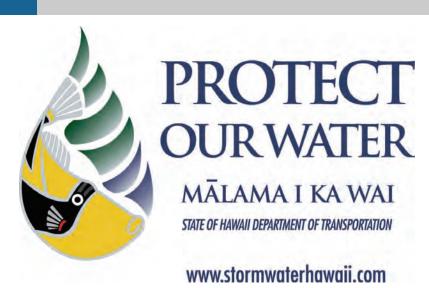


# Storm Water Pollution Control Plan Kakoi Baseyard



Hawaii State Department of Transportation Highways Division, Oahu District Storm Water Management Program NPDES Permit No. HI S000001

# RECORD OF REVISION

Revision No.	<b>Revision Date</b>	Description	<b>Sections Affected</b>
1	May 2006	Version 1.0 – Initial Release	All
2	January 2014	Version 2.0 – Structural Changes and Formatting Revision	All
3	September 2015	Version 3.0 – New vehicle and equipment garage for Honolulu Crew and roof extension for Light Motor Pool; Sampling parameters updated	Section 2.2.1 and 2.2.2; Figures 2-1, 2-2, 3-5, and 3-7; Appendix A: Checklist Questions; Appendix B: Figure 2-1, Table 3-1, Section 4.2, and Estimated Flow Rate Calculations and Field Parameters
4	October 2016	Version 4.0	1.1.2 – Inspections; 2.2.1 – Drainage Area 1; 2.2.2 – Drainage Area 2; Figures 2-1 and 2- 2; Figure 3-12; Appendix A – Inspection Checklist; Appendix B – Storm Water Monitoring Plan
5	June 2017	SWPCP Figure Updates	Figures 2-1 and 2- 2; Appendix B – Figure 2-1
6	December 2017	Signature Page; SWPCP Figure Updates	Signature Page; Figures 2-1 and 2- 2; Appendix B – Figure 2-1
7	June 2018	SWPCP Figure Updates	Figures 2-1 and 2- 2; Appendix B – Figure 2-1
8	January 2019	SWPCP Figure Updates	Figures 2-1 and 2- 2; Appendix B – Figure 2-1

Revision No.	<b>Revision Date</b>	Description	<b>Sections Affected</b>
9	June 2019	SWPCP Figure Updates;	Figures 2-1 and 2-
		Appendix B	2; Appendix B –
			Figure 2-1;
			Appendix B –
			Table 3-1
10	October 2019	Version 5.0	All
11	May 2020	SWPCP Figure Updates;	Figures 2-1, 2-2,
		Appendix B	and 2-3; Appendix
			B – Figure 2-1;
			Appendix B –
			Table 3-1
12	October 2020	Version 6.0	All
13	May 2021	SWPCP Figure Updates	Figures 2-1, 2-2,
		_	and 2-3

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael K. Medeiros
Oahu District Engineer

State of Hawaii Department of Transportation

13 The

May 21, 2021

Date

**SWPCP Responsible Party**: Maintenance Superintendent and Keehi Baseyard Supervisors (Electrical Crew, Roadway and Paving Crew, Special Services Crew, Bridge Crew, and Structures Crew)

# TABLE OF CONTENTS

Sectio	Section		
1.0	INTRODUCTION	1	
1.1	SWPCP IMPLEMENTATION	1	
1	.1.1 Training	1	
1	.1.2 Inspections	1	
1.2	SWPCP REVISIONS		
2.0	SITE DESCRIPTION	2	
2.1	Site Drainage	2	
2.2	Drainage Areas		
2	2.1 Drainage Area 1		
2	2.2.2 Drainage Area 2		
3.0	POLLUTION CONTROL STRATEGIES	. 11	
3.1	GENERAL OPERATING CONDITIONS	11	
3.2	BEST MANAGEMENT PRACTICES		
4.0	SPILL PREVENTION AND RESPONSE	34	
5.0	REFERENCES		
3.0	REFERENCES	40	
	LIST OF TABLES		
TABLE	E 4-1: SPILL RESPONSE PROCEDURE.	. 35	
TABLE	E 4-2: EMERGENCY SPILL CONTACT INFORMATION	. 37	
TABLE	TABLE 4-3: SPILL RESPONSE DOCUMENTATION FORM		
	LIST OF FIGURES		
Figur	e 2-1: Site Plan	8	
	E 2-2: AREAS OF RESPONSIBILITY		
FIGUR	e 2-3: Drainage Plan	10	
FIGUR	E 3-1: BASEYARD FUNCTIONAL AREAS – ADMINISTRATION BUILDING	12	
FIGUR	E 3-2: BASEYARD FUNCTIONAL AREAS – VEHICLE AND EQUIPMENT PARKING AREAS	. 13	
FIGUR	E 3-3: BASEYARD FUNCTIONAL AREAS – DRIVEWAY AREAS	14	
	E 3-4: BASEYARD FUNCTIONAL AREAS – FUEL STATION AND USTS		
FIGUR	E 3-5: BASEYARD FUNCTIONAL AREAS – HONOLULU CREW STORAGE AREA	16	
	E 3-6: BASEYARD FUNCTIONAL AREAS – WAREHOUSE BUILDING		
	E 3-7: BASEYARD FUNCTIONAL AREAS – LIGHT MOTOR POOL	_	
	E 3-8: BASEYARD FUNCTIONAL AREAS – HEAVY MOTOR POOL		
	E 3-9: BASEYARD FUNCTIONAL AREAS – MAINTENANCE OFFICE BUILDING		
	FIGURE 3-10: BASEYARD FUNCTIONAL AREAS – SIGNS AND MARKINGS CREW STORAGE AREAS		
	E 3-11: GOOD HOUSEKEEPING		
	E 3-12: BASEYARD OPERATIONS		
Figur	Figure 3-13: Fueling		

FIGURE 3-14: VEHICLE AND EQUIPMENT STORAGE	29		
FIGURE 3-15: MATERIAL STORAGE			
FIGURE 3-16: WASTE MANAGEMENT.			
LIST OF APPENDICES			
APPENDIX A BASEYARD SWPCP INSPECTION CHECKLIST			

#### LIST OF ACRONYMS

Acronym Meaning

AMS Asset Management System

BMP Best Management Practice

CFR Code of Federal Regulations

CWB Clean Water Branch

DA Drainage Area

DOH State of Hawaii, Department of Health

EPA U.S. Environmental Protection Agency

GWV Gross Vehicle Weight

HDOT State of Hawaii, Department of Transportation HEER Hazard Evaluation and Emergency Response

HWY-O Highways Division, Oahu District

LEPC Local Emergency Planning Committee

NPDES National Pollutant Discharge Elimination System

NRC National Response Center

Permit NPDES Individual Permit No. HI S000001

SWPCP Storm Water Pollution Control Plan

UST Underground Storage Tank

#### 1.0 INTRODUCTION

Federal regulations administered by the State of Hawaii, Department of Health (DOH) through State of Hawaii, Department of Transportation (HDOT), Highways Division National Pollutant Discharge Elimination System (NPDES) Individual Permit No. HI S000001 (Permit) requires that the Kakoi Baseyard implement its latest Storm Water Pollution Control Plan (SWPCP). The SWPCP is designed to protect water quality by minimizing the discharge of pollutants in storm water runoff from activities at the baseyard.

#### 1.1 **SWPCP Implementation**

The storm water management controls described in this plan will be implemented by HDOT, Highways Division, Oahu District (HWY-O) as required by the Permit, effective September 1, 2020, Part E DOT-HWYS Baseyard Facilities and Part F.2 Storm Water Associated with Baseyards.

#### 1.1.1 Training

Management, staff, and maintenance personnel will be provided with training on the SWPCP initially upon implementation and at least annually thereafter. Additionally, training will be conducted following any major revision to the SWPCP and will also be provided to new hires. This training will include, a discussion of potential pollutants, best management practices (BMPs), spill response procedures, and past spills. Training records will be documented and retained for five years. Baseyard personnel will be responsible for implementing controls detailed in the SWPCP and training courses.

#### 1.1.2 Inspections

Baseyard inspections will be conducted at least semiannually to ensure the pollutant control strategies (Section 3.0) and spill prevention and response plan (Section 4.0) are being effectively carried out. All inspections will be documented on the Baseyard SWPCP Inspection Checklist (Appendix A) and retained in the Maximo Asset Management System (AMS) for five years. Corrective actions for deficiencies noted during inspections will be documented, tracked, and closed-out in the AMS.

#### 1.2 SWPCP Revisions

The SWPCP will be reviewed as often as needed to comply with the conditions of the Permit. In the event the plan is modified, a copy of the updated SWPCP will be provided to the baseyard.

#### 2.0 SITE DESCRIPTION

The Kakoi Baseyard is located in the southern portion of Oahu and is occupied by the following HDOT Highways Maintenance Crews and shops:

- Bridge Crew
- Honolulu Crew
- Motor Pool
- Structures Crew
- Signs and Marking Crew
- District Warehouse

Except for limited portions of landscaped areas, the entire site is paved. The HDOT Highways Oahu District Office Administration Building is located at the northwest portion of the property with a Fuel Station located to the east of the building. The Maintenance Building is located along the southwestern portion of the property and the Sign Shop and Marking Crew Storage Area are located at the southwestern corner. The District Warehouse is located along the southern portion of the property and the Honolulu Crew (Landscape Maintenance) occupies the southeastern corner of the baseyard. The Heavy Motor Pool is located at the western portion of the property, and the Light Motor Pool is in the central portion of the property. Shops and maintenance crews use the baseyard store equipment and materials to support the various HDOT Highways Maintenance operations. The Motor Pool repairs vehicles, equipment and operates the Small Engine Shop and the Welding Shop. Except for refueling of vehicles and equipment, all significant maintenance operations and activities occur under cover or indoors. The baseyard does not maintain raw material stockpiles or perform any vehicle or equipment washing; these activities are conducted at the nearby Keehi Baseyard.

Access to the site is provided by a driveway located at the north end of Kakoi Street. There are two storm drain inlets located near the northwest and southwest corners of the Warehouse building. Two additional storm drain inlets are located in the northeastern portion of the employee parking lot. The paved areas are primarily used for parking and storage of vehicles. The property is bordered on the east by Moanalua Stream which empties into the Keehi Lagoon, and then the Pacific Ocean (Figure 2-1). Areas of responsibility for the various Maintenance Crews at the Kakoi Baseyard are depicted on Figure 2-2.

#### 2.1 Site Drainage

The majority of the site is graded towards the paved area in the southern portion of the property where two storm drain inlets are located. These two storm drains are connected to a drain pipe that runs along the southern border of the site and discharges to Moanalua Stream at a point located just off the southeast corner of the baseyard. Two additional storm drain inlets are located in the parking lot in the northeastern portion of the property. These two storm drains collect runoff from the eastern portion of the site and are connected to a drain pipe that

discharges to Moanalua Stream off of the northeastern corner of the baseyard (Figure 2-3). Moanalua Stream empties into the Keehi Lagoon, that eventually empties into the Pacific Ocean.

## 2.2 Drainage Areas

The Kakoi Baseyard is divided into two drainage areas (Figure 2-3). Drainage Area 1 (DA-1) is in the northern and eastern portions of the baseyard and includes the administrative and employee parking areas as well as the fuel station and the Honolulu Crew operational area. DA-1 is bordered on the north by the facility driveway and on the east by Moanalua Stream. Drainage Area 2 (DA-2) is located on the southern and western portions of the baseyard and includes the operational and storage areas for all the baseyard's maintenance crews and shops.

#### 2.2.1 Drainage Area 1

The Honolulu Crew has an office trailer and small storage container located in the southeast corner of the baseyard. This area is used for storage of landscaping equipment and supplies. The Honolulu Crew also parks vehicles, trailers, and equipment under cover in this area. There are no drain inlets in this portion of DA-1 (Figure 2-1).

The Motor Pool operates fuel dispensers that are located under a canopy in the eastern portion of DA-1 (Figure 2-1). The dispensing pumps are connected to two 8,000gallon underground storage tanks (USTs); one containing diesel and one containing gasoline.

The administrative building and employee parking area occupy the remainder of DA-1. A permanent BMP rain garden has been landscaped adjacent to the administrative building to capture rooftop rainfall. Vehicles, trailers, and equipment waiting for disposal are stored along the eastern boundary of the parking area. Storm water in DA-1 generally sheet flows to one of two storm drains located in the northeastern portion of the parking lot. Storm water from these inlets is routed to a drain pipe that discharges to Moanalua Stream at a point located just off the northeastern corner of the baseyard.

Potential pollutants in this drainage area include:

- Gasoline and diesel fuel stored in USTs at the fuel dispensing area (8,000 gallons each).
- Small quantities of petroleum (gasoline, motor oil, hydraulic oil) are secured within flammable storage lockers.
- Small quantities of herbicides are secured within storage lockers.
- Minor leaks (drips) of oils and lubricants associated with vehicular traffic.

#### Routine Runoff

Generally, routine runoff from DA-1 may consist of dust and silt that may have been deposited either by the wind or from vehicular traffic. Dust and silt may affect water quality parameters such as total suspended solids and turbidity. As is expected from areas with vehicular activity and fueling operations, the potential for minor amounts of petroleum to enter runoff also exists.

#### *Non-Routine Runoff*

Non-routine runoff may be a result of spillage, leaks, fuel dispensing, routine maintenance operations, failure of BMPs, or other emergency conditions (i.e., major equipment leaks). Such incidents will be addressed immediately as described in the Spill Prevention and Response Plan (see Section 4.0). The grade of the fuel dispensing area is relatively flat and is designed to prevent minor spills from migrating towards other areas of the baseyard.

Potential non-routine runoff may result from the following sources:

- Spills and leaks from chemicals and equipment
- Fueling of equipment and vehicles
- Storage of vehicles and equipment
- Rubbish and litter
- Improper disposal of chemicals
- Chemical storage container failure
- Improper storage of chemicals (i.e. container deterioration, exposure to rain, no secondary containment)
- Improper storage of miscellaneous hazardous materials and solid waste debris
- Major equipment leaks
- Poor spill response management

## 2.2.2 Drainage Area 2

As indicated in Figure 2-3, DA-2 encompasses the majority of the baseyard's operational areas and houses the Bridge Crew, Structures Crew, Signs and Marking Crew, the District Warehouse, as well as the Light and Heavy Motor Pools, Small Engine Shop and Welding Shop. DA-2 is entirely paved except for the grass section located on the south end of the District Warehouse and storm water runoff from this area is routed to one of two storm drain inlets that are located near the northwest and southwest corners of the District Warehouse. Storm water is then routed through a drain pipe that runs to the southeast corner of the facility and offsite where it discharges into Moanalua Stream.

#### **Bridge Crew**

The Bridge Crew has an office and a storage room located in the Maintenance Building (Figure 2-1) that is used for hardware, tools and equipment, and other material storage. A second storage room in the District Warehouse stores small equipment and materials. This crew has various vehicles and equipment at this baseyard.

#### **Structures Crew**

The Structures Crew has an office and a storage room also located in the Maintenance Building (Figure 2-1) that is used for storing various materials and small equipment. Additionally, a storage cage is located on the eastern side of the Maintenance Building that is used for compressed gas cylinders storage. A small storage room is also located in the District Warehouse building and this crew has various vehicles at this baseyard.

#### **Signs and Marking Crew**

The Signs and Marking Crew has an office, Sign Shop, and computer room in the Maintenance Building. A separate building used for storage of traffic marking supplies and equipment and general outdoor sign storage is located at the southwestern corner of the property. Fabricated signs are kept in an enclosed storage area located along the western side of the Heavy Motor Pool (Figure 2-1). These operational areas are used to make signs, store traffic marking equipment, and store various materials. Multiple material storage cabinets and two material storage buildings are in use by the Signs and Marking Crew.

#### **District Warehouse**

The District Warehouse is located along the southern boundary of the property (Figure 2-1) and is used to store various materials used by all HWY-O sections.

#### **Heavy Motor Pool**

The Heavy Motor Pool is situated along the northwest border of the site and is responsible for repair and maintenance of vehicles and equipment that are greater than 15,000 gross vehicle weight (GVW) (Figure 2-1). All significant maintenance activities are performed within the building or under the cover of the vehicle maintenance bays. The interior of the building and the vehicle maintenance bays are outfitted with floor drains and a trench drain that are routed to a 1,500-gallon oil/water separator before being discharged to the City and County's sanitary sewer system.

The Heavy Motor Pool facility stores various automotive repair supplies such as petroleum lubricants, cleaners, brake fluid, antifreeze, etc. The facility also has a service truck that dispenses and/or stores hydraulic oil, motor oil, antifreeze, and used oil. This truck parks under cover of the Heavy Motor Pool facility when it is not in use. Vehicles and equipment that are waiting to be serviced are parked alongside the western end of the District Warehouse.

Used oil generated at the Heavy Motor Pool is stored in a 600-gallon capacity used oil UST located near the northeastern corner of the Light Motor Pool.

#### **Light Motor Pool**

The Light Motor Pool is situated directly to the east of the Heavy Motor Pool facility and is responsible for repair and maintenance of vehicles and equipment that are less than 15,000 GVW (Figure 2-1). All significant maintenance activities are performed within the building or under the cover of the vehicle maintenance bays. There are five (5) floor drains and a trench drain

within the Light Motor Pool facility that are routed to an oil/water separator located on the southeast corner of the building before being discharged to the City and County's sewer system.

The Light Motor Pool facility stores various automotive repair supplies such as petroleum lubricants, cleaners, brake fluid, antifreeze, etc. Used oil generated by Light Motor Pool operations is stored in the same 600-gallon UST described above. In addition, Light Motor Pool manages the Fuel Station that is used to refuel HDOT Highways vehicles.

### **Small Engine Shop**

The Small Engine Shop is in a room on the north side of the Heavy Motor Pool and stores miscellaneous small equipment repair supplies (Figure 2-1).

## **Welding Shop**

The Welding Shop is located on the eastern corner of the Maintenance Building (Figure 2-1). All welding is done under cover in the shop. Compressed gases and welding supplies are also stored in this area.

Potential pollutants in this drainage area include:

- Used oil stored in a 600-gallon UST.
- Small quantities of petroleum (gasoline, motor oil, hydraulic oil) are secured within flammable storage lockers or on containment pallets in the motor pool areas.
- Minor leaks (drips) of oils and lubricants associated with vehicular traffic.

#### Routine Runoff

Generally, routine runoff from the facility may consist of dust and silt that may have been deposited either by the wind or from vehicular traffic. Dust and silt may affect water quality parameters such as total suspended solids and turbidity. As is expected from areas with vehicular activity and equipment maintenance, potential for minor amounts of petroleum to enter runoff also exists.

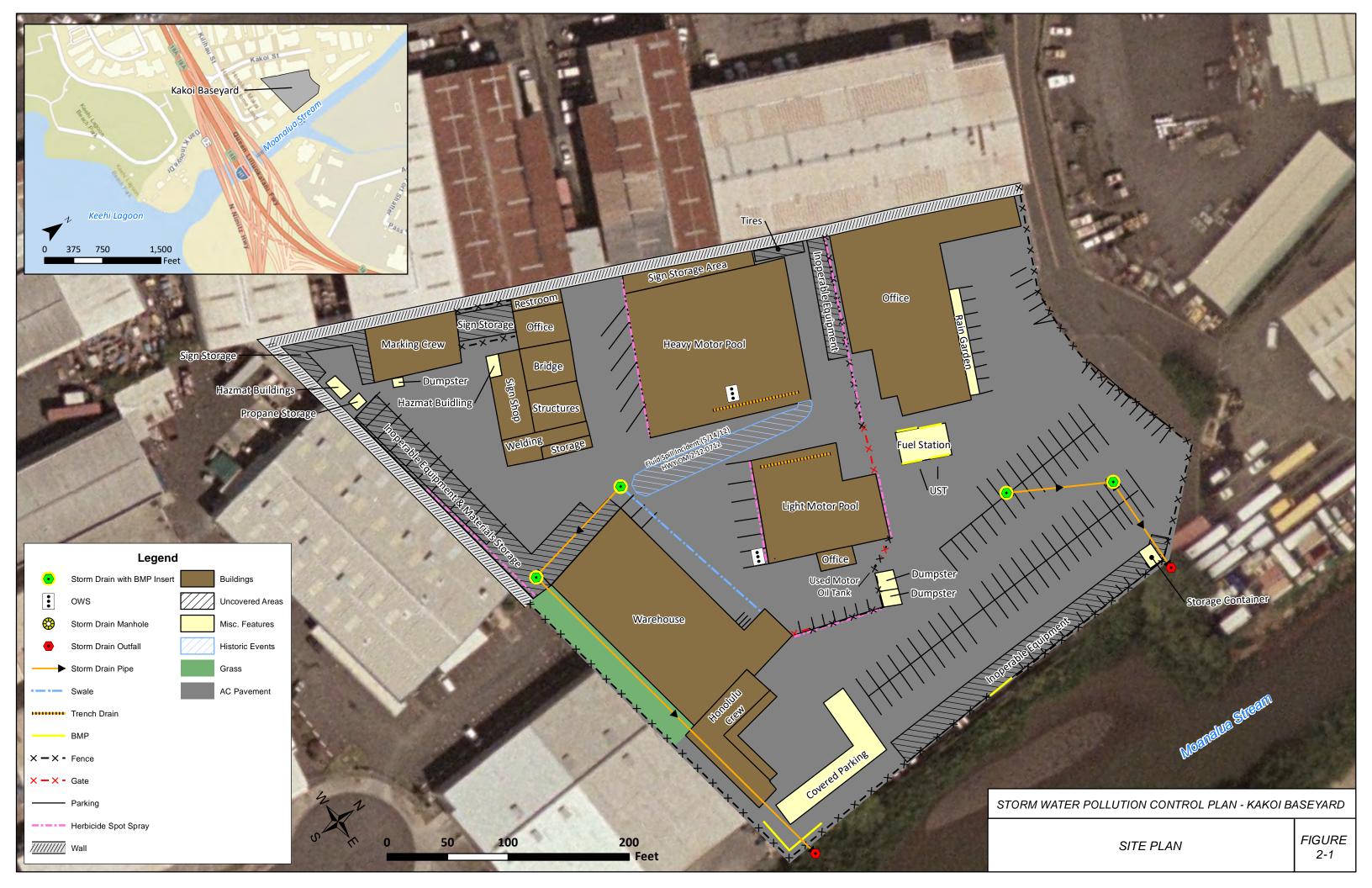
#### *Non-Routine Runoff*

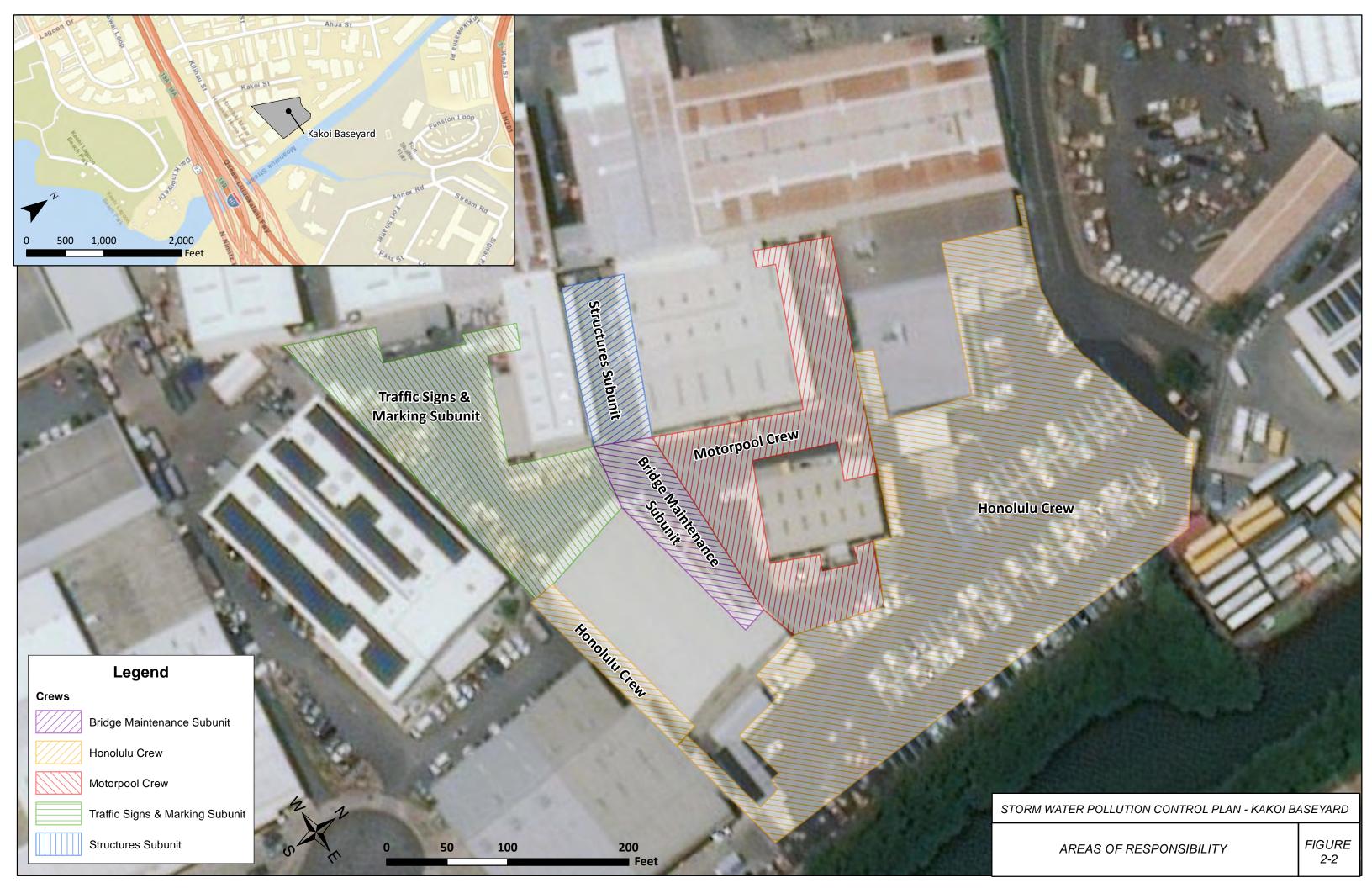
Non-routine runoff may be a result of failure of BMPs, or other emergency conditions (i.e., major equipment leaks). Such incidents will be addressed immediately as described in the Spill Prevention and Response Plan (see Section 4.0).

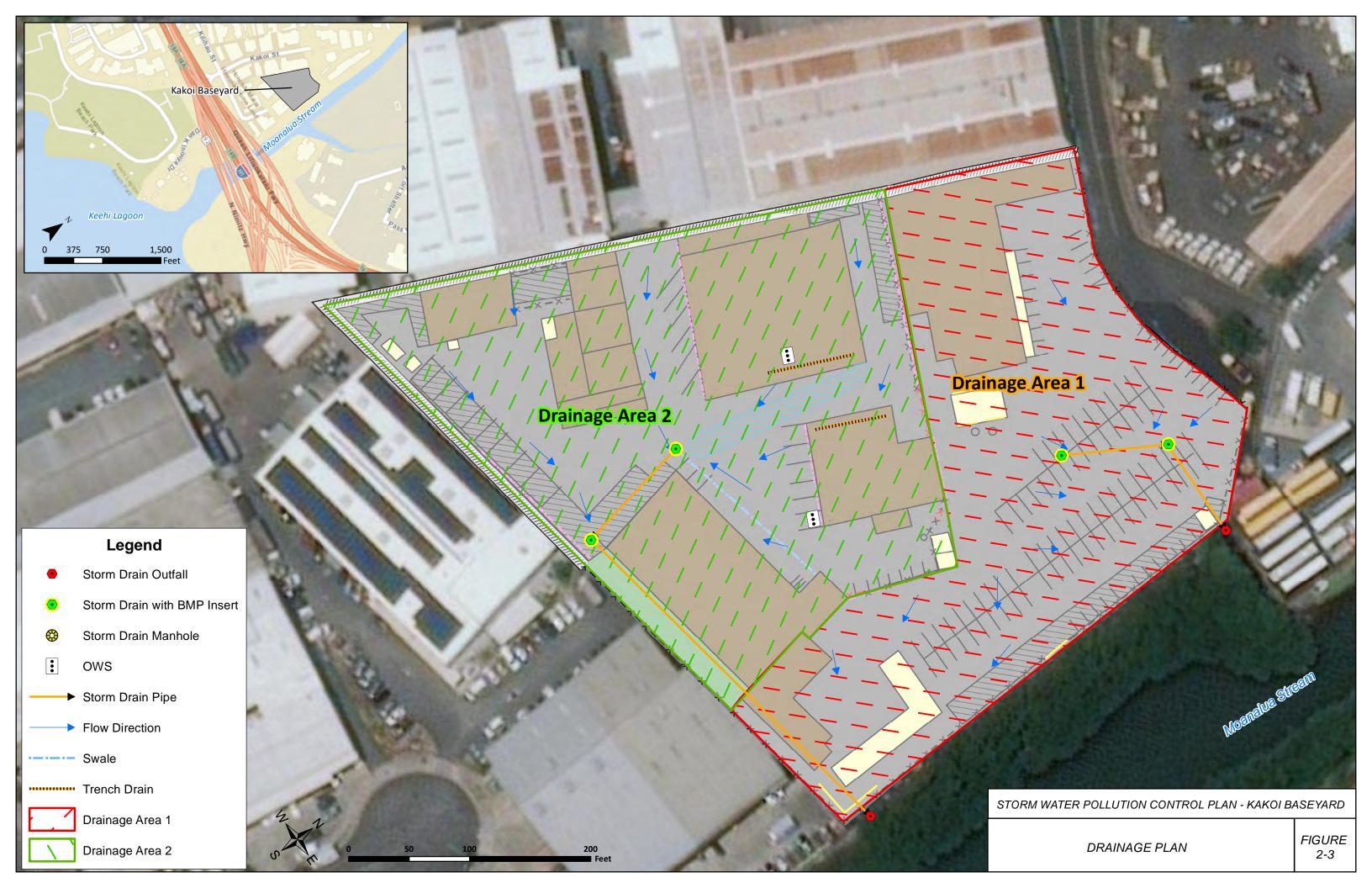
Potential non-routine runoff may result from the following sources:

- Rubbish and litter
- Improper storage of materials (i.e. container deterioration, exposure to rain, no secondary containment)

- Poor spill response management
- Spills and leaks from chemicals and equipment
- Fueling of equipment (i.e. topping off motor oil, fueling of weed eaters and mowers)
- Improper disposal of chemicals
- Storage of vehicles and equipment
- Major equipment leaks
- Poor spill response management







#### 3.0 POLLUTION CONTROL STRATEGIES

## 3.1 General Operating Conditions

The Kakoi Baseyard has been divided into 10 functional areas:

- Administration Building
- Vehicle and equipment parking areas
- Driveway areas
- Fuel station and USTs
- Honolulu Crew Storage Area
- Warehouse Building
- Light Motor Pool
- Heavy Motor Pool
- Maintenance Office Building
- Signs and Markings Crew Storage Areas

Figures 3-1 to 3-10 present photographs of each functional area of the baseyard taken in their ideal operating condition. These photographs can be used for baseyard crews and inspection teams as a quick reference of how each functional area of the baseyard should appear. Deficiencies identified in the field should be corrected immediately to minimize the potential for pollution of storm water runoff.

FIGURE 3-1: BASEYARD FUNCTIONAL AREAS – ADMINISTRATION BUILDING





FIGURE 3-2: BASEYARD FUNCTIONAL AREAS – VEHICLE AND EQUIPMENT PARKING AREAS







FIGURE 3-3: BASEYARD FUNCTIONAL AREAS – DRIVEWAY AREAS







FIGURE 3-4: BASEYARD FUNCTIONAL AREAS – FUEL STATION AND USTS







FIGURE 3-5: BASEYARD FUNCTIONAL AREAS – HONOLULU CREW STORAGE AREA





FIGURE 3-6: BASEYARD FUNCTIONAL AREAS – WAREHOUSE BUILDING





FIGURE 3-7: BASEYARD FUNCTIONAL AREAS – LIGHT MOTOR POOL







FIGURE 3-8: BASEYARD FUNCTIONAL AREAS – HEAVY MOTOR POOL





FIGURE 3-9: BASEYARD FUNCTIONAL AREAS – MAINTENANCE OFFICE BUILDING







FIGURE 3-10: BASEYARD FUNCTIONAL AREAS – SIGNS AND MARKINGS CREW STORAGE AREAS







## 3.2 Best Management Practices

BMPs will be utilized at the baseyard to minimize and control potential pollutants from baseyard activities. Figures 3-11 to 3-16 include a list of activities associated with the baseyard and photos of BMPs that may be implemented at the Kakoi Baseyard; this list may not include all specific activities that are conducted.

#### FIGURE 3-11: GOOD HOUSEKEEPING

## 1. Baseyard Sweeping



Sweep baseyard areas at least once per week and additionally as needed to remove accumulated sediment and debris and to prevent tracking.

**Potential Pollutant**—Sediment, Metals, Rubbish

## 2. Rubbish Disposal



Keep rubbish in a covered container. Close at the end of business day.

Do not overfill waste containers.

If waste bins are not feasible for bulk items, ensure that waste is maintained to avoid mobilization in storm water (i.e. tarpaulin, filter devices, etc.).

# **Potential Pollutant**—Sediment, Metals, Rubbish

## 3. Storm Drainage Area Maintenance



Visually inspect the storm drain inlets for accumulation of rubbish, vegetation, and sediment. Clean the storm drains inlets and areas around storm water drainage as needed and at least semi-annually.

Remove and properly dispose of accumulated rubbish, vegetation, and sediment.

# **Potential Pollutant**—Sediment and Rubbish

## FIGURE 3-11: GOOD HOUSEKEEPING

## 4. Parking Lot Maintenance



Clean any parking area oil stains that produce a sheen when wet.

## Potential Pollutant-

Petroleum, Oil, Lubricants

## 5. Spill Kits



Ensure that spill kits are located in easily accessible locations (i.e. main office) so that personnel can respond to spills.

Replenish spill kits when used, or as needed.

Ensure that spill materials are cleaned up following use and properly disposed.

## Potential Pollutant-

Various used absorbents

#### FIGURE 3-12: BASEYARD OPERATIONS

## 1. Motor Vehicle Servicing



Utilize spill containment materials whenever there is the potential for fluid leaks or spills (i.e., topping off fluids, long term storage of vehicles, etc.).

# **Potential Pollutant**—Vehicle fluids

#### 2. Herbicide Usage



Ensure that herbicides are mixed and managed to minimize contact with storm water.

Store herbicide in covered storage and/or secondary containment.

Follow the HDOT Chemical Application Plan for herbicide usage guidelines.

# **Potential Pollutant**—Herbicides

3. Painting



Do not paint in the rain or when rainfall is anticipated.

Ensure that wet paints are not mobilized to drainage areas or storm drains.

Clean brushes and dispose of paint waste in accordance with product label. Ensure that paint is not cleaned out in the dirt, street, storm drain, or other drainage way.

**Potential Pollutant**—Paints, Solvents

FIGURE 3-12: BASEYARD OPERATIONS



# FIGURE 3-13: FUELING

# 1. Vehicle Fueling







Visually inspect fuel dispenser hoses for leaks.

Pay attention when fueling to prevent overfilling.

Cleanup spilled fuels immediately. Ensure that fuels are not mobilized to drainage areas or storm drains.

Dispose of clean up materials properly.

**Potential Pollutant**—Gasoline, Diesel

## FIGURE 3-13: FUELING

## 2. Equipment Fueling



and hoses for cracks and leaks.

Visually inspect portable fuel transfer tanks

Store fuel containers within secondary containment (i.e. flammable storage lockers).

Ensure that hand-held equipment fueling activities are conducted within secondary containment.

Cleanup spilled fuels immediately. Ensure that fuels are not mobilized to drainage areas or storm drains.

**Potential Pollutant**—Gasoline, Diesel



# FIGURE 3-14: VEHICLE AND EQUIPMENT STORAGE

# 1. Storing Inoperable Equipment for Disposal



Remove fluids.

**Potential Pollutant**—Vehicle Fluids



Remove batteries.

## Potential Pollutant— Lead, Sulfuric Acid

# 2. Parking (HDOT and Employee Vehicles)



Visually inspect vehicles for leaks and use drip pans or pads where necessary. Ensure that drip pan is not overfilled with leaking materials or storm water.

#### **Potential Pollutant-**

Oil, Gasoline, Diesel, Coolant, Hydraulic Fluid, Metals, Sediment

FIGURE 3-14: VEHICLE AND EQUIPMENT STORAGE



# 3. Handheld Equipment Storage



Ensure that handheld equipment is managed to minimize contact with storm water.

Store handheld equipment within drip pans or on absorbent pads when not in use.

# **Potential Pollutant**—Oil, Gasoline

## FIGURE 3-15: MATERIAL STORAGE

## 1. Material Storage



Store materials in compatible containers that are in good condition (i.e. not rusting, leaking, or deteriorating) and closed when not in use.

Store liquid materials under cover.

#### Potential Pollutant-

Various hazardous materials (i.e., Petroleum, Oil, and Lubricants; Herbicides; Paint)



FIGURE 3-15: MATERIAL STORAGE



#### 2. Metal Storage



Ensure that metals are managed to minimize contact with falling rain and storm water flowing on the ground.

Store metals in a covered area or with a tarpaulin, if metals are rusting.

Place metals on pallets or wood blocks to elevate materials off the ground.

**Potential Pollutant**– Rusting Metal

#### FIGURE 3-16: WASTE MANAGEMENT

#### 1. Managing Wastes Generated On-Site and Obtained from Highways Right-of-Ways



Separate wastes into categories and do not mix:

- Solid waste (i.e. general rubbish)
- Green waste
- Bulk items (i.e. mattresses, tires, etc.)
- Hazardous waste
- Universal waste

Ensure that wastes are managed to minimize contact with storm water.

Ensure that wastes are transported to Keehi Baseyard for disposal as soon as possible.

#### Potential Pollutant-

Rubbish, Green Waste, Miscellaneous Waste

#### 4.0 SPILL PREVENTION AND RESPONSE

Spills of materials used and stored at the Kakoi Baseyard can discharge to storm drains and State waters and contaminate storm water runoff. A Spill Prevention Response Plan is provided here to address that risk.

# Spill Prevention and Response Plan

Purpose	Provide procedures to follow in the event a spill occurs
Personnel-In-Charge of Implementation	Maintenance Superintendent with support of Kakoi Baseyard Supervisors
Resources	Table 4-1: Checklist of Procedures Table 4-2: Pertinent Contact Numbers Table 4-3: Spill Response Documentation Form (spills in excess of 25 gallons or more)
<b>Documents to Maintain</b>	Spill Response Documentation Forms (kept by HWY-O)
Recent (within 5 years) spills of toxic or hazardous pollutants	None
Discharges of storm water resulting in reportable quantity triggering notification under 40 Code of Federal Regulations (CFR) 110.6 since 11-16- 1987	None

TABLE 4-1: SPILL RESPONSE PROCEDURE

	SPILL RESPONSE PROCEDURE	✓				
1	Stop work.					
2	<ul> <li>Assess the situation: <ul> <li>Source of Release (Stop the source of the spill, if it can be done safely)</li> </ul> </li> <li>Notify Others. <ul> <li>Call 911 if an emergency situation occurs.</li> <li>Inform the Baseyard Supervisors of all spills.</li> </ul> </li> <li>Type of Material Spilled and Associated Hazards. <ul> <li>If the material is flammable, ensure that all sources of ignition are removed (i.e. turn off vehicles, prohibit smoking, evacuate unnecessary personnel).</li> </ul> </li> <li>Location of Release (i.e. HDOT right of way? pavement vs. soil?).</li> <li>Total Amount and Rate of Release.</li> <li>Potential for Surface Water Impacts.</li> <li>Deploy BMPs to protect storm drains and other surface water bodies.</li> </ul>					
3	Can the spill be cleaned up with baseyard staff and supplies? If yes – <i>continue to Step 4</i> . If no – <i>skip to Step 10</i> .					
4	Assign personnel to clean the spill and don appropriate personal protective equipment.					
5	Remove any incompatible materials from the area. This may include prohibiting smoking and the starting of vehicle engines.					
6	Begin spill clean-up efforts by ensuring that the source of the spill has been stopped. This may include closing valves, repairing equipment, or plugging holes.					
7	Confine the spill perimeter using absorbent material such as clay granules, sand, and/or soil. Ensure that drainage ways are blocked.					
8	Clean the remainder of the spill using absorbent material and a broom or vacuum.  *Important: Never use a water source for cleaning unless the water is contained.					
9	Dispose of cleaning materials and personal protective equipment properly. <i>Skip to Step 13</i> .					
10	Evacuate all personnel from the spill vicinity and move to the evacuation assembly area near the entrance gate on the outside of the facility fence-line. See Figure 2-1 for location.					
11	Call the Emergency Coordinator who will notify or designate someone to notify the Spill Response Contractor from Table 4-2.					
12	Take note of spill clean-up action performed by the baseyard personnel and/or Spill Response Contractor.					

	SPILL RESPONSE PROCEDURE	✓
13	The Emergency Coordinator or designee will notify the appropriate authorities from Table 4-2, if required.	
14	The Emergency Coordinator or designee completes Table 4-3, Spill Response Documentation Form.	

#### **TABLE 4-2: EMERGENCY SPILL CONTACT INFORMATION**

**Note:** The reportable quantity for oil and fuel products is a spill of 25 gallons or more, a spill not cleaned within 72 hours, or a spill that threatens ground or surface waters. Notification of the National Response Center (NRC) is NOT required for releases of oil – only notification of State and County agencies are required for these substances.

Contact	Telephone Number
Emergency (Medical Assistance, Fire Department, Police Department)  If there is an emergency or life-threatening situation, 911 should be called first.	911
Supervisor The Supervisor should be notified of all spills so that they can contact the Emergency Coordinator.	Varies
Maintenance Superintendent, Emergency Coordinator The Maintenance Superintendent or designee should be notified of all spills so that they can act as the Emergency Coordinator for response efforts, which includes coordinating clean-up response, notifying the appropriate parties, and completing relevant forms.	(808) 837-8058 or (808) 258-3269
Spill Response Contractor  The current spill response contractor (Pacific Commercial Services) should be notified by the Emergency Coordinator or designee for assistance when a spill is beyond the baseyard's capacity for removal or to dispose of spent absorbents.	(808) 545-4599
National Response Center (NRC)  The Emergency Coordinator or designee should call the NRC to report any spill of hazardous materials of a reportable quantity. The NRC will notify the appropriate Federal On-Scene Coordinator (Environmental Protection Agency - EPA) and various state agencies. [Note: Notification of the NRC is NOT required for releases of oil—only notification of State/County agencies are required for these substances.]	(800) 424-8802
DOH Hazard Evaluation and Emergency Response (HEER) Office (Oahu)  The Emergency Coordinator or designee should notify the HEER office of any chemical spill of a reportable quantity.  [Note: Reportable quantity for oil and fuel products is a spill of 25 gallons or more, a spill not cleaned within 72 hours, or a spill that threatens ground or surface waters.]	(808) 586-4249 (808) 247-2191 (after hours)

A written notification must also be submitted no later than thirty (30) days after the initial release.	
DOH Clean Water Branch (CWB) (Oahu)	
The Emergency Coordinator or designee should notify the CWB of any spills of any chemical of a reportable quantity immediately by telephone. A written notification must also be submitted no later than thirty (30) days after the initial release.	(808) 586-4309
U.S. Coast Guard Marine Safety Office (Oahu)	
The Emergency Coordinator or designee should notify the U.S. Coast Guard of any quantity spill that reaches the ocean.	(808) 522-8260
Local Emergency Planning Committee (LEPC)	
The Emergency Coordinator or designee should notify the LEPC of any reportable quantity spill. After business hours, leave a message including name, phone number, time of spill, what was spilled, and quantity of spill.	(808) 723-8960

#### TABLE 4-3: SPILL RESPONSE DOCUMENTATION FORM

Date of Incident:	Time:
Reported by:	
Location of Incident:	
Description of Incident:	
Description of incident.	
Nature of Release (Paint, herbicide, oil/grease, concrete, etc.):	
Cause/Source of Release:	
Quantity of Release:	
Immediate response measures taken:	
Regulatory Agency Notifications:	

Copies of the completed Spill Response Documentation Form shall be kept in the Kakoi Baseyard SWPCP binder and with the Environmental Management Section Head

#### 5.0 REFERENCES

- State of Hawaii, Department of Transportation, Highways Division. February 2013. *Environmental Management System Manual.*
- State of Hawaii, Department of Transportation, Highways Division. September 1,
   2020. National Pollutant Discharge Elimination System, Permit Number HI S000001, expires August 31, 2025.
- State of Hawaii, Department of Transportation, Highways Division. April 2015. Storm Water Management Program Plan.

# APPENDIX A BASEYARD SWPCP INSPECTION CHECKLIST

# **BASEYARD SWPCP INSPECTION CHECKLIST**

Facility Name:	Kakoi Baseyard, Highways Division, Department of Transportation						
Inspector's Name & Title:							
Date & Time of Inspection:							
Weather:	Raining		loudy		Sunny	Rain in 24 hrs? Yes	□No
ISSUE BEING EVALUATED		YES	NO	N/A		COMMENTS	
SWPCP AND DOCUMENTATION							
Is the SWPCP onsite?							
Has the SWPCP map been update current baseyard conditions?	ed to reflect						
Are there any changes needed to the SWPCP based on the current observed baseyard conditions?							
Are the inspection reports onsite?							
Is the National Pollutant Discharg Elimination System NPDES perm							
Is the employee training current a documented?	nd						
Have any spills of a reportable que gallons or more) been reported and documented since last inspection	nd/or						
GOOD HOUSEKEEPING							
Are paved areas that are potential to storm water generally free and accumulated sediment and debris	clear of						
Are the rubbish bins covered?							
Is rubbish managed to prevent ov of waste storage containers and/o of contact with storm water, if ne	r prevention						
Are the drainage areas (culvert, d channel, downspouts) clear of del							

ISSUE BEING EVALUATED	YES	NO	N/A	COMMENTS
Are there any oil stains present that produce a sheen when wet?				
Are spill kits available and stocked?				
Are spent spill cleanup materials properly disposed of?				
Other:				
BASEYARD OPERATIONS				
Are drip pans or hydrocarbon absorbing pads utilized whenever there is the potential for fluid leaks or spills?				
Are herbicides mixed and managed to minimize contact with storm water?				
Are painting activities and cleanup conducted to minimize contact with storm water?				
Other:				
FUELING				
Are portable fuel transfer containers and hoses cracked or leaking?				
Are fuel containers managed to minimize contact with storm water?				
Are fuel spills present that are exposed to storm water?				
Other:				
VEHICLE AND EQUIPMENT STORAGE				
Are salvage equipment leaking fluids and if so, managed to minimize contact with storm water?				
If necessary, are drip pans utilized and in good condition and placed properly under equipment?				
Are drip pans filled or overflowing with rainwater and/or petroleum products (oil and grease, etc.)?				

ISSUE BEING EVALUATED	YES	NO	N/A	COMMENTS
Is handheld and/or portable equipment (i.e. chainsaw, weed whacker, generator, tamper, etc.) managed to minimize contact with storm water?				
Other:				
MATERIAL STORAGE	<u> </u>			
Are materials managed to minimize contact with storm water?				
Are rusting metal pieces managed to minimize contact with storm water?				
Are highway construction and maintenance related items managed to minimize contact with storm water?				
Are green wastes, gravel, sand stockpiles managed to minimize contact with storm water?				
Are BMPs that are utilized for material containment in good condition and working effectively?				
Other:				
WASTE MANAGEMENT				
Are wastes appropriately separated according to operational disposal requirements and managed to minimize contact with storm water?				
Does waste need to be transferred to the Keehi Baseyard for final disposal?				
Other:				