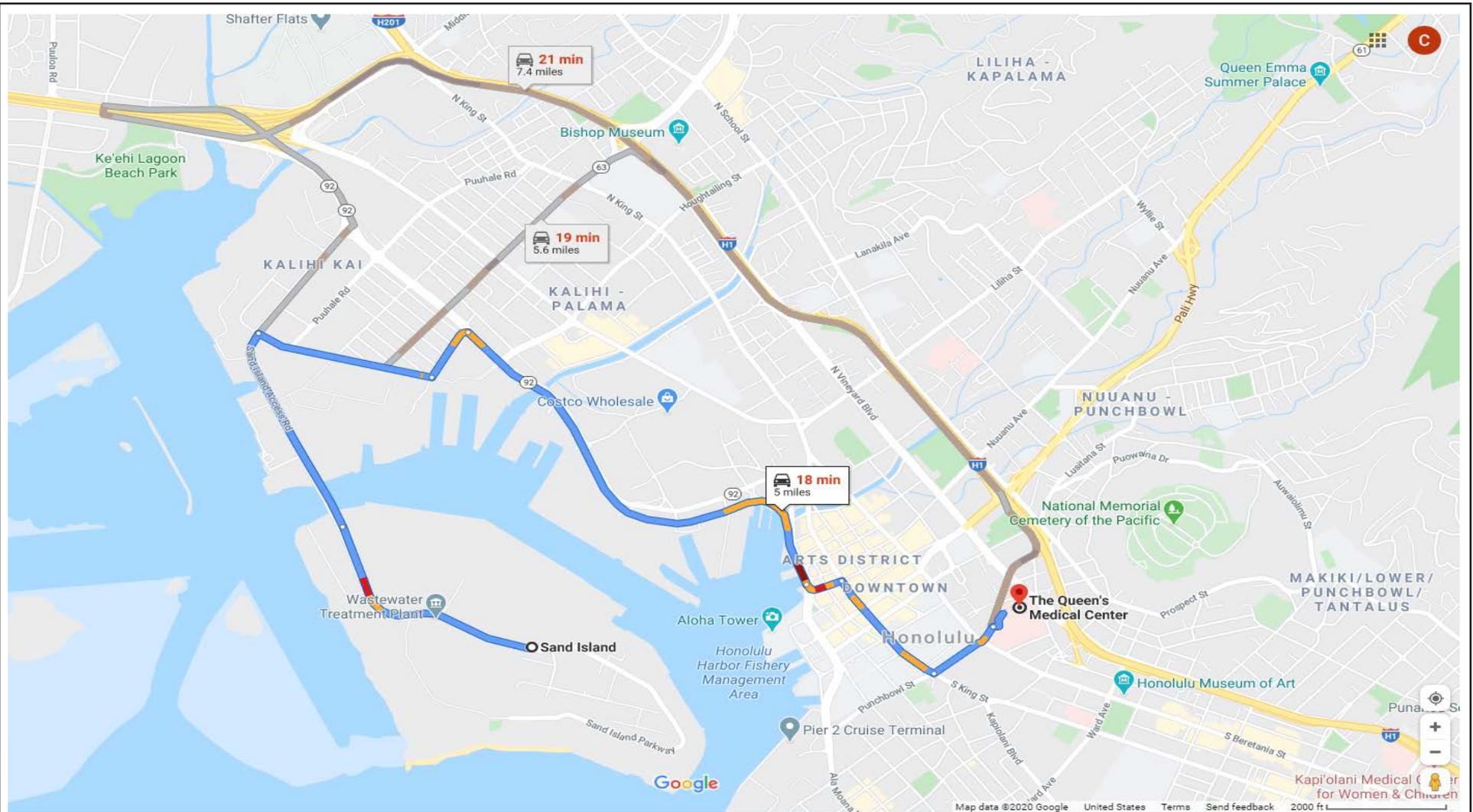
During a rain event, field personnel will notify impacted parties, mobilize required equipment, and conduct a wet weather inspection using the ORIIP Form (Appendix B). If criteria such as rainfall intensity, duration, and occurrence during regular work hours are met, Harbors Environmental Section will conduct wet weather inspections at the identified high risk outfalls each year.

Wet weather observation of sheet flows over the pier edge and from undeveloped areas will also be conducted. Field personnel will be standing on the pier or nearest landside location. Upstream nodes will be observed if necessary. The annual wet weather inspection shall include visual inspection of color, odor, clarity, solids, foam, oil sheen and other signs of non-stormwater discharges. Photo and/or video documentation shall be collected for each outfall. If an illicit discharge is observed, investigative techniques detailed in Section 3.3.2 will be used to track down and eliminate the source.



APPENDIX III
Tailgate Safety Meeting Record Form

APPENDIX IV
Medical Facility Routes



Medical Facility Route:

1. Head Southwest toward Sand Island Parkway
2. Continue on Sand Island Parkway to Auiki St.
3. Continue on Auiki St. to HI-92 E
4. Turn right onto HI-92 E then use the left 2 lanes to turn slightly left onto Bethel St.
5. Turn right onto S King St.
6. Turn left onto Punchbowl St (**Destination will be on the right**)



Project No. 13-6009

March 2020

Figure 1 - Medical Facility Route from Honolulu Harbor
 Health & Safety Plan
 Department of Transportation, Harbors Division

ORIIP APPENDIX G

ORIIP PROCESS FLOWCHART

ORI Process Flow Chart

