Stormwater Pollution Prevention Plan (SWPPP)

For Construction Activities At:

Interstate Route H-1 Resurfacing
Miller Pedestrian Overpass to Kapiolani Interchange
Oahu, Hawaii

Project No.: H1IJK-01-17M

SWPPP Prepared For:

State of Hawaii
Department of Transportation
Highways Division
601 Kamokila Boulevard
Kapolei, Hawaii 96707

SWPPP Prepared By:

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SWPPP Preparation Date:

July 2020

Estimated Project Dates:

Project Start Date: November 2020
Project Completion Date: November 2021

Contents

SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Owner / Operator(s) / Subcontractor(s) [Ref. HAR, 11-55, Appendix C, Section 7.2.15.1]

Operator/Subcontractor information to be provided at least 30 calendar days prior to discharge

Operator(s):

Company or Organization Legal Name:
Contact Person's Name:
Contact Person's Position Title:
Street Address:
City, State, Zip Code:
Telephone Number:
Email:

Subcontractor(s):

Company or Organization Legal Name: (Information to be documented prior to start of construction)
Contact Person's Name:
Contact Person's Position Title:
Street Address:
City, State, Zip Code:
Telephone Number:
Email:
Area of control (if more than one operator at site):

Emergency 24-Hour Contact:

Company or Organization Legal Name:
Contact Person's Name: (to be completed prior to the start of construction activities)
Contact Person's Position Title:
Street Address:
City, State, Zip Code:
Telephone Number:
Email:
Roles and Responsibilities:

1.2 Stormwater Team [HAR, 11-55, Appendix C, Section 7.2.1]

Instructions:

- Identify the staff members (by name or position) that comprise the project's stormwater team as well as their individual responsibilities. At a minimum the stormwater team is comprised of individuals who are responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the requirements in this permit (i.e., installing and maintaining stormwater controls, conducting site inspections, and taking corrective actions where required).
- Each member of the stormwater team must have ready access to either an electronic or paper copy of applicable portions of the NPDES or NGPC and your SWPPP.

Insert Role or Responsibility:
Insert Position:
Insert Name:
Insert Telephone Number:
Insert Email:

Role or Responsibility:
Position:
Name:
Telephone Number:
Email:

Role or Responsibility:
Position:
Name:
Telephone Number:
Email:

SECTION 2: SITE EVALUATION, ASSESSMENT, AND PLANNING

2.1 Project/Site Information

Project Name and Address

Project/Site Name: Interstate Route H-1 Resurfacing Miller Pedestrian Overpass to Kapiolani Interchange
Project Street/Location: Interstate Route H-1
City: Honolulu
State: Hawaii
ZIP Code: 96822
County or Similar Subdivision: City and County of Honolulu

Project Latitude/Longitude

(Use **one** of three possible formats, and specify method)
Project Start
Latitude:
1. 21.3096 ° N (decimal)

Longitude:
1. 157.8519 ° W (decimal)

Project End
Latitude:
1. 21.2880 ° N (decimal)

Longitude:
1. 157.8129 ° W (decimal)

Method for determining latitude/longitude:
☐ USGS topographic map (specify scale:) ☐ EPA Web site ☐ GPS
☒ Other (please specify): Google Map (HI DOH e-Permitting tools)

Horizontal Reference Datum:
☐ NAD 27 ☒ NAD 83 or WGS 84 ☐ Unknown

Additional Project Information

Is the project/site located on Indian country lands, or located on a property of religious or cultural significance to an Indian tribe? ☐ Yes ☒ No

2.2 Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☒No

Are there any surface waters that are located within 50 feet of your construction disturbances?
☐Yes ☒ No

The storm water sheet flows Palolo Stream.

2.3 Nature of the Construction Activity [HAR, 11-55, Appendix C, Section 7.2.2.]

Instructions (see HAR 11-55, Appendix C, Section 7.2.2):

- Provide a general description of the nature of the construction activities at your project.
- Describe the size of the property (in acres) and the total area expected to be disturbed by the construction activities (in acres), construction support activities covered by this permit and the maximum area expected to be disturbed at any one time.

General Description of Project

Provide a general description of the construction project:

The scope of work includes repavement and reconstruction along the H-1 Freeway from the Miller Street Overpass to the Kapiolani Interchange, where the pavement transition from asphaltic concrete to Portland cement concrete. The pavement repairs also include on and off-ramps, frontage streets, and cross streets within the project limits and HDOT right-of-way, as presented below.

The pavement repairs consist of cold planing and resurfacing with asphaltic concrete of equal thickness. The project also includes upgrades to the existing street lighting, overpass bridge rails, drainage and landscaping.

Size of Construction Project

What is the size of the property (in acres), the total area expected to be disturbed by the construction activities (in acres), and the maximum area expected to be disturbed at any one time?

Project site area = 57.94acres

Total area of construction disturbance = 57.94 acres

Maximum Area to be Disturbed at any one time (in acres) = 57.94 acres

Construction Support Activities (only provide if applicable)

Describe any construction support activities for the project (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas)

The contractor's staging and storage area will be located in the median off of the University Ave on ramp and off ramp.

Staging Area Location Information:

LOCATION	LATITUDE	LONGITUDE
Area 1	21.1742 ° N (decimal)	157.4917 ° W (decimal)
Area 2	21.1740 ° N (decimal)	157.4914° W (decimal)

2.4 Sequence and Estimated Dates of Construction Activities [Ref. HAR, 11-55, Appendix C, Section 7.2.5.]

Instructions:

- Describe the intended construction sequence and timing of major activities.
- For each phase of construction, include the following information:
  - ✓ Installation of stormwater controls, and when they will be made operational;
  - ✓ Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;
  - ✓ Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site;
  - ✓ Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject to in HAR 11-55 Appendix C Section 7.2.5; and
  - ✓ Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.
- The construction sequence must reflect the following requirements:
  - ✓ Area of disturbance;
  - ✓ Installation of stormwater controls; and
  - ✓ Stabilization deadlines.
- Also, see EPA's *Construction Sequencing BMP Fact Sheet* at http://www.epa.gov/npdes/stormwater/menuofbmps/construction/cons_seq)

Timeline of Activity:

Phase 1 – H1 Freeway & On/Off Ramps (Sta. 172+64 to Sta. 45_82)

Estimated Timeline of Activity	Construction Activity and BMP Descriptions
November 2020	Installation of BMPs • Install Filter Sock (See Section 4.2) • Install Stabilized Construction Entrance (See Section 4.3) • Install Temporary Inlet Protection (See Section 4.9) • Install Temporary Catch Basin Protection (See Section 4.9)
November 2020 – December 2020	Commencement of Earth-Disturbing Activities • Install Filter Socks around Stockpiles (See Section 4.4) • Install Temporary Sanitary Facilities and Dumpsters (See Section 5.5) • Begin Overall Site Demolition • Remove Existing Guardrail or Impact Attenuator • Remove Existing Fence on Concrete Barrier • Begin Site Clearing and Grubbing Operations
November 2020 – July 2021	Roadway Reconstruction • Pavement Reconstruction and Resurfacing
August 2021	Cessation of Construction Activities and Removal of BMPs • Cease construction activities

	• Removal of construction equipment and vehicles • Cease pollutant-generating activities • Remove all temporary control BMPs and stabilize areas disturbed by BMPs

Phase 2 – Pedestrian Bridge, Side Streets & Over/Under Pass Paving

Estimated Timeline of Activity	**Construction Activity and BMP Descriptions**
May 2021	Installation of BMPs • Install Filter Sock (See Section 4.2) • Install Stabilized Construction Entrance (See Section 4.3) • Install Temporary Inlet Protection (See Section 4.9) • Install Temporary Catch Basin Protection (See Section 4.9)
May 2021 – June 2021	Commencement of Earth-Disturbing Activities • Install Filter Socks around Stockpiles (See Section 4.4) • Install Temporary Sanitary Facilities and Dumpsters (See Section 5.5) • Begin Overall Site Demolition • Remove Existing Guardrail or Impact Attenuator • Remove Existing Fence on Concrete Barrier • Begin Site Clearing and Grubbing Operations
May 2021 – October 2021	Roadway Pavement Construction • Pavement Reconstruction and Resurfacing
October 2021	Cessation of Construction Activities and Removal of BMPs • Cease construction activities • Removal of construction equipment and vehicles • Cease pollutant-generating activities • Remove all temporary control BMPs and stabilize areas disturbed by BMPs
November 2021	Notice of Cessation Form will be submitted.

2.5 Allowable Non-Stormwater Discharges [Ref. HAR, 11-55, Appendix C, Section 7.2.8]

Instructions:

- Identify all allowable sources of non-stormwater discharges. The allowable non-stormwater discharges identified in the permit:
  - ✓ Discharges from emergency fire-fighting activities;
  - ✓ Fire hydrant flushings;
  - ✓ Landscape irrigation;
  - ✓ Waters used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;
  - ✓ Water used to control dust;
  - ✓ Potable water including uncontaminated water line flushings;
  - ✓ Routine external building wash down that does not use detergents;
  - ✓ Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and detergents are not used. You are prohibited from directing pavement was waters directly into any surface water, storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;
  - ✓ Uncontaminated air conditioning or compressor condensate;
  - ✓ Uncontaminated, non-turbid discharges of ground water or spring water;
  - ✓ Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and
  - ✓ Construction dewatering water that has been treated by an appropriate control.

Type of Allowable Non-Stormwater Discharge	**Likely to be Present at Your Site?**
Discharges from emergency fire-fighting activities	☐ YES ☒ NO
Fire hydrant flushings	☐ YES ☒ NO
Landscape irrigation	☐ YES ☒ NO
Waters used to wash vehicles and equipment	☒ YES ☐ NO
Water used to control dust	☐ YES ☒ NO
Potable water including uncontaminated water line flushings	☐ YES ☒ NO
Routine external building wash down	☐ YES ☒ NO
Pavement wash waters	☒ YES ☐ NO
Uncontaminated air conditioning or compressor condensate	☐ YES ☒ NO
Uncontaminated, non-turbid discharges of ground water or spring water	☐ YES ☒ NO
Foundation or footing drains	☐ YES ☒ NO
Construction dewatering water	☐ YES ☒ NO

2.6 Site Maps [Ref. HAR, 11-55, Appendix C, Section 7.2.6.]

Instructions:

- Attach site maps in Appendix A of the Template. For most projects, a series of site maps is necessary and recommended. The first should show the undeveloped site and its current features. An additional map or maps should be created to show the developed site or, for more complicated sites, show the major phases of development.

These maps must include the following features:

- Boundaries of the property and of the locations where construction will occur, including:
  - ✓ Locations where earth-disturbing activities will occur, noting any phasing of construction activities;
  - ✓ Approximate slopes before and after major grading activities. Note areas of steep slopes, as defined in Appendix A;
  - ✓ Locations where sediment, soil, or other construction materials will be stockpiled;
  - ✓ Locations of any crossings of surface waters;
  - ✓ Designated points on the site where vehicles will exit onto paved roads;
  - ✓ Locations of structures and other impervious surfaces upon completion of construction; and
  - ✓ Locations of construction support activity areas covered by this permit.
- Locations of all surface waters, including wetlands, that exists on or near your site. Indicate which waterbodies are listed as impaired, and which are identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 waters.
- The boundary lines of any natural buffer areas
- Areas of federally-listed critical habitat for endangered or threatened species.
- Topography of the site, existing vegetative cover (e.g., forest, pasture, pavement, structures), and drainage pattern(s) of stormwater and allowable non-stormwater flow onto, over, and from the site property before and after major grading activities.
- Stormwater and allowable non-stormwater discharge locations, including:
  - ✓ Locations of any storm drain inlets on the site and in the immediate vicinity of the site; and
  - ✓ Locations where stormwater or allowable non-stormwater will be discharged to surface waters (including wetlands).
- Locations of all potential pollutant-generating activities.
- Locations of stormwater control measures.
- Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

Refer to Appendix A for site maps

SECTION 3: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS

3.1 Safe Drinking Water Act Underground Injection Control Requirements [Ref. HAR, 11-55, Appendix C, Section 7.2.14.]

This Safe Drinking Water Act Underground Injection Control Requirements are not applicable to this project.

SECTION 4: EROSION AND SEDIMENT CONTROLS [Ref. HAR, 11-55, Appendix C, Section 7.2.10.]

General Instructions:

- Describe the erosion and sediment controls that will be installed and maintained at your site.
- For more information or ideas on BMPs, see EPA's National Menu of BMPs http://www.epa.gov/npdes/stormwater/menuofbmps

4.1 Natural Buffers or Equivalent Sediment Controls [Ref. HAR, 11-55, Appendix C, Section 5.1.2.1]

Instructions:

This section only applies to you if a surface water is located within 50 feet your construction activities. If this is the case, consult HAR 11-55, Appendix C, Section 5.1.2.1 for information on how to comply with the buffer requirements.

- Describe the compliance alternative that was chosen to meet the buffer requirements, and include any required documentation supporting the alternative selected. The compliance alternative selected must be maintained throughout the duration of permit coverage. However, if you select a different compliance alternative during your period of permit coverage, you must modify your SWPPP to reflect this change.
- If you qualify for one of the exceptions, include documentation related to your qualification for such exceptions.

Buffer Compliance Alternatives

Are there any surface waters within 50 feet of your project's earth disturbances? ☒ YES ☐ NO

4.2 Perimeter Controls [Ref. HAR, 11-55, Appendix C, Section 5.1.2.2]

Instructions:

- Describe sediment controls that will be used (e.g., silt fences, filter berms, temporary diversion dikes, or fiber rolls) to meet the HAR 11-55, Appendix C Section 5.1.2.2 requirement to "install sediment controls along those perimeter areas of your site that will receive stormwater from earth-disturbing activities."
- For linear projects, where you have determined that the use of perimeter controls in portions of the site is impracticable, document why you believe this is to be the case.
- Also see, EPA's *Silt Fence BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/silt_fences or *Fiber Rolls BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/fiber_rolls

General

- The project shall utilize perimeter controls at areas around the project site where stormwater sheet flow from earth-disturbing activities will need to be intercepted. The perimeter controls shall collect the sheet flow runoff, allowing sediment to settle out, and release runoff slowly as sheet flow, preventing sediment migration offsite and preventing erosion from occurring outside the project boundaries.

Specific Perimeter Controls

Perimeter Control # 1 – Filter Sock

Perimeter Control Description

- FILTER SOCK – A sock usually filled with composted material and placed perpendicular to runoff to reduce flow velocity and retain sediment and other pollutants.
- For design specifications, see Appendix A Construction Drawing Sheet 34, EC23.
- Compost material shall not contribute nutrients in concentrations that would violate State water quality standards.

Installation

- Filter Sock shall be in place and operational prior to earth-disturbing activities at each location.

Maintenance Requirements

- Inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater.

- Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment shall be removed when the sediment accumulation reaches one-third of the above ground height. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location.

- Repair or replace Filter Sock if it becomes damaged.

- Filter Sock shall remain in effective operating condition and shall be protected from activities that would reduce its effectiveness until project disturbed areas are stabilized.

- After inspection, routine maintenance and repairs shall be initiated immediately, and completed by the close of the next work day. Replacements or significant repairs shall be implemented by no later than 7 calendar days from the time of discovery where feasible. If it is infeasible to complete the installation or repair within 7 calendar days, the Contractor shall document the reasons why in its records, and document the schedule for making the BMP operational. If these actions result in changes to the storm water controls or procedures documented in the SWPPP, Contractor shall modify the SWPPP accordingly within 7 calendar days of completing this work.

- Remove Filter Sock when no longer needed. Remove sediment accumulation and clean, re-grade, and stabilize the area. Removed sediment should be incorporated in the project or disposed of.

4.3 Sediment Track-Out [Ref. HAR, 11-55, Appendix C, Section 5.1.2.3.]

Instructions:

- Describe stormwater controls that will be used to "minimize the track-out of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting your construction site."
- Describe location(s) of vehicle exit(s), procedures to remove accumulated sediment off-site (e.g., vehicle tracking), and stabilization practices (e.g., stone pads or wash racks or both) to minimize off-site vehicle tracking of sediment. Also include the design, installation, and maintenance specifications for each control.
- Also, see EPA's *Construction Entrances BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/cons_entrance

General

- The project shall utilize controls that will minimize the track-out of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting the construction staging area. Vehicles that will access the staging and construction areas will be restricted to using the designated entry/exit point, which will be coordinated with the Construction Manager and the Contractor. Sediment track-out remedies will be stabilized and properly maintained, including measures to promptly remove any tracked out sediment that is not captured by the installed controls.

Specific Track-Out Controls

Track-Out Control – Temporary Stabilized Construction Entrance/Exit

Track-Out Control Description

- TEMPORARY STABILIZED CONSTRUCTION ENTRANCE/EXIT – this will provide a stabilized pad of aggregate underlain with filter cloth located at the entrance/exit to the contractor staging area. The purpose of a stabilized construction entrance/exit is to reduce or eliminate the tracking of sediment onto adjacent paved roadways. Reducing tracking of sediments and other pollutants onto paved roads helps prevent deposition of sediments into storm drains, storm water conveyances, and surface waters and production of airborne dust.
- For design specifications, see Appendix A Construction Drawing Sheet 34, EC23

Installation

- Temporary stabilized construction entrance shall be in place and operational prior to earth disturbing activities.

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMPs are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintain repair.

- Inspect roads adjacent to the site daily. Sweep or vacuum to remove visible accumulated sediment. Where sediment has been tracked-out from the site onto the surface of off-site streets, other paved areas, and sidewalks, the contractor shall remove the deposited sediment by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. The contractor shall remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. The contractor shall refrain from hosing or sweeping tracked-out sediment into any stormwater conveyance, storm drain inlet, or surface water.

- Remove aggregate, separate and dispose of sediment if construction entrance/exit is clogged with sediment.

- Check for damage and repair as needed.

- Replace gravel material when surface voids are visible.

- After inspection, routine maintenance and repairs shall be initiated immediately, and completed by the close of the next work day. Replacements or significant repairs shall be implemented by no later than 7 calendar days from the time of discovery where feasible. If it is infeasible to complete the installation or repair within 7 calendar days, the Contractor shall document the reasons why in its records, and document the schedule for making the BMP operational. If these actions result in changes to the storm water controls or procedures documented in the SWPPP, Contractor shall modify the SWPPP accordingly within 7 calendar days of completing this work.

- Temporary stabilized construction entrance/exit shall remain in effective operating condition and shall be protected from activities that would reduce its effectiveness until project disturbed areas are stabilized.

- Remove gravel and filter fabric at completion of construction and restore the area.

4.4 Stockpiled Sediment or Soil [Ref. HAR, 11-55, Appendix C, Section 5.1.2.4.]

Instructions:

- Describe stormwater controls and other measures you will take to minimize the discharge of sediment or soil particles from stockpiled sediment or soil. Include a description of structural practices (e.g., diversions, berms, ditches, storage basins), including design, installation, and maintenance specifications, used to divert flows from stockpiled sediment or soil, retain or detain flows, or otherwise limit exposure and the discharge of pollutants from stockpiled sediment or soil.
- Also, describe any controls or procedures used to minimize exposure resulting from adding to or removing materials from the pile.

General

- The project shall utilize controls that will properly locate and protect sediment or soil that will be temporarily stockpiled as part of the project. These controls shall prevent discharge of sediment from the stockpiled soils into storm drain inlets, storm water conveyances, or surface waters.

Specific Stockpile Controls

Stockpile Control # 1

Stockpiled Sediment/Soil Control Description

- Temporary stockpiles shall be located within the designated contractor staging area and a minimum of 50 feet away from concentrated flows of storm water, drainage courses, and drainage inlets.
- Filter Sock shall be installed around the bottom of the stockpile to keep runoff away and to mitigate runoff coming from the stockpile.
- Controls shall be implemented to minimize dust that may come from the stockpiled material. See Section 4.5 on "Minimize Dust."
- Prior to the onset of rain and at all times during the rainy season, the stockpile shall be covered entirely with plastic or comparable material.
- Stockpiles shall be kept at a maximum height of 15 feet.

Installation

- Equipment and sediment controls needed for stockpile control shall be on-site and ready for use prior to earth-disturbing activities.

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs and cover stock pile prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.

- Repair and/or replace Filter Sock and covers as needed to keep them functioning properly.

- After inspection, routine maintenance and repairs shall be initiated immediately, and completed by the close of the next work day. Replacements or significant repairs shall be implemented by no later than 7 calendar days from the time of discovery where feasible. If it is infeasible to complete the installation or repair within 7 calendar days, the Contractor shall document the reasons why in its records, and document the schedule for making the BMP operational. If these actions result in

changes to the storm water controls or procedures documented in the SWPPP, Contractor shall modify the SWPPP accordingly within 7 calendar days of completing this work.

- Stockpile controls shall remain in effective operating condition and shall be protected from activities that would reduce their effectiveness until stockpiles have been removed from project site.

- The contractor shall not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance, storm drain inlet, or surface water.

4.5 Minimize Dust [Ref. HAR, 11-55, Appendix C, Section 5.1.2.5.]

Instructions:

Describe controls and procedures you will use at your project/site to minimize the generation of dust.

General

- The project shall utilize controls that will prevent or alleviate dust nuisance generated by construction activities.

Specific Dust Controls

Dust Control:

Dust Control Description

- Construction activities shall be scheduled to minimize the amount of exposed area.
- Onsite construction vehicle traffic shall be limited to 15 mph.
- Watering shall be the primary means of dust control.
    - Water shall be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution.
    - Water shall be applied daily or as needed to be effective, but shall not be excessive such that the water is not able to percolate into the ground.
    - All distribution equipment shall be equipped with a positive means of shutoff.
    - Reclaimed waste water shall not be used for dust control.
    - Water used for dust control shall not be allowed to enter any storm drain inlet, storm water conveyance, and surface water.
- For exposed areas that will not be subjected to traffic, alternative temporary control measures include gravel.

Installation

- Daily or as needed
- Equipment and material needed for dust control shall be on-site and ready for use prior to earth-disturbing activities.

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities.
- Check areas protected to ensure coverage.
  Most dust control measures require frequent, often daily, or multiple times per day attention. Adjust water flow if it looks like water may run off to storm drains, storm water conveyances, or surface waters.

Dust control measures shall remain in effective operating condition and shall be protected from activities that would reduce their effectiveness until project disturbed areas are stabilized.

4.6 Minimize the Disturbance of Steep Slopes [Ref. HAR, 11-55, Appendix C, Section 5.1.2.6.]

Instructions:

- Describe how you will minimize the disturbance to steep slopes (as defined by HAR 11-55 Appendix C Section 5.1.2.6).
- Describe controls (e.g., erosion control blankets, tackifiers), including design, installation and maintenance specifications, that will be implemented to minimize sediment discharges from slope disturbances.
- Also, see EPA's *Geotextiles BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/geotextiles

This control is not applicable to this project. There are no existing or proposed steep slopes (>15%) within the project limits. This control will not be installed for this project.

4.7 Topsoil [Ref. HAR, 11-55, Appendix C, Section 5.1.2.7.]

Instructions:

- Describe how topsoil will be preserved and identify these areas and associated control measures on your site map(s).
- If it is infeasible for you to preserve topsoil on your site, provide an explanation for why this is the case.

This control will not be installed on this project.

4.8 Soil Compaction [Ref. HAR, 11-55, Appendix C, Section 5.1.2.8.]

Instructions:

- In areas where final vegetative stabilization will occur or where infiltration practices will be installed, describe the controls, including design, installation, and maintenance specifications that will be used to restrict vehicle or equipment access or condition the soil for seeding or planting.

This control will not be installed on this project.

4.9 Storm Drain Inlets [Ref. HAR, 11-55, Appendix C, Section 5.1.2.9.]

Instructions:

- Describe controls (e.g., inserts, rock-filled bags, or block and gravel) including design, installation, and maintenance specifications that will be implemented to protect all inlets that will receive stormwater from your construction activities, and that you have authority to access.
- Also, see EPA's *Storm Temporary Inlet Protection BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/storm_drain

General

- The project shall utilize controls to protect existing and proposed storm drain inlets from stormwater sediment that could flow to the drain inlets from the project site.

Specific Catch Basin Controls

Storm Drain Inlet Control – #1

Storm Drain Inlet Control Description

- TEMPORARY INLET PROTECTION – This inlet protection usually filled with composted material and placed perpendicular to runoff to reduce flow velocity and retain sediment and other pollutants.
- To be installed around the perimeter of grated drain inlets
- For design specifications, see Appendix A Construction Drawings – Sheet 34, EC23.
- Compost material shall not contribute nutrients in concentrations that would violate State water quality standards.

Installation

- Inlet protection shall be in place and operational prior to earth-disturbing activities.

Maintenance Requirements

- Inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater.
- Inspection for sediment shall be for the duration the inlet protection is installed, after each rainfall and on a weekly basis.
- Sediment that accumulates in the BMP must be periodically removed in order to maintain BMP effectiveness. Sediment shall be removed when the sediment accumulation reaches one-third of the above ground height. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location.
- Repair or replace inlet protection if it becomes damaged.

  Temporary Inlet Protection shall remain in effective operating condition and shall be protected from activities that would reduce its effectiveness until project disturbed areas are stabilized.

Storm Drain Inlet Control # 2

Storm Drain Inlet Control Description

- TEMPORARY CATCH BASIN PROTECTION – this method of inlet protection will be used at catch basins. The inserts shall be removable and can be cleaned and reused.
- For design specifications, see Appendix A Construction Drawings – Sheet 31, EC23

Installation

- Inlet protection shall be in place and operational prior to earth-disturbing activities.

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.

- Inspection for sediment shall be for the duration the inlet protection is installed, after each rainfall and on a weekly basis.

- Remove all accumulated sediment.

- Remove catch basin protection once the drainage area is stabilized. Clean and regrade area around the catch basin and clean the inside of the catch basin as it must be free of sediment and debris at the time of final inspection.

4.10 Contaminated Soil and Contaminated Soil Stockpiles [Ref. HAR, 11-55, Appendix C, Section 5.1.2.10.]

Instructions:

Describe controls including design, installation, and maintenance specifications that will be implemented to prevent storm water from contacting contaminated soil and contaminated soil stockpiles, or prevent the discharge of storm water runoff from contaminated soil and contaminated soil stockpiles.

Contaminated soils are not anticipated on this project site; therefore specific controls are not applicable. While not anticipated at this project site, if encountered, notify Construction Manager and Contracting Officer Representative, coordinate storm water controls, and make appropriate modifications to the SWPPP.

4.11 Constructed Stormwater Conveyance Channels [Ref. HAR, 11-55, Appendix C, Section 5.1.3.1.]

Instructions:

If you will be installing a stormwater conveyance channel, describe control practices (e.g., velocity dissipation devices), including design specifications and details (volume, dimensions, outlet structure), that will be implemented at the construction site.

This control will not be installed on this project.

4.12 Sediment Basins [Ref. HAR, 11-55, Appendix C, Section 5.1.3.2.]

Instructions:

If you will install a sediment basin, include design specifications and other details (volume, dimensions, outlet structure) that will be implemented at in conformance with HAR 11-55 Appendix C Section 5.1.3.2.

- At a minimum, sediment ponds must provide storage for either (1) the calculated volume of runoff from the 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained
- Sediment ponds must also utilize outlet structures that withdraw water from the surface, , unless infeasible
- Also, see EPA's *Sediment Basin BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/sediment_basins

This control will not be used on this project.

4.13 Dewatering Practices [Ref. HAR, 11-55, Appendix C, Section 5.1.3.3.]

Instructions:

If you will be discharging stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, include design specifications and details of all dewatering practices that are installed and maintained to comply with the permit

This control will not be used on this project.

4.14 Other Stormwater Controls

Instructions:

- Describe any other stormwater controls that do not fit into the above categories.

N/A

4.15 Site Stabilization [Ref. HAR, 11-55, Appendix C, Section 5.2 and 7.2.10.2.]

Instructions:

The HAR requires you to immediately initiate stabilization when work in an area of your site has permanently or temporarily stopped, and to complete certain stabilization activities within prescribed deadlines. See HAR 11-55 Appendix C Sections 5.2 and 7.2.10.2. The HAR also requires that stabilization measures meet certain minimum criteria. For your SWPPP, you must include the following:

- Describe the specific vegetative and/or non-vegetative practices that will be used to stabilize exposed soils where construction activities have temporarily or permanently ceased. Avoid using impervious surfaces for stabilization whenever possible.
- Also, see EPA's *Seeding BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/seeding
- Once you begin construction, consider using the Grading/Stabilization Activities log in Appendix H of the Template to document your compliance with the stabilization requirements

Site Stabilization Practice #1

☐ *Vegetative* ☒ *Non-Vegetative*
☐ *Temporary* ☒ *Permanent*

Description of Practice

- HARDSCAPE
- Portions of the project site will be permanently stabilized with cement concrete pavement.
- Upon achieving final grades, stabilization shall begin immediately.

Installation

- During final paving and construction of impervious structures
- Stabilization measures shall be initiated immediately whenever earth-disturbing activities have permanently ceased on any portion of the site to receive hardscape; no later than the end of the next work day, following the day when the earth-disturbing activities have permanently ceased.

Maintenance Requirements

- N/A

4.16 Post Construction Measures [Ref. HAR, 11-55, Appendix C, Section 7.2.10.3.]

Description

- Disturbed areas will be stabilized with either hardscape or grassing.

SECTION 5: POLLUTION PREVENTION STANDARDS

5.1 Potential Sources of Pollution (Ref. HAR 11-55, Appendix C, Section 7.2.7, 7.2.10.1 and 7.2.12)

Instructions:

- Identify and describe all pollutant-generating activities at your site (e.g., paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal).
- For each pollutant-generating activity, include an inventory of pollutants or pollutant constituents associated with that activity (e.g., sediment, fertilizers, and/or pesticides, paints, solvents, fuels), which could be exposed to rainfall or snowmelt, and could be discharged from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges.

Construction Site Pollutants

Pollutant-Generating Activity	**Pollutants or Pollutant Constituents** (that could be discharged if exposed to stormwater)	**Location on Site** (or reference SWPPP site map where this is shown)
Demolition	Sediments; Concrete Slurry; Solid Waste; Hazardous Materials; Construction & Domestic Waste	See Appendix A, Construction Drawings, sheets 12 to 33 (EC1 – EC22)
Grading	Sediment	See Appendix A, Construction Drawings, sheets 56 to 78 (R1 – R23)
Concrete Construction, Curing and Finishing	Sediments; Oil, Grease, Fuels, Concrete Wash Water, Slurry, Concrete, Hazardous Materials, Construction and Domestic Waste	See Appendix A, Construction Drawings, sheets 56 to 78 (R1 – R23)
Pavement Marking and Signing Plan	Trace Metals, Paint, Solvent, Wash Water from Paint	See Appendix A, Construction Drawings, sheet 143 -165 (M2 – M24)
Contractor Construction Support Operations throughout all construction activities (material delivery, storage and use; stockpiling; solid waste storage and management; hazardous or toxic waste storage and management; concrete waste containment; sanitary/septic waste storage and management; vehicle/equipment fueling and/or maintenance; mobile refueling of tracked vehicles)	Sediments; Nutrients; Trace Metals; Oil, Grease, Fuels; Hazardous Materials; Sanitary Waste; Water from washing of equipment and vehicles; Soap; Construction & Domestic Waste	See Appendix A, Construction Drawings, sheets 53 -55 (GP1 - GP3)

5.2 Spill Prevention and Response [Ref. HAR, 11-55, Appendix C, Section 7.2.11.1.]

Instructions:

- Describe procedures you will use to prevent and respond to leaks, spills, and other releases. You must implement the following at a minimum:
  - ✓ Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or title of the employee(s) responsible for detection and response of spills or leaks; and
  - ✓ Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.3.4c and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.
- Some projects/site may be required to develop a Spill Prevention Control and Countermeasure (SPCC) plan under a separate regulatory program (40 CFR 112). If you are required to develop an SPCC plan, or you already have one, you should include references to the relevant requirements from your plan.

Education

- Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills.
- Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
- Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees.
- Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

- Provide a spill prevention control and countermeasure (SPCC) plan when the above ground storage volume is equal to or greater than 55 gallons of petroleum product (40 CFR 112.1 (d)(2)(ii)).
- To the extent that the work can be accomplished safely, spills of oil, petroleum products, and hazardous substances as listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Refer to section *1.2 Stormwater Team* of this SWPPP for individuals responsible for overseeing and enforcing control measures.

- Prepare and maintain a spill response plan at the project site.
- Spills should be covered and protected from storm water run-on during rainfall to the extent that it doesn't compromise cleanup activities.
- Do not bury or wash spills with water.
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with the following:
    - Contaminated water should be contained in a leak-proof container such as a roll-off bin or portable tank.
    - Containment devices must be structurally sound and leak free. Contaminated water storage/treatment facilities shall prevent the infiltration of contaminants which may affect subsurface soils and groundwater.
    - Containment devices must be of sufficient quantity or volume to completely contain the contaminated water.
    - Contaminated water shall be tested to determine if it is hazardous or toxic prior to handling or disposal.
    - Dispose of contaminated water in accordance with applicable laws and regulations and at an off-site permitted facility. For disposal of contaminated water that exceeds hazardous or toxic waste levels, refer to section *5.5.3 Hazardous or Toxic Waste* of this SWPPP.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

- Clean up leaks and spills immediately.
- Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to either a certified laundry (rags) or disposed of as hazardous waste.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

Minor Spills

- Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.

- Absorbent materials should be promptly removed and disposed of properly.
- Follow the practice below for a minor spill:
    - Contain the spread of the spill,
    - Recover spilled materials, and
    - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

- Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.
- Spills should be cleaned up immediately:
    - Contain spread of the spill;
    - Notify the project foreman immediately;
    - If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely;
    - If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil; and
    - If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

- For significant or hazardous spills that cannot be controlled by personnel in the immediate vicinity, the following steps should be taken:
    - Notify the local emergency response by dialing 911. In addition to 911, the contractor will notify the proper Department of Transportation Services Representative. It is the contractor's responsibility to have all emergency phone numbers at the construction site;
    - The services of a spills contractor or a HazMat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site; and
    - Other agencies which may need to be consulted include, but are not limited to Hawaii State Department of Health Hazard Evaluation and Emergency Response Office, Honolulu Local Emergency Planning Committee, Honolulu Fire Department, the Coast Guard, Department of Health Solid Waste & Hazardous Waste Branch, Department of Health Clean Water Branch, Department of Labor & Industrial Relations Hawaii Occupational Safety and Health Administration (HIOSH), etc.

Reporting

- Report significant spills to local agencies, such as the Fire Department; they can assist in cleanup.
- If possible, the Contractor should notify the Navy after the initial spill response is initiated and emergency services have been contacted, before calling the NRC, CWB, and HEER Office to coordinate the reporting to outside agencies. Contact the NAVFAC Hawaii

FEAD Construction Manager/Engineering Technician. Contact the Deputy Navy On-Scene Coordinator if the spill reaches the storm drain system or reaches reportable quantity (Patricia Lee, 473-4689, cell 864-2463). The National Response Center and HEER Office only needs to be notified if there is a release of a substance over its reportable quantity in a 24-hour period. The Clean Water Branch only needs to be notified for permit violations or if the release occurs to a water body or reaches a water body via the storm drainage system. The State Hospital Operator only needs to be notified if the spill occurs outside of normal operating hours (because other State agencies are closed).

- Federal regulations require that any significant oil or hazardous substance spill into a water body or onto an adjoining shoreline in excess of a reportable quantity established under 40 CFR Part 100, 40 CFR Part 117, or 40 CFR Part 302 occurring within a 24-hour period be reported to the National Response Center (NRC) at 800-424-8802 (24 hours), the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch via email at cleanwaterbranch@doh.hawaii.gov during non-business hours as soon as the Contractor has knowledge of the discharge. The Contractor shall also, within 7 calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release, in coordination with the Government.

5.3 Fueling and Maintenance of Equipment or Vehicles [Ref. HAR, 11-55, Appendix C, Section 5.3.3.1.]

Instructions:

- Describe equipment/vehicle fueling and maintenance practices that will be implemented to eliminate the discharge of spilled or leaked chemicals (e.g., providing secondary containment *(examples: spill berms, decks, spill containment pallets)* and cover where appropriate, and/or having spill kits readily available.
- Also, see EPA's *Vehicle Maintenance and Washing Areas BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/vehicile_maintain

General

- Equipment and vehicle fueling and maintenance should be done offsite as much as possible. If these activities need to be done onsite, the procedures below are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of storm water. This can be accomplished by fueling and performing maintenance in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling and maintenance procedures.

Specific Pollution Prevention Practices

Pollution Prevention Practice # 1
Description

- VEHICLE AND EQUIPMENT FUELING
- Use offsite fueling stations as much as possible. These businesses are better equipped to handle fuel and spills properly. Performing this work offsite can also be economical by eliminating the need for a separate fueling area at a site.
- Discourage "topping-off" of fuel tanks.
- Absorbent spill cleanup materials and spill kits should be available in fueling areas and on fueling trucks, and should be disposed of properly after use.

- Drip pans or absorbent pads should be used during vehicle and equipment fueling, unless the fueling is performed over an impermeable surface in a dedicated fueling area.
- Use absorbent materials on small spills. Do not hose down or bury the spill. Remove the adsorbent materials promptly and dispose of properly.
- Avoid mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas. With the exception of tracked equipment such as bulldozers and large excavators, most vehicles should be able to travel to a designated area with little lost time.
- Train employees and subcontractors in proper fueling and cleanup procedures.
- When fueling must take place onsite, designate an area away from drainage courses to be used. Fueling areas will be located in staging areas.
- Dedicated fueling areas should be protected from storm water runon and runoff, and should be located at least 50 ft. away from downstream drainage facilities and watercourses. Fueling must be performed on level-grade areas.
- Protect fueling areas with impermeable berms to prevent runon, runoff, and to contain spills. Berms may be constructed of earth covered with an impermeable liner; sand bags/flood socks; or manufactured spill berms.
- Nozzles used in vehicle and equipment fueling should be equipped with an automatic shutoff to control drips. Fueling operations should not be left unattended.
- Use vapor recovery nozzles to help control drips as well as air pollution.
- Federal, state, and local requirements should be observed for any stationary above ground storage tanks.

Installation

- Pollution prevention practices shall be implemented continuously throughout construction

Maintenance Requirements

- Vehicles and equipment should be inspected each day of use for leaks. Leaks should be repaired immediately or problem vehicles or equipment should be removed from the project site.
- Keep ample supplies of spill cleanup materials onsite.
- Immediately clean up spills and properly dispose of contaminated soil and cleanup materials.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.
- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

Pollution Prevention Practice # 2

Description

- VEHICLE AND EQUIPMENT MAINTENANCE
- Use offsite repair shops as much as possible. These businesses are better equipped to handle vehicle fluids and spills properly. Performing this work offsite can also be economical by eliminating the need for a separate maintenance area.
- If maintenance must occur onsite, use designated areas, located away from drainage courses. Dedicated maintenance areas should be protected from storm water runon and runoff, and should be located at least 50 ft. from downstream drainage facilities and watercourses.

- Drip pans or absorbent pads shall be used during vehicle and equipment maintenance work that involves fluids, unless the maintenance work is performed over an impermeable surface in a dedicated maintenance area.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- All fueling trucks and fueling areas are required to have spill kits and/or use other spill protection devices.
- Use adsorbent materials on small spills. Remove the absorbent materials promptly and dispose of properly.
- Inspect onsite vehicles and equipment daily at startup for leaks, and repair immediately. Keep vehicles and equipment clean; do not allow excessive build-up of oil and grease. If vehicle/equipment cannot be repaired or removed immediately, use drip pans and absorbents under and around leaky vehicle/equipment.
- Segregate and recycle wastes, such as greases, used oil or oil filters, antifreeze, cleaning solutions, automotive batteries, hydraulic and transmission fluids. Provide secondary containment and covers for these materials if stored onsite.
- Train employees and subcontractors in proper maintenance and spill cleanup procedures.
- Drip pans or plastic sheeting should be placed under all vehicles and equipment placed on docks, barges, or other structures over water bodies when the vehicle or equipment is planned to be idle for more than 1 hour.
- For long-term projects, consider using portable tents or covers over maintenance areas if maintenance cannot be performed offsite.
- Consider use of new, alternative greases and lubricants, such as adhesive greases, for chassis lubrication and fifth-wheel lubrication.
- Properly dispose of used oils, fluids, lubricants, and spill cleanup materials in accordance with federal, state and local requirements.
- Do not place used oil in a dumpster or pour into a storm drain or watercourse.
- Properly dispose of or recycle used batteries.
- Do not bury used tires.

Installation

- Pollution prevention practices shall be implemented continuously throughout construction

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.
- Keep ample supplies of spill cleanup materials onsite.
- Maintain waste fluid containers in leak proof condition.
- Vehicles and equipment should be inspected on each day of use. Leaks should be repaired immediately or the problem vehicle(s) or equipment should be removed from the project site.
- Inspect equipment for damaged hoses and leaky gaskets routinely. Repair or replace as needed immediately.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.
- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control

as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

5.4 Washing of Equipment and Vehicles [Ref. HAR, 11-55, Appendix C, Section 5.3.3.2.]

Instructions:

- Describe equipment/vehicle washing practices that will be used to minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing (e.g., locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls).
- Describe how you will prevent the discharge of soaps, detergents, or solvents by providing either (1) cover (*examples: plastic sheeting or temporary roofs*) to prevent these detergents from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.
- Also, see EPA's *Vehicle Maintenance and Washing Areas BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/vehicile_maintain

General

- Equipment and vehicle washing should be done offsite as much as possible. If these activities need to be done onsite, the procedures below are designed to eliminate the discharge of pollutants to storm water from vehicle and equipment cleaning operations. Procedures and practices include but are not limited to: washing in designated, contained areas only; eliminating discharges to the storm drain by infiltrating the wash water; and training employees and subcontractors in proper cleaning procedures.

Specific Pollution Prevention Practices

Pollution Prevention Practice # 1

Description

- ONSITE EQUIPMENT AND VEHICLE WASHING
- Use phosphate-free, biodegradable soaps only if necessary, and follow containment measures below.
- Educate employees and subcontractors on pollution prevention measures
- Do not permit steam cleaning onsite. Steam cleaning can generate significant pollutant concentrates
- Cleaning of vehicles and equipment with soap, solvents or steam shall not occur on the project site unless resulting wastes are fully contained and disposed of. Resulting wastes shall not be discharged or buried, and must be captured and recycled or disposed according to the following:
    - Wash water shall be contained in a controlled area such as a roll-off bin or portable tank.
    - Containment devices must be structurally sound and leak free.
    - Containment devices must be of sufficient quantity or volume to completely contain the wash water.
    - Wash water shall be tested to determine if it is hazardous or toxic prior to handling or disposal.

  - Dispose of contaminated water in accordance with applicable laws and regulations and at an off-site permitted facility. For disposal of wash water that exceeds hazardous or toxic waste levels, refer to section *5.5.3 Hazardous or Toxic Waste* of this SWPPP.

- Minimize use of solvents. Use of diesel for vehicle and equipment cleaning is prohibited
- Vehicles and equipment that regularly enter and leave the construction site shall be cleaned offsite, when practicable. Off-site cleaning facilities may be better equipped to properly handle and dispose of wash waters.
- When vehicle and equipment washing and cleaning must occur onsite, and the operation cannot be located within a structure or building equipped with appropriate disposal facilities, the outside cleaning area shall have the following characteristics:
  - Located away from storm drain inlets, drainage facilities, or watercourses
  - Bermed to contain wash waters and to prevent runon and runoff. Berms shall be impermeable and may be constructed of earth covered with an impermeable liner; sand bags/flood socks; or manufactured spill berms.
  - Configured with a sump to allow collection and disposal of wash water
  - No discharge of wash waters to storm drains or watercourses; and
  - Used only when necessary
- When cleaning vehicles and equipment with water:
  - Install high-efficiency water fixtures. Use as little water as possible. High-pressure sprayers may use less water than a hose and should be considered
  - Use positive shutoff valve to minimize water usage; and
  - Facility wash racks should discharge to a sanitary sewer, recycle system or other approved discharge system and must not discharge to the storm drainage system, watercourses, or to groundwater.
- For design specifications, see Appendix A, Construction Drawing Sheet CD501 detail A4

Installation

- Pollution prevention practices shall be implemented continuously throughout construction

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.
- Berm repair may be necessary.
- Monitor employees and subcontractors throughout the duration of the construction project to ensure appropriate practices are being implemented.
- Inspect sump regularly to ensure it is not overflowing and remove liquids and sediment as needed.
- Prohibit employees and subcontractors from washing personal vehicles and equipment on the construction site.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.

- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

5.5 Storage, Handling, and Disposal of Construction Products, Materials, and Wastes [Ref. HAR, 11-55, Appendix C, Section 5.3.3.3.]

Instructions:

- For any of the types of construction products, materials, and wastes below in Sections 5.5.1-5.5.5 below that are expected to be used or stored at your site, provide the information on how you will comply with the corresponding CGP provision and the specific practices that will be employed.
- Also, see EPA's *General Construction Site Waste Management BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/cons_wasteman

5.5.1 Material Delivery and Storage

General

- Prevent or eliminate the discharge of pollutants from material delivery and storage to the storm water system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.
- These procedures are suitable for use at all construction sites with delivery and storage of the following materials:
  - Petroleum products such as fuel, oil, and grease. Note that spill prevention, control, and countermeasure (SPCC) plan are necessary if total above ground storage tank (AST) volume is equal to or greater than 55 gallons of petroleum product (40 CFR 112.1 (d)(2)(ii)).
  - Asphalt and concrete components;
  - Hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds;
  - Concrete compounds; and/or
  - Other materials that may be detrimental if released to the environment.

Specific Pollution Prevention Practices

Pollution Prevention Practice # 1
Description
Material Storage Risk Reduction

- Temporary storage area should be located away from vehicular traffic;
- Safety Data Sheets (SDSs) shall be supplied for all materials stored;
- Construction site areas should be designated for material delivery and storage;
- Material delivery and storage areas should be located near the construction entrances, away from waterways, if possible:
  - Avoid transport near drainage paths or waterways;
  - Surround with berm sufficiently impervious to contain oil (berms may be constructed of earth covered with an impermeable liner; sand bags/flood socks; or manufactured spill berm) or approved containment device; and
  - Place in an area which will be paved.

- Storage of reactive, ignitable, or flammable liquids must comply with the City and County of Honolulu and Federal fire codes. See the Flammable and Combustible Liquid Code, NFPA30;
- An up to date inventory of materials delivered and stored onsite should be kept;
- Hazardous materials storage onsite should be minimized;
- Hazardous materials should be handled as infrequently as possible;
- During the rainy season, consider storing materials in a covered area. Store materials in impermeable secondary containments such as horse trough, or even a children's wading pool for non-reactive materials such as detergents, oil, grease, and paints. Small amounts of material may be secondarily contained in "bus boy" trays or concrete mixing trays;
- Do not store chemicals, drums, or bagged materials directly on the ground. Place these items on a pallet and, when possible, in secondary containment;
- If drums must be kept uncovered, store them at a slight angle to reduce ponding of rainwater on the lids to reduce corrosion. Domed plastic covers are inexpensive and snap to the top of drums, preventing water from collecting;
- Chemicals should be kept in their original labeled containers;
- Employees and subcontractors should be trained on the proper material delivery and storage practices;
- Employees trained in emergency spill cleanup procedures must be present when dangerous materials or liquid chemicals are unloaded; and
- If significant residual materials remain on the ground after construction is complete, properly remove materials and any contaminated soil. If the area is to be paved, pave as soon as materials are removed to stabilize the soil.

Material Storage Areas and Practices

- Liquids, petroleum products, and hazardous substances listed in 40 CFR Parts 110, 117, or 302 shall be stored in approved containers and drums and shall not be overfilled. Containers and drums should be placed in temporary containment facilities for storage.
- A temporary containment facility should provide for a spill containment volume able to contain precipitation from a 25 year storm event, plus the greater of 10% of the aggregate volume of all containers or 100% of the capacity of the largest container within its boundary, whichever is greater.
- A temporary containment facility should be impervious to the materials stored therein for a minimum contact time of 72 hours.
- A temporary containment facility shall be maintained free of accumulated rainwater and spills. In the event of spills or leaks, accumulated rainwater and spills shall be collected and placed into drums. These liquids shall be handled as a hazardous waste unless testing determines them to be non-hazardous. All collected liquids or nonhazardous liquids shall be sent to an approved disposal site.
- Sufficient separation shall be provided between stored containers to allow for spill cleanup and emergency response access.
- Incompatible materials, such as chlorine and ammonia, shall not be stored in the same temporary containment facility.
- Throughout the rainy season, each temporary containment facility shall be covered during non-working days, prior to, and during rain events.
- Materials should be stored in their original containers and the original product labels should be maintained in place in a legible condition. Damaged or otherwise illegible labels should be replaced immediately.
- Bagged and boxed materials shall be stored on pallets and shall not be allowed to accumulate on the ground. To provide protection from wind and rain throughout the rainy season, bagged and boxed materials shall be covered during non-working days and prior to and during rain events.

- Stockpiles should be protected in accordance with section *4.4 Stockpiled Sediment or Soil* of this SWPPP.
- Materials should be stored indoors within existing structures or sheds when available.
- Proper storage instructions shall be posted at all times in an open and conspicuous location.
- An ample supply of appropriate spill cleanup material should be kept near storage areas.

Material Delivery Practices
- Keep an accurate, up-to-date inventory of material delivered and stored onsite.
- Arrange for employees trained in emergency spill cleanup procedures to be present when hazardous or toxic materials or liquid chemicals are unloaded.

Spill Cleanup
- Contain and clean up any spill immediately.
- Properly remove and dispose of any hazardous materials or contaminated soil if significant residual materials remain on the ground after construction is complete.
- Refer to section *5.2 Spill Prevention and Response* of this SWPPP for spills of chemicals and/or hazardous materials.

Installation
- Pollution prevention practices shall be implemented continuously throughout construction

Maintenance Requirements
- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.
- Keep an ample supply of spill cleanup materials near the storage area.
- Keep storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored.
- Repair or replace perimeter controls, containment structures, covers, and liners as needed to maintain proper function.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.
- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

5.5.2 Material Use

General
- Prevent the discharge of pollutants to the storm drain system or watercourses from material use by using alternative products, minimizing hazardous material use onsite, and training employees and subcontractors.
- This BMP is suitable for use at all construction projects. These procedures apply when the following materials are used or prepared onsite:
    - Petroleum products such as fuel, oil, and grease;

- Asphalt and other concrete components;
- Other hazardous chemicals such as acids, lime, glues, adhesives, paints, solvents, and curing compounds;
- Concrete compounds; and/or
- Other materials that may be detrimental if released to the environment.

Specific Pollution Prevention Practices

Pollution Prevention Practice # 1

Description

- Minimize use of hazardous materials onsite;
- Follow manufacturer instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals;
- Train employees and subcontractors in proper material use;
- Supply Safety Data Sheets (SDS) for all materials;
- Use recycled and less hazardous products when practical. Recycle residual paints, solvents, non-treated lumber, and other materials;
- Use materials only where and when needed to complete the construction activity. Use safer alternative materials as much as possible. Reduce or eliminate use of hazardous materials onsite when practical;
- Use temporary scaffolding to hang drop cloths or draperies to prevent drift during painting work. Application equipment that minimizes overspray also helps. When using sealants on woods, pavement, roofs, etc., quickly clean up spills. Remove excess liquid with absorbent material or rags;
- If painting requires scraping or sand blasting of the existing surface, use a drop cloth to collect all of the chips and grit. Dispose the residue and sand blasted material properly in accordance with applicable laws and regulations and at an off-site permitted facility. Paint chips and dust from non-hazardous dry stripping and sand blasting (if paint content is known) may be swept up and disposed of as trash. Paint chips and dust (if paint content is not known or is known to contain lead or tin) shall be tested for lead or tributyl tin prior to handling or disposal. If the test results exceed hazardous waste levels, refer to the Hazardous or Toxic Waste section 5.5.3;
- Dispose of latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths, when thoroughly dry and are no longer hazardous, with other construction debris;
- Mix paint indoors or in a containment area. Never clean paintbrushes or rinse paint containers into a street, gutter, storm drain, or watercourse. Dispose of any paint thinners, residue, and sludge(s) that cannot be recycled, as hazardous waste;
- For water-based paint, clean brushes to the extent practicable, and rinse to a drain leading to a sanitary sewer where permitted, or into a leak-proof container. For oil-based paints, clean brushes to the extent practicable, and filter and reuse thinners and solvents in leak-proof container;
- Keep an ample supply of spill cleanup material near use areas. Train employees in spill cleanup procedures; and
- Avoid exposing applied materials to rainfall and runoff unless sufficient time has been allowed for them to dry.
- Limit paving operations during wet weather when possible.
- Place drip pans under paving equipment to contain leaks and spills. Clean up spills with absorbent materials.
- Properly dispose of old or spilled asphalt. Collect and remove broken asphalt. Recycle asphalt when possible.
- Excess sand and gravel shall be swept.
- Avoid mixing excess concrete, if possible. Discard excess concrete in designated area.
- Do not overspray concrete curing compounds, allow runoff, or apply during rain.

Installation

- Pollution prevention practices shall be implemented continuously throughout construction

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.
- Maintenance of this best management practice is minimal.
- Spot check employees and subcontractors throughout the job to ensure appropriate practices are being employed.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.
- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

5.5.3 Hazardous or Toxic Waste

General

- Prevent the discharge of pollutants to storm water from hazardous waste through proper material use, waste disposal, and training of employees and subcontractors.
- This best management practice (BMP) applies to all construction projects. Hazardous or toxic waste management practices are implemented on construction projects that generate waste from the use or generation of:
    - Petroleum Products,
    - Concrete Curing Compounds,
    - Asphalt Products,
    - Acids,
    - Paints,
    - Solvents,
    - C&D Wastes, including clean-up materials, contaminated with hazardous or toxic substances

- In addition, sites with existing structures may contain wastes, which must be disposed of in accordance with Federal and State regulations. These wastes include:
    - Sandblasting grit or chips contaminated with lead-, cadmium-, or chromium-based paints;
    - Asbestos; and
    - PCBs

- To determine if a material or item is potentially hazardous waste:
    - Check label and shipping papers;
    - Look for words such as hazardous, danger, caustic or corrosive (dissolves skin, metal or other materials); flammable or ignitable (catches fire easily); carcinogenic (causes cancer); and toxic or poisonous (harms people and animals). A list of hazardous waste

and criteria are found in Hawaii Administrative Rules (HAR) Title 11, Chapter 261 Hazardous Waste Management Identification and Listing of Hazardous Waste;
- Check the Safety Data Sheet (SDS) the manufacturer must prepare for the product. Ask your supplier for a copy; and/or
- For questions and additional information including fact sheets and flyers, call the DOH, Hazardous Waste Program Office at 586-4226.

Specific Pollution Prevention Practices

Pollution Prevention Practice # 1

Description

- The following actions should be taken with respect to temporary contaminant:
  - Ensure that adequate hazardous waste storage volume is available;
  - Ensure that hazardous waste collection containers are conveniently located;
  - Place a stockpile of spill cleanup materials where it will be readily accessible.
  - Designate hazardous waste storage areas onsite away from storm drains or watercourses and away from moving vehicles and equipment to prevent accidental spills;
  - Minimize production or generation of hazardous materials and hazardous waste on the job site;
  - Use containment berms in fueling and maintenance areas and where the potential for spills is high;
  - Segregate potentially hazardous waste and toxic liquid wastes and chemicals from non-hazardous and non-toxic construction site waste;
  - Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion and under cover;
  - Clearly label all hazardous waste containers with the waste being stored and the date of accumulation and in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all applicable federal, state, and local requirements;
  - Place hazardous waste containers in secondary containment;
  - Do not allow potentially hazardous waste materials to accumulate on the ground;
  - Do not mix wastes;
  - Use all of the product before disposing of the container; and
  - Do not remove the original product label; it contains important safety and disposal information.
  - Sufficient separation shall be provided between stored containers to allow for spill cleanup and emergency response actions.
  - Hazardous material and waste containers shall be protected from vandalism.
  - Do not mix wastes, this can cause chemical reactions, making recycling impossible and complicating disposal.
  - Recycle any useful materials such as used oil or water-based paint.
  - Arrange for regular waste collection before containers overflow.
  - Make sure that hazardous waste (e.g., excess oil-based paint and sludge) is collected, removed, and disposed of only at authorized disposal areas.
  - Consult the "Hazardous Waste Management Checklist" within the State DBEDT's "A Contractor's Waste Management Guide: Best Management Practices and Tools for Job Site Recycling and Waste Reduction in Hawaii" for additional tips and BMPs on how to reduce hazardous waste volumes, and how to best determine if a material or item is a potentially hazardous waste.

- Disposal Procedures

  - Waste shall be disposed of by a professional hazardous waste transporter at an authorized and licensed disposal facility or recycling facility utilizing properly completed Uniform Hazardous Waste Manifest forms.
  - Waste shall be sampled and analyzed using appropriate laboratory methods and standards to determine appropriate disposal and handling requirements.
  - Properly dispose of rainwater in secondary containment that may have mixed with hazardous waste.
  - Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, and local requirements.

- Education
  - Train employees and subcontractors in proper hazardous waste management. Consult the "Hazardous Waste management Checklist" within the State DBEDT's "A Contractor's Waste Management Practices and Tools for Job Site Recycling and Waste Reduction in Hawaii" for tips and other useful resources available to help you train your employees and subcontractors.
  - Educate employees and subcontractors on hazardous waste storage and disposal procedures.
  - Educate employees and subcontractors on potential dangers to humans and the environment from hazardous wastes.
  - Instruct employees and subcontractors on safety procedures for common construction site hazardous wastes.
  - Instruct employees and subcontractors in identification of hazardous and solid waste.
  - Hold regular meetings to discuss and reinforce hazardous waste management procedures (incorporate into regular safety meetings).
  - The Contractor shall oversee and enforce proper hazardous waste management procedures and practices.
  - Make sure that hazardous waste is collected, removed, and disposed of only at authorized disposal areas.
  - Warning signs should be placed in areas recently treated with chemicals.

Installation

- Pollution prevention practices to be implemented continuously throughout construction

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.
- Hazardous waste should be regularly collected.
- A foreman or construction supervisor shall monitor onsite hazardous waste storage and disposal procedures.
- Waste storage areas shall be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored.
- Perimeter controls, containment structures, covers, and liners shall be repaired or replaced as needed to maintain proper function.
- Hazardous spills shall be cleaned up and reported in conformance with the applicable Safety Data Sheet (SDS) and the instructions posted at the project site.
- Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

- Refer to section 5.2 Spill Prevention and Response of this SWPPP for spills of chemicals and hazardous materials.
- A copy of the hazardous waste manifests must be provided to the Government.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.
- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

5.5.4 Construction and Domestic Waste

General

- Prevent discharge of pollutants to the land, groundwater, in storm water from solid waste by providing designated waste collection areas, separate containers for recyclable waste materials, timing collection of waste and recyclable materials with each stage of the construction or demolition project, and properly training subcontractors and employees.
- Construction and demolition (C&D) waste is defined as solid, largely inert waste, resulting from the demolition or razing of buildings, of roads, or other structures, such as concrete, brick, bituminous concrete, wood, and masonry, composition roofing, and roofing paper, steel, plaster, and minor amount of other metals such as copper. Cleanup materials contaminated with hazardous substances, friable asbestos, waste paint, solvents, sealers, adhesives, or similar materials are not acceptable at C&D disposal sites.
- This section is also applicable to inert fill material, which is defined as earth, soil, rock, rock-like material such as cured asphalt, brick, and clean concrete (with no exposed steel-reinforcing rod) less than eight inches in its greatest dimension. The fill material shall not contain vegetation or organic material, or other solid waste, and should not be commingled with other C&D waste, especially if intended for reuse.
- This section is also applicable to green waste and incidental trash. Green waste including all tree, bush, hedge, flower trimmings in part or whole, grass, mulch, compost heaps, fruit and vegetable scraps, decaying stumps and other plant matter must be taken to a designated green waste collection point throughout JBPHH. At least 1 hour advanced notification to the NAVFAC Green Waste Disposal Coordinator is required for all disposals. The NAVFAC Green Waste Disposal Coordinator, Lonnie Felise, can be contacted at 808-347-2645. If at any stage Coconut Rhinoceros Beetles (CRB) are suspected in green waste, do not disturb or transfer the material and call the Pest Hotline immediately at 808-679-5244. Green waste may not be stockpiled for more than 24 hours.

Specific Pollution Prevention Practices

Pollution Prevention Practice # 1

Description

- Some C&D waste generated on-site should be recycled whenever and wherever possible. These wastes include but are not limited to:
    - Recycling:
        - Asphalt pavement,

        - Concrete aggregate (no LBP, asbestos-free),
        - Excavated rock,
        - Glass,
        - Green waste – yard and tree trimmings, trunks, limbs,
        - Metals, ferrous – steel from appliances, concrete rebar,
        - Metals, non-ferrous – aluminum brass, copper, stainless-steel,
        - Used tires, and/or
        - Wood and lumber (untreated, no LBP, asbestos-free) – esp. pallets.
    - Cardboard not accepted at on-base recycling. Other materials may be offered to the on-site facility but may be refused. Recyclable materials not accepted by the on-site recycling centers must be recycled at a permitted off-site center.

- Collection, Storage, and Disposal
    - Select designated waste collection areas onsite;
    - Inform trash-hauling contractors that you will accept only watertight dumpsters for onsite use.
    - Locate containers in a covered area;
    - Provide an adequate number of containers with lids or covers that can be placed over the container to keep rain out or to prevent loss of wastes when it is windy;
    - Plan for additional containers and more frequent pickup during the demolition phase of construction;
    - Make sure that construction waste is collected, removed, and disposed of only at authorized disposal areas.
    - Littering on the project site shall be prohibited.
    - To prevent clogging of the storm drainage system, litter and debris removal from drainage grates, trash racks, and ditch lines should be a priority.
    - Trash receptacles shall be provided in the contractor's yard, field trailer areas, and at locations where workers congregate for lunch and break periods.
    - Litter from work areas within the construction limits of the project site shall be collected and placed in watertight dumpsters at least every work day, regardless of whether the litter was generated by the contractor, the public, or others. Collected litter and debris shall not be placed in or next to drain inlets, storm water drainage systems, or watercourses.
    - Dumpsters of sufficient size and number should be provided to contain the solid waste generated by the project.
    - Full dumpsters shall be emptied or removed from the project site and the contents should be disposed of by the trash hauling contractor.
    - Construction wastes shall be stored and arranged in an orderly manner.
    - Storm water runon should be prevented from contacting stored solid waste through the use of berms, dikes, or other temporary diversion structures or through the use of measures to elevate waste from site surfaces.
    - Solid waste storage areas should be located at least 50 ft. from drainage facilities and watercourses and should not be located in areas prone to flooding or ponding.
    - Construction waste not stored in watertight dumpsters should be securely covered from wind and rain by covering the waste with tarps or plastic.
    - Segregate potentially hazardous or toxic waste from non-hazardous or toxic construction site waste.
    - Make sure that hazardous or toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
    - For disposal of hazardous or toxic waste, refer to section *5.5.3 Hazardous or Toxic Waste* in this SWPPP.

- Salvage or recycle useful vegetation debris, packaging and surplus building materials when practical. For example, trees and shrubs from land clearing can be used as a brush barrier, or converted into wood chips, then used as mulch on graded areas. Wood pallets, cardboard boxes, and construction scraps can also be recycled.
- Minimize production of solid waste materials wherever possible.

- Education
  - Have the contractor's superintendent or representative oversee and enforce proper solid waste management procedures and practices.
  - Instruct employees and subcontractors on identification of solid waste and hazardous waste.
  - Educate employees and subcontractors on solid waste storage and disposal procedures.
  - Hold regular meetings to discuss and reinforce disposal procedures (incorporate into regular safety meetings).
  - Require that employees and subcontractors follow solid waste handling and storage procedures.
  - Prohibit littering by employees, subcontractors, and visitors.

Installation

- Pollution prevention practices to be implemented continuously throughout construction

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.
- Do not hose out dumpsters on the construction site. Leave dumpster cleaning to the trash hauling contractor to do off-site;
- Clean up immediately if a container does spill
- Arrange for regular waste collection before containers overflow.
- Inspect dumpsters for leaks and repair or replace any dumpster that is not watertight;
- Schedule collection of recycled materials according to each phase of the construction/demolition project.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.
- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

5.5.5 Sanitary Waste

General

- Proper sanitary and septic waste management prevent the discharge of pollutants to storm water from sanitary and septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal. Sanitary or septic wastes shall be treated or disposed of in

accordance with State and City requirements. In many cases, one contract with a local facility supplier will be all that it takes to make sure sanitary wastes are properly disposed.

Specific Pollution Prevention Practices

Pollution Prevention Practice # 1

Description

- Storage and Disposal Procedures
  - Temporary sanitary facilities shall be located away from drainage facilities, watercourses, and from traffic circulation. When subjected to high winds or risk of high winds, temporary sanitary facilities should be secured to prevent overturning.
  - Wastewater shall not be discharged or buried within the project site.
  - Sanitary and septic systems that discharge directly into sanitary sewer systems, where permissible, shall comply with all applicable Federal, State, and local laws and regulations, and requirements of the system owner.
  - Only reputable, professional sanitary and septic waste haulers should be used.
  - Sanitary facilities shall be located in a convenient location.
  - Temporary sanitary facilities that discharge to the sanitary sewer system shall be properly connected to avoid illicit discharges.
  - Sanitary and septic facilities shall be maintained in good working order by a professional service.
  - Regular waste collection by a professional hauler shall be arranged before facilities overflow.
  - Position portable toilets so that they are secure and will not be tipped or knocked over.
- Education
  - Educate employees, subcontractors, and suppliers on sanitary and septic waste storage and disposal procedures.
  - Educate employees, subcontractors, and suppliers of potential dangers to humans and the environment from sanitary and septic wastes.
  - Instruct employees, subcontractors, and suppliers in identification of sanitary and septic waste.
  - Hold regular meetings to discuss and reinforce disposal procedures (incorporate into regular safety meetings).
  - Establish a continuing education program to indoctrinate new employees.

Installation

- Pollution prevention practices to be implemented continuously throughout construction

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.
- Arrange for regular waste collection.
- If high winds are expected, portable sanitary facilities must be secured with spikes or weighed down to prevent over turning.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.

- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

5.6 Washing of Applicators and Containers used for Paint, Concrete or Other Materials [Ref. HAR, 11-55, Appendix C, Section 5.3.3.4.]

Instructions:

- Describe how you will comply with the HAR Appendix C Section 5.3.3.4 requirement to "provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials."
- Also, see EPA's *Concrete Washout BMP Fact Sheet* at www.epa.gov/npdes/stormwater/menuofbmps/construction/concrete_wash

General

- The project shall utilize controls that will eliminate the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials. To accomplish this, the contractor shall:
  - Direct all wash water into a leak-proof container or leak-proof pit. A leak-proof pit is an excavated depression in the ground which is covered by an impermeable liner. The liner shall be secured around the rim by sandbags. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation;
  - Provide separate containers or pits for each type of wash water. Wash water shall not be mixed.
  - Handle washout or cleanout wastes as follows:
    - Do not dump liquid wastes in storm sewers, storm water conveyances, or surface waters, or onto the ground;
    - Liquid waste shall be tested to verify if it is hazardous or toxic prior to handling and disposal.
    - Dispose of hazardous or toxic liquid wastes in accordance with section *5.5.3 Hazardous or Toxic Waste* of this SWPPP
- Locate any washout or cleanout activities as far away as possible from surface waters and stormwater inlets or conveyances, and, to the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.

Specific Pollution Prevention Practices

Pollution Prevention Practice # 1

Description

- WASHING OF APPLICATORS AND CONTAINERS USED FOR PAINT
- Paint brushes and equipment for water and oil based paints shall be cleaned within a contained area and shall not be allowed to contaminate site soils, watercourses, or drainage systems. Waste paints, thinners, solvents, residues, and sludge that cannot be recycled or reused should be disposed of as hazardous waste. When thoroughly dry, latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths should be disposed of as solid waste.
- Do not clean out brushes or rinse paint containers into the dirt, street, gutter, storm drain, or stream.

- "Paint out" brushes as much as possible. Rinse water-based paints to the sanitary sewer where permitted. For oil-based paints, clean brushes to the extent practicable, and filter and reuse thinners and solvents in leak-proof container. Dispose of excess oil-based paints and sludge as hazardous waste.
- Store hazardous materials and wastes in covered containers and protect from vandalism.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Train employees in spill prevention and cleanup.
- Refer to section *1.2 Stormwater Team* of this SWPPP for individuals responsible for overseeing and enforcing control measures.
- Prepare and maintain a spill response plan at the project site.
- Spills should be covered and protected from storm water runon during rainfall to the extent that it doesn't compromise cleanup activities.
- Do not bury or wash spills with water.
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with the following:
    - Contaminated water should be contained in a leak-proof container.
    - Containment devices must be of sufficient quantity or volume to completely contain the contaminated water.
    - Contaminated water shall be tested to determine if it is hazardous or toxic prior to handling or disposal.
- Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.
- Refer to section *5.5.3 Hazardous or Toxic Waste* of this SWPPP for information on disposal.

Installation

- Pollution prevention practices shall be implemented continuously throughout construction

Maintenance Requirements

- Refer to section *5.5.3 Hazardous or Toxic Waste* of this SWPPP for information on maintenance requirements.

Pollution Prevention Practice # 2

Description

- CONCRETE WASTE MANAGEMENT
- Prevention of Storm Water Pollution from Concrete Wastes

- Discuss the concrete management techniques described in this BMP (such as handling of concrete waste and washout) with the ready-mix concrete supplier before any deliveries are made.
- Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- Avoid mixing excess amounts of fresh concrete;
- Dispose of excess concrete off-site, when feasible;
- Perform washout of concrete trucks offsite or in designated areas only.
- Do not wash out concrete trucks into storm drains, storm water conveyances, or surface waters, or onto the ground.
- Do not allow excess concrete to be dumped onsite, except in designated areas. If excess concrete needs to be disposed of on-site, dump into onsite temporary concrete washout facility.
- Do not wash sweepings from exposed aggregate concrete into the street, storm drain, storm water conveyances, or surface waters. Collect and return sweepings to aggregate base stockpile or dispose in the trash.

- Education
  - Educate employees, subcontractors, and suppliers on the concrete waste management techniques described herein.
  - Arrange for contractor's superintendent or representative to oversee and enforce concrete waste management procedures.

- Concrete Slurry Wastes
  - Trained personnel shall monitor onsite concrete working tasks, such as saw cutting, coring, grinding and grooving to ensure proper methods are implemented.
  - Saw-cut slurry shall not be allowed to enter storm drains or watercourses. Residue from grinding operations shall be picked up by means of a vacuum attachment to the grinding machine. Saw cutting residue shall not be allowed to flow across the pavement and should not be left on the surface of the pavement.
  - Slurry residue shall be vacuumed and disposed in a temporary pit and allowed to dry. Dispose of dry slurry residue in accordance with section *5.5.5 Construction and Domestic Waste* in this SWPPP.

- Onsite Temporary Concrete Washout Facility, Transit Truck Washout Procedures
  - Temporary concrete washout facilities shall be located a minimum of 50 ft. from storm drain inlets, open drainage facilities, and watercourses. Each facility shall be located away from construction traffic or access areas to prevent disturbance or tracking.
  - A sign should be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.
  - Temporary concrete washout facilities shall be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations, and allow for precipitation.
  - It is recommended that <u>only</u> concrete from mixer truck chutes be washed into concrete wash out.
  - It is recommended that concrete washout from concrete pumper bins be washed into concrete pumper trucks and discharged into designated washout area or properly disposed of offsite.
  - Once concrete wastes are washed into the designated area and allowed to harden, the concrete should be broken up, removed, and disposed of per section *5.5.5 Construction and Domestic Waste* in this SWPPP. Dispose of hardened concrete on a regular basis.
  - Temporary Concrete Washout Facility:

- Temporary concrete washout facilities shall have sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations, and allow for precipitation; and
- Shall be lined with plastic to prevent seepage of the wash water into the ground. Plastic lining material shall be a minimum of 10 mil in polyethylene sheeting and shall be free of holes, tears, or other defects that compromise the impermeability of the material.

- Removal of Temporary Concrete Washout Facilities
  - When temporary concrete washout facilities are no longer required for the work, the hardened concrete shall be removed and disposed of. Materials used to construct temporary concrete washout facilities shall be removed from the site of the work and disposed of.
  - Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and the site restored to pre-existing condition.

Installation

- Pollution prevention practices shall be implemented continuously throughout construction

Maintenance Requirements

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP are under way, inspect BMPs prior to forecast rain, daily during extended rain events, once every 7 calendar days, and within 24 hours after a storm event of 0.25 inches or greater to determine if BMP needs maintenance or repair.
- Temporary concrete washout facilities should be maintained to provide adequate holding capacity with a minimum freeboard of 4 in. for above grade facilities and 12 in. for below grade facilities. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials shall be removed and disposed of.
- Washout facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full.
- Containment must be replaced immediately if leaks are observed, and water pumped into replacement leak-proof containment.
- Pollution prevention controls shall remain in effective operating condition and be protected from activities that would reduce their effectiveness.
- If pollution prevention controls need routine maintenance or minor repair, initiate work immediately after discovering the problem and complete the work by the close of the next work day.
- If pollution prevention controls need replacement or significant repair, complete the installation or modification such that control is operational within 7 calendar days from the time of discovery. If 7 calendar days is infeasible, document why it is infeasible and the schedule for installing the control as soon as practicable. If controls or procedures are changed as result of repairing/replacing, document in the SWPPP within 7 calendar days of completing the repair/replacement.

5.7 Other Pollution Prevention Practices

Instructions:

Describe any additional pollution prevention practices that do not fit into the above categories.

N/A

SECTION 6: INSPECTION AND CORRECTIVE ACTION

6.1 Inspection Personnel and Procedures [Ref. HAR, 11-55, Appendix C, Sections 7.2.12 and 9]

Instructions:

Describe the procedures you will follow for conducting inspections.

The Contractor shall timely inspect the receiving state waters, storm water runoff and control measures and best management practices to detect violations of and conditions which may cause violations of the basic water quality criteria as specified in HAR 11-54-4. (e.g., the Contractor shall look at storm water discharges and receiving state waters for turbidity, color, floating oil and grease, floating debris and scum, materials that will settle, substances that will produce taste in the water or detectable off-flavor in fish, and inspect for items that may be toxic or harmful to human or other life.) Except, if the discharge enters a drainage system, then the Contractor may inspect their discharge when it enters a drainage system rather than at the receiving water (excluding an upset event, BMP failure, or rainfall events greater than 0.25 inches).

Personnel Responsible for Inspections

The person(s) inspecting the site may be a person on staff or a third party hired to conduct such inspections. The Contractor is responsible for ensuring that the person who conducts inspections is a "qualified person." A "qualified person" is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact storm water quality, and the skills to assess the effectiveness of any storm water controls selected and installed to meet the requirements of this permit.

INSERT NAMES OF PERSONNEL OR TYPES OF PERSONNEL WHO WILL BE CONDUCTING SITE INSPECTIONS HERE

Note: All personnel conducting inspections must be considered a "qualified person." HAR 11-55, Appendix C Section 9.1.1 clarifies that a "qualified person" is a person knowledgeable in the principles and practices of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

Personnel Responsible for the design, installation, maintenance, and/or repair of storm water controls:

Role or Responsibility:_____
Position:_____
Name:_____
Telephone Number:_____
E-mail:_____

Role or Responsibility: _____
Position:_____
Name:_____
Telephone Number: _____
E-mail:_____

Personnel Responsible for the application and storage of chemicals (if applicable):
Role or Responsibility:_____
Position: _____
Name: _____
Telephone Number: _____
E-mail: _____

Personnel Responsible for Conducting Inspections:
Role or Responsibility:_____
Position: _____
Name: _____
Telephone Number: _____
E-mail: _____

Inspection Schedule

The BMPs will be inspected once every 7 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater.

Note: Inspections are only required during the project's normal working hours.

Note: The contractor is not required to inspect areas that, at the time of the inspection, are considered unsafe to inspection personnel.

Rain Gauge Location (if applicable)

No rain gauge will be installed for this project.

Inspection Report Forms

Samples of blank inspection forms are in Appendix D. Insert completed inspection forms in Appendix D. Each inspection form must be certified and signed by NAVFAC Hawaii's duly authorized representative for the permit within 48 hours of the inspection, and a copy kept on site in case of inspection by DOH or EPA.

6.2 Corrective Action [Ref. HAR, 11-55, Appendix C, Sections 7.2.12 and 10]

Instructions:

- Describe the procedures for taking corrective action in compliance with HAR 11-55 Appendix C Sections 7.2.12 and 10.

The contractor shall immediately stop, reduce, or modify construction, or implement new or revised BMPs as needed to stop or prevent a violation of the basic water quality criteria as specified in HAR Section 11-54-4.

Requirements for taking corrective actions

On the same day a condition is found (or the next day if found late in the day) the contractor shall take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

For the following conditions, the contractor shall install a new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If this is infeasible, the contractor shall document in the records the reasons why, and document a schedule for installing the storm water control(s) and making it operational as soon as practicable after the 7-day timeframe.

- A required storm water control was never installed, was installed incorrectly, or not in accordance with the requirements set forth in HAR Chapter 11-55 Appendix C sections 5 and/or 6;
- The storm water controls that have been installed and maintained are not effective enough for the discharge to meet applicable water quality standards. (In this case, the contractor shall notify the CM who will notify DOH by the end of the next work day.); or
- One of the following prohibited discharges (as defined in HAR-Chapter 11-55 Appendix C section 5.3.1) has occurred or is occurring:
    - Wastewater from washout of concrete,
    - Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials,
    - Fuels, oils or other pollutants used in vehicle and equipment operations and maintenance,
    - Soaps, solvents, or detergents used in vehicle and equipment washing; and
    - Toxic or hazardous substances from a spill or other release.

Where corrective actions result in changes to any of the storm water controls or procedures documented in the SWPPP, the contractor shall modify the SWPPP accordingly within 7 calendar days of completing correction action work.

The contractor shall comply with any corrective actions required by DOH and/or EPA as a result of permit violations found during an inspection.

Corrective Action Report

Within 24 hours of discovering the occurrence of one of the conditions requiring corrective action on the site, the contractor shall complete a report of the following:

- Which condition was identified at the site;
- The nature of the condition identified; and
- The date and time of the discovery and how the condition was identified.

Within 7 calendar days of discovering the occurrence of one of the conditions requiring corrective action on the site, the contractor shall complete a report of the following:

- Any follow-up actions taken to review the design, installation, and maintenance of storm water controls, including the dates such actions occurred;
- A summary of storm water control modifications taken or to be taken, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed; and
- Notice of whether SWPPP modifications are required as a result of the condition identified or corrective action.

Information to be filled out by Contractor. Contractor to be provided at least 30 calendar days prior to construction.

Personnel Responsible for Corrective Actions

INSERT NAMES OF PERSONNEL OR TYPES OF PERSONNEL RESPONSIBLE FOR CORRECTIVE ACTIONS

Personnel Responsible for Corrective Actions:

Role or Responsibility:_____
Position:_____
Name:_____
Telephone Number:_____
E-mail: _____

Corrective Action Forms

Samples of blank corrective action forms are in Appendix E. Insert completed inspection forms in Appendix E. Each corrective action form must be certified and signed by NAVFAC Hawaii's duly authorized representative for the permit when it is completed, and a copy kept on site in case of inspection by DOH or EPA.

6.3 Delegation of Authority

Instructions:

- Identify the individual(s) or positions within the company who have been delegated authority to sign inspection reports.
- Attach a copy of the signed delegation of authority (see example in Appendix J of the Template.

Duly Authorized Representative(s) or Position(s):
Role or Responsibility:
Position:
Name:
Street Address:
City/State/Zipcode:
Telephone Number:
E-mail:

SECTION 7: TRAINING ***[Ref. HAR, 11-55, Appendix C, Sections 7.2.13]***

Instructions:

- Complete the table below to provide documentation that the personnel required to be trained completed the appropriate training
- If personnel will be taking course training, consider using Appendix I to track completion of this training
- The following personnel, at a minimum, must be receive training, and therefore should be listed out individually in the table below:
  - ✓ Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention measures);
  - ✓ Personnel responsible for the application and storage of treatment chemicals (if applicable);
  - ✓ Personnel who are responsible for conducting inspections
  - ✓ Personnel who are responsible for taking corrective actions
- HAR 11-55 Appendix C requires that the required personnel must be trained to understand the following if related to the scope of their job duties:
  - ✓ The location of all stormwater controls on the site required by this permit, and how they are to be maintained;
  - ✓ The proper procedures to follow with respect to the permit's pollution prevention requirements; and
  - ✓ When and how to conduct inspections, record applicable findings, and take corrective actions.

Prior to earth-disturbing activities or pollutant-generating activities, whichever occurs first, the contractor shall ensure that the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements;

- Personnel who are responsible for the design, installation, maintenance, and/or repair of storm water controls (including pollution prevention measures);
- Personnel responsible for the application and storage of chemicals (if applicable);
- Personnel who are responsible for conducting inspections; and
- Personnel who are responsible for taking corrective actions

The contractor is responsible for ensuring that all activities on the site comply with the requirements of the permit. The contractor is not required to provide or document formal training for subcontractors or other outside service providers, but must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.

Personnel must be trained to understand the following if related to the scope of their job duties:

- The location of all storm water controls on the site required by this permit, and how they are to be maintained;

- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

If a new employee starts after earth-disturbing or pollutant-generating activities begin, the contractor shall ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit.

Information to be filled out by Contractor. Contractor to be provided at least 30 calendar days prior to construction

Table 7-1: Documentation for Completion of Training

Name	Date Training Completed
INSERT NAME OF PERSONNEL HERE	INSERT COMPLETION DATE HERE
INSERT NAME OF PERSONNEL HERE	INSERT COMPLETION DATE HERE
INSERT NAME OF PERSONNEL HERE	INSERT COMPLETION DATE HERE
INSERT NAME OF PERSONNEL HERE	INSERT COMPLETION DATE HERE
INSERT NAME OF PERSONNEL HERE	INSERT COMPLETION DATE HERE
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INSERT NAME OF PERSONNEL HERE	INSERT COMPLETION DATE HERE
INSERT NAME OF PERSONNEL HERE	INSERT COMPLETION DATE HERE
INSERT NAME OF PERSONNEL HERE	INSERT COMPLETION DATE HERE

Information to be documented prior to start of construction.

SECTION 8: REQUIRED SWPPP MODIFICATIONS (Appendix F)

The contractor shall modify the SWPPP, including the site map(s), in response to any of the following conditions:

- Whenever new contractors become active in construction activities on the site; or changes are made to the construction plans, storm water control measures, pollution prevention measures, or other activities at the site that are no long accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered under conditions described in Section 6.2. The contractor does not need to modify the SWPPP if the sequence or dates of construction change during construction.
- To reflect areas on the site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;
- If inspections or investigations by site staff, or by local, state, or federal officials determine that SWPPP modifications are necessary for compliance with the permit;
- Where DOH determines it is necessary to impose additional requirements on the discharge, the following must be included in the SWPPP:
    - A copy of any correspondence describing such requirements; and
    - A description of the storm water control measures that will be used to meet such requirements.
- To reflect any revisions to applicable federal, state, and local requirements that affect the storm water control measures implemented at the site

The contractor shall complete required revisions to the SWPPP within 7 calendar days following the occurrence of any of the conditions listed above.

The contractor shall maintain records showing the dates of all SWPPP modifications. The records must include a signature of the person authorizing each change, date, and a brief summary of all changes.

Records showing amendments to the SWPPP and Re-Certification Forms are found in Appendix F.

Upon determining that a modification to the SWPPP is required, if there are multiple contractors covered under this permit, the contractor shall immediately notify any subcontractors who may be impacted by the change to the SWPPP

SECTION 9: MONTHLY COMPLIANCE REPORT (Appendix J)

The contractor shall prepare a monthly compliance report, which shall include but is not limited to information as required in the permit, any incidences of non-compliance and corrective actions. The monthly compliance report shall be kept on-site and available by the end of the next business day when requested by DOH.

Upon DOH receiving Cross-Media Electronic Reporting Regulation (CROMERR), the monthly compliance reports shall be submitted through the e-Permitting Portal.

Any comments provided by DOH shall be answered in the time specified and to the satisfaction of DOH.

If the activity is in compliance and none of the information on file with DOH requires updating, or there were no incidences of non-compliance, preparation of the monthly compliance information is still required which states that there were "no changes, updates, or any incidences of non-compliance to report."

Monthly Compliance Reports are found in Appendix J.

SECTION 10: CERTIFICATION AND NOTIFICATION

Instructions:

- The following certification statement must be signed and dated by a person who meets the requirements of the permit.
- This certification must be re-signed in the event of a SWPPP Modification.

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 gathered and evaluated 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.

Name: _____ Title: _____

Signature: _____ Date: _____