

Section E

Pollution Prevention and Good Housekeeping Program

Stormwater Management Plan
Honolulu Harbor
and Kalaheo Barbers Point Harbor



Prepared for:
State of Hawaii
Department of Transportation
Harbors Division

This page intentionally left blank

SECTION E TABLE OF CONTENTS

1.0	STORM SEWER SYSTEM OPERATION AND MAINTENANCE PROGRAM	1-1
2.0	MAINTENANCE AND HOUSEKEEPING PRACTICES.....	2-1
2.1	SWEEPING COMMON AREAS AND SELECT TENANT FACILITIES	2-1
2.2	WASTE COLLECTION.....	2-2
3.0	REVIEW OF WASH AREAS, DRY WELLS, AND INFILTRATION SINKS.....	3-1
3.1	WASH AREAS.....	3-1
3.2	DRY WELLS AND INFILTRATION SINKS.....	3-1
4.0	TENANT EDUCATION AND EMPLOYEE TRAINING	4-1

TABLES

Table 2-1	Grounds Maintenance Sweeping Schedule	2-2
-----------	---	-----

APPENDICES

Attachment 1 – Storm Sewer System Operation & Maintenance Program

This page intentionally left blank

1.0 STORM SEWER SYSTEM OPERATION AND MAINTENANCE PROGRAM

Harbors has developed an SSS O&M Program that covers inspection and cleaning procedures for the small MS4s at Honolulu Harbor and KBPH. The SSS O&M Program is included as Attachment 1 and is summarized in this section.

Following the initial cleaning back in 2015, HAR-O has been conducting recurring cleaning of all inlets, pipes (as necessary), drainage features, and outfalls (as necessary) by removing accumulated debris, trash, and sediment, at Honolulu Harbor and KBPH since.

The goal of the program is to identify structural defects, trash, debris, and other issues that have the potential to limit the flow of stormwater. Harbors will inspect drains concurrently with cleaning activities and track results of the inspections in an AMS. A storm drain is determined in need of cleaning when a visual inspection or “stick test” determines accumulated soil, wet organic material, and debris have accumulated to certain threshold measurements. If debris has accumulated beyond 6 inches but less than 12 inches, then the drain will be cleaned within 30 working days. If debris has accumulated beyond 12 inches, then the drain will be cleaned within 10 working days.

Harbors identifies “hot spots” where there is a greater risk for potential discharges of pollutants to the storm sewer system. In terms of small MS4 O&M, a hot spot is defined as: *a storm drain where more than 12 inches of accumulated soil, wet organic material, or debris were observed within two consecutive inspection cycles.*

Appropriate BMPs, including more frequent cleaning and maintenance to minimize potential discharges of pollutants will be implemented at or near hot spot locations. If an illicit discharge is observed due to accumulated sediment, trash or other pollutant related to drainage system cleaning, response will be conducted as detailed in the SSS O&M Program document.

2.0 MAINTENANCE AND HOUSEKEEPING PRACTICES

Maintenance is ongoing at both tenant and Harbors facilities. The following maintenance activities will be conducted:

- ✓ Emptying dumpsters, removing and disposing of discarded objects, machinery or equipment;
- ✓ Prompt repair/replacement of malfunctioning dumpsters;
- ✓ General maintenance and repair of public facilities will be conducted in-house, while a contractor will be used for most large-scale projects;
- ✓ Personnel will use fertilizer or herbicides following the manufacturer's instructions and in a manner that eliminates potential for runoff into the gutters, or storm drain system;
- ✓ Pier apron and common area are swept regular, and their cleanliness is assessed for debris and staining, and responsible parties will be required to keep these areas clean;
- ✓ Tenants having rail tracks are required to conduct routine maintaining and cleaning;
- ✓ Operators with leaking vehicles are required to park vehicles and equipment indoors/under cover, provide drip pans and repair leaks;
- ✓ Vehicle and equipment washing under Harbors jurisdiction is generally prohibited unless performed in an approved wash facility and properly contained; and
- ✓ Clean up stains, spills, oil spots using dry cleanup methods.

2.1 SWEEPING COMMON AREAS AND SELECT TENANT FACILITIES

Sweeping prevents microscopic pollutants from entering the harbors by removing them before they flow into the storm drainage system. Regular sweeping will be performed by HAR-OC. HAR-OC has four sweepers dedicated to Honolulu Harbor and KBPH. Sweeping will included all common areas and certain areas on tenant facilities where cleaning is requested. Sweeping will be performed according to the following schedule presented in Table 2-1.

Table 2-1 Grounds Maintenance Sweeping Schedule

Location	Frequency	Duration (Hours)
Young Brothers	M, Th	2.5
Matson	Tu, F	2.75
Horizon Lines Terminal	W	3
Aloha Cargo Pier 1	Once per month	2.5
Piers 10, 11	M, F	1
Sand Island Base Yard	T, W	1
Fishing Village Parking Lot and Road Ways, Pier 35	Once per week	1.5
Piers 30, 31, 32 and Shed Areas	Twice per week	1.5
Piers 27, 28, 29	Twice per week	1.5
Piers 18, 19, 23, 24	Twice per week	1.5
Channel Street, Pier 2 Outside and Inside of Shed Areas	M, F	3
Pier 1 Entrance	Twice per week	1
Piers 1, 2 Common Roadways	Twice per week	1
KBPH Common Roadways & Apron	Twice per month	4

All waste from Honolulu Harbor and KBPH will be combined and disposed of through the appropriate disposal contractors.

2.2 WASTE COLLECTION

HAR-OC picks up and disposes of other potential pollutants left in drop off areas or discarded illegally by the public in order to minimize and/or prevent pollution to the environment. This includes automobile, boat, and motorcycle lead acid batteries, scrap steel, discarded used tires, and construction debris. Waste from drop off areas, illegal dumping, and sweeping activities are disposed of with the appropriate waste contractors. The destination of each type of waste will be reported in the ACR.

3.0 REVIEW OF WASH AREAS, DRY WELLS, AND INFILTRATION SINKS

3.1 WASH AREAS

Washing activities are crucial to the business operations of some tenants. Washing practices that are improperly performed can generate illicit discharges and are prohibited. All washing wastewater needs to be properly contained and properly disposed of. Harbors requires tenants to formally submit applications to perform permitted washing activities with the goal of minimizing potential pollutants from being discharged into MS4 or adjacent harbor water.

Harbors will require that applications for washing include at least the following information:

- ✓ What the tenant intends to wash;
- ✓ Equipment used (such as pressure sprayer, hose, etc.) and flow rate;
- ✓ What type of detergent the tenant intends to use (biodegradable detergent is preferred)
- ✓ Wash water containment method (permanent wash rack, temporary berm, etc.);
- ✓ Wash water capture method (vacuum truck, evaporation, etc.);
- ✓ Wash water collection container capacity; and
- ✓ Wash water disposal method.

Tenants are prohibited from washing equipment and vehicles without obtaining prior consent from Harbors. Following the acceptance of the washing application, Harbors will issue a formal letter of approval once these conditions are met. The application and review process are tracked on an annual basis and reported in the ACR.

If the washing facility discharges to the CCH sanitary sewer, an Industrial Wastewater Discharge Permit (IWDP) will be required. It is the tenant's responsibility to apply for and meet the requirements of the CCH IWDP permit.

3.2 DRY WELLS AND INFILTRATION SINKS

Harbors will require that applications for sinks or drains that are not connected to the sanitary sewer include the following information:

- ✓ The intended use of the sink;
- ✓ A list of substances that may be washed into the sink (e.g. bio-degradable soaps and dirt);
- ✓ Construction drawings for the sink;
- ✓ Proposed treatment of the water (filtration fabric, sand, carbon filters, oil-absorbent material, etc.);
- ✓ Final destination of wash water; and
- ✓ Routine maintenance schedule for the sink (replacement of filtration material).

Tenants are prohibited from using unapproved sinks until Harbors verifies that the sinks do not create a potential hazard to receiving waters. Harbors may issue a formal letter of approval once these conditions are met. The application and review process will be tracked on an annual basis and reported in the ACR.

4.0 TENANT EDUCATION AND EMPLOYEE TRAINING

Tenants will be educated regarding pollution prevention and good housekeeping practices at the Annual Tenant Stormwater Pollution Prevention Awareness Training. Meanwhile, Harbors will provide information to all employees about its stormwater management program on an annual basis. In addition, Harbors will provide annual IDDE and awareness training to employees including Harbor Police, Marine Cargo Specialists, and Grounds Supervisors. Slides depicting examples of proper and improper BMPs will be presented to illustrate acceptable procedures.

ATTACHMENT 1
STORM SEWER SYSTEM OPERATION & MAINTENANCE
PROGRAM

This page intentionally left blank