State of Hawaii, Department of Health, Clean Water Branch
NPDES Form C
Application for HAR, Chapter 11-55 - NPDES Individual Permit Authorizing Discharges of Storm Water Associated With Construction Activities (as defined in 40 CFR §§122.26(b)(14)(x) and 122.26(b)(15)(i))

All sections of this form MUST be completed for National Pollutant Discharge Elimination System (NPDES) Permit compliance.

C.1 – General Information

You are required to fulfill all requirements and check the box below. If you do not check the box, your application will be considered incomplete, and the CWB may deny your request for NPDES permit coverage with prejudice.

☒ *I certify that:*

- *I will design, implement, operate, and maintain a Site-Specific Best Management Practices (BMPs) Plan to ensure that storm water discharges associated with construction activities will not violate HAR, Chapter 11-54; HAR, Chapter 11-55; and HAR, Chapter 11-55, Appendix C.*
- *My Site-Specific BMPs Plan will contain perimeter control BMPs everywhere storm water may leave my project site.*
- *My Site-Specific BMPs Plan will contain appropriate controls to prevent a discharge of non-storm water pollutants; pollutants commingled in storm water; pollutants that may contaminate groundwater; and any applicable Section 303(d) pollutants of concern for my receiving State water.*
- *My Site-Specific BMPs Plan will contain appropriate controls to prevent tracking of sediment and debris onto streets/roads.*
- *Post-construction BMPs will be implemented, maintained, and incorporated into my project for storm water quantity and quality control. My post-construction BMPs will ensure that my project will comply with HAR, Chapter 11-54; HAR, Chapter 11-55; and HAR, Chapter 11-55, Appendix C.*

C.2 - Existing Pollution Sources/ History of Land Use

Describe the history of land use at the existing Facility/Project site: The project is located on the windward side of Oahu in the City and County of Honolulu's Koolaupoko district. Kalanianaole Highway currently serves as the only major transportation facility through Waimanalo making it a highly utilized arterial. Land use along the project site includes residential, business, military, and community facilities. Dominating uses include the Olomana Golf Course, Waimanalo Town Center, Waimanalo Elementary and Intermediate School, and Bellow Air Force Station.

Determine if the existing Facility/Project site may contain any existing pollution source(s) by using the following references. Place a check next to all references you utilized to determine existing pollution source(s). You are required to check at least one reference.

- ☐ *a. DOH, Solid and Hazardous Waste Branch-Hawaii Underground Storage Tank- Leaking Underground Storage Tank database*
- ☐ *b. DOH, Hazard Evaluation and Emergency Response Office records*
- ☒ *c. Phase I and/or Phase II Environmental Site Assessments, as applicable*
- ☐ *d. Recent site inspections*
- ☐ *e. Past land use history*
- ☐ *f. Soil sampling data, if available*
- ☐ *g. Other (specify):* _____

Describe any existing pollution source(s) identified in the references you checked above: Concerns have been identified with the pole mounted electrical transformers located alongside the entire length of the project. Stained soils have been encountered below transformers,signifying a leak and possible contamination of soils.

Describe any corrective measures that have been undertaken for any existing pollution source(s): The project will incorporate mitigation measures in the event stained soils under pole mounted transformers is encountered in the field. This may include coordinating with the electrical company, removal and proper disposal of the contaminated soils, and soil sampling.

C.3 - Construction Site Estimates

Please provide the following estimates for the construction site.

Total project area including areas to be left undisturbed: _____ *5.60 acres*

Construction site area to be disturbed including storage and staging areas: _____ *5.60 acres*

Impervious area before construction: _____ *4.03 acres*

Impervious area after construction: _____ *4.59 acres*

C.4 - Quantity of Storm Water Runoff

Estimate the quantity of storm water runoff during construction when the greatest and/or maximum area of disturbance occurs. Provide the supporting calculations in an attachment or insert in this section.

_____ *Millions of Gallons per Day (MGD)*

or

37.49 *Cubic Feet per Second (CFS)*

C.5 - Soil Characterization

Describe the nature of the soil on the project site (including the potential to encounter contaminated soil) and the nature of the fill material to be used: The project site consists of improvements to a 4700 foot section of Kalani`ana`ole Highway. According to the 1972 Soil Survey by USDA Soil Conservation Service/UH Agricultural Experiment Station, this stretch of the highway is underlain by: Hanalei Silty Clay, Kaloko Clay, Papaa clay, and Pohakapu Silty Clay Loam. Based on the reviews from additional report from the DOT Highway Materials Testing Lab, subsurface conditions along the project limits consisted of between 30'-45' of poor soils (swamp deposits). Fill material was placed over the poor soils to depths ranging from 10-30' deep, with sand drains to promote rapid consolidation settlement. Analyzing the site by sections, at the first part (STA 133+00 to STA 144+00) older alluvium was observed at the section cuts on the hill side. Along the outside curve of the highway, the pavement was underlain by fill, which was placed over the swamp deposits. At section STA 144+00 to STA 152+00, near surface material was found to be yellow-brown, gravelly, silt, which is typically found to contain organic material and clay to boulder sized materials. The following section at STA 152+00 to STA 157+50 was found to contain reddish, older alluvium. This soil is expansive with polygon-forming fissures. Two of the following sections of Kalani`ana`ole Highway (STA 157+50 to STA 159+00 and STA 166+00 to STA 171+65) crosses an unnamed stream gully and Kahawai Stream, which typically indicates presence of organic material and clay through boulder–sized materials. The section\ between (STA 159+00 to STA 166+00) was found to contain older alluvium (silt, sand, and weathered gravel boulders. Subsurface material at the last stretch of the highway within the project site did not match info presented in published references. Encountered material was moist to wet Silty Clay at least 12' thick.

C.6 - Nature and Sequence of Construction Activity

What is the function of the construction activity (Please check all applicable activity(ies))?

☐ Residential ☐ Commercial ☐ Industrial ☒ Road Construction ☐ Linear Utility

*☐ Other (please specify):*_____

What is being constructed? Road widening and other supporting improvements

Describe the scope of work and major construction activities you wish to be covered in this NPDES application, including baseyards and staging areas. You may only include project areas where the locations of impervious structures are known; project areas where the final grades are known; and work areas that will be performed by one (1) general contractor. A separate NPDES application will be required for all other project areas.

The Kalanianaole Highway Improvements project is a roadway improvement project along a stretch of existing Kalanianole Highway between Olomana Golf Course and Poalima Street. The project consists of the following: widening to provide a two-lane left turn lane, left turn pockets, paved shoulders, sidewalks and equestrian path. Other supporting improvements include drainage improvements, electrical relocations, safety improvements, retaining walls.

C.7 - Existing or Pending Permits, Licenses, or Approvals

Place a check next to all applicable Federal, State, or County permits, Licenses, or approvals for the project and specify the permit number.

☐ *Other NPDES Permit or NGPC File No.:* _____

☐ *Department of the Army Permit (Section 404):* _____

If your project requires work in, above, under or adjacent to State waters, please contact the Army Corps of Engineers (COE) Regulatory Branch at (808) 438-9258 regarding their permitting requirements. Provide a copy of the COE permitting jurisdictional determination (JD) or the JD with COE Person's Name, Phone Number, and Date Contacted.

☐ *Facility on SARA 313 List (identify SARA 313 chemicals on project site:* _____

☐ *RCRA Permit (Hazardous Wastes):* _____

☐ *Section 401 Water Quality Certification:* _____

☐ *Other (Specify):* _____

County-approved Erosion and Sediment Control Plan and/or Grading Permit

a. *Is a County-approved Erosion and Sediment Control Plan and/or Grading Permit, where applicable for the activity and schedule for implementing each control, required?*

   ☒ *Yes. Please complete Section C.7.b below and skip Section C.7.c.*

   ☐ *No. Please complete Section C.7.c below and skip Section C.7.b.*

b. *Is a copy County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, attached?*

   ☐ *Yes, see Attachment* _____

   ☒ *No, the County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, will be submitted at least 30 calendar days before the start of construction activities.*

c. *Please select and complete at least one (1) of the following items to demonstrate that a County-approved Erosion and Sediment Control Plan and/or Grading Permit, as appropriate for the activity and schedule for implementing each control, is not required.*

☐ *See Attachment _____ for the County written determination.*

☐ *Provide the County contact person information (Name, Department, Phone Number, and Date Contacted):*

☐ *The project is a Federal Project and does not require County approval.*

☒ *Other (specify): Federal aid HDOT project with appropriate erosion control plans. See attachment A.8 Erosion Control Plans.*

C.8 - Project Site Maps and Construction Plans/Drawings

Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A. Please reference which maps account for the features listed below.

a. *Island on which the project is located. Oahu. See Attachment A.3 Item1.9a – Location Map*
b. *Vicinity of the project on the island. See Attachment A.3 Item 1.9.a – Location Map*
c. *Legal boundaries of the project. See Attachment A.4 Item1.9d(1) – Topographic Map*
d. *Receiving State water(s) from Section 6 of e-Permitting form and receiving separate drainage system(s) from Section 7 of e-Permitting form, identified and labeled. See Attachment A.4 Item 1.9d(1) – Topographic Map 1 and Attachment A.5 Item 1.9d(2) – Topographic Map.*
e. *Location of ALL discharge points from Section 6 of e-Permitting form with identification numbers. See Attachment A.4 Item 1.9d(1) – Topographic Map 1 and Attachment A.5 Item 1.9d(2) – Topographic Map.*
f. *Boundaries of 100-Year flood plans. See Attachment A.6 Item 1.9f – FEMA Flood Insurance Rate Map*
g. *Areas of soil disturbance. See Attachment A.8 Erosion Control Plans and Construction Drawings, Sheets 20-27 Roadway Plans and Sheets 38-41 Intersection Layout Plans*
h. *Location(s) of impervious structures (including buildings, roads, parking lots, etc.) after construction is completed. See Attachment A.8 Construction Drawings Sheets 20-27 Roadway Plans and Sheets 38-41 Intersection Layout Plans*
i. *Pre-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). See Attachment A.8 Erosion Control Plans*
j. *During-Construction Topography (after major grading activities) including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). See Attachment A.8 Erosion Control Plans and Construction Drawings, Sheets 20-27 Roadway Plans and Sheets 38-41 Intersection Layout Plans*

k. Post-Construction Topography including approximate slopes and drainage patterns for the entire Facility/Project site to the receiving storm water drainage system (if applicable) or to the receiving State water(s) (with flow arrows). See Attachment A.8 Construction Drawings Sheets 20-27 Roadway Plans and Sheets 38-41 Intersection Layout Plans

C.9 - Flow Chart or Line Drawing

Attach or insert in Attachment A, a flow chart showing the following (Check each item, as applicable):

☐ *a. Storm water entering the project from off-site areas*

☒ *b. General route taken by storm water through the project (show the routes through different drainage areas)*

☒ *c. Treatment system(s) utilized for the reduction of sediment (e.g., silt fence, earth berm, detention basin, vegetated swale, etc.)*

☒ *d. Best Management Practices (BMPs) utilized to prevent erosion (e.g., erosion control mats, reduced open area, revegetation, etc.)*

☒ *e. Estimated quantity of flow through each applicable route from upslope to the receiving State water*

☒ *f. Drainage system(s) receiving storm water from the project, as applicable (e.g., City and County of Honolulu Municipal Separate Storm Sewer System (MS4), etc.)*

☒ *g. State water name(s) receiving storm water from the project*

Indicate which item(s) are not identified and explain why the item(s) are not identified: Item a. Storm water entering the project from off-site areas. Majority of the offsite runoff will be conveyed by existing culverts from Mauka to Makai side of the highway and some storm water runoff will enter the existing drainage system. See attachment A.8 Erosion Control Plans

C.10 - Construction Schedule

Provide the following estimated dates:

The date when construction activity will begin. July 2014

The date when each major construction activity begins.

- *Mobilization – **July 2014***
- *Installation of Erosion Control Measures – **July 2014***
- *Clearing, Grubbing, Demolition – **July 2014***
- *Excavation and Demolition of Existing Structures – **August 2014 to October 2014***
- *Utilities – **October 2014 to February 2015***
- *Roadway pavement construction – **February 2015 to April 2015***
- *End of Site Disturbance – **May 2015***

The date when the Notice of Cessation form will be submitted. July 2015

C.11 - Potential Storm Water and Non-Storm Water Pollutant Sources

a. You are required to check the box below. If you do not check the box, your application will be considered incomplete, and the CWB may deny your request for NPDES permit coverage with prejudice.

☒ *I certify that:*

- *All potential pollutant sources will be prevented from discharging with storm water runoff.*
- *All potential non-storm water pollution sources will not be discharged to State waters.*
- *I will not dispose of concrete truck wash water or any other potential ground water pollutant via percolation.*
- *All solid waste shall be disposed of at DOH, Solid and Hazardous Waste Branch (SHWB), Solid Waste Section (SWS) permitted facilities. If my solid waste cannot be disposed at these facilities, I will contact the SHWB-SWS at (808) 586-4226 as additional permits may be required.*

b. Place a check next to all potential storm water and non-storm water pollution sources applicable to your project.

☒ *Construction debris, green waste, general litter.*
☒ *Materials associated with the operation and maintenance of equipment, such as oil, fuel, and hydraulic fluid leakage.*
☒ *Soil erosion from the disturbed areas*
☒ *Sediment from soil stockpiles*
☒ *Emulsified asphalt or prime/tack coat*
☒ *Materials associated with painting, such as paint and paint wash solvent*
☐ *Industrial chemicals, fertilizers, and or pesticides*
☐ *Hazardous waste (Batteries, Solvents, Treated Lumber, etc.)*
☐ *Metals*
☒ *Dust control water.*
☒ *Concrete truck wash water.*
☒ *Construction exit wash water.*
☒ *Irrigation water.*
☐ *Hydrotesting effluent.*
☐ *Dewatering effluent.*
☒ *Saw-cutting slurry.*

☒ *Concrete curing water.*

☐ *Plaster waste water.*

☐ *Water-jet wash water.*

☐ *Existing pollution sources identified in C.2 above.*

☐ *Other (specify)*_____

C.12 – Site-Specific Best Management Practices (BMPs) Plan

You are responsible for the design, implementation, operation, and maintenance of the site-specific BMPs Plan to ensure that storm water discharges associated with construction activities will not cause or contribute to a violation of HAR, Chapter 11-54, Chapter 11-55, and Chapter 11-55 Appendix C.

The contractor may augment or improve BMPs for discharges of storm water associated with construction activity after the NPDES permit is issued. Amendments to the Site-Specific BMPs Plan shall be identified and certified in Attachment F. These amendments do not have to be submitted to the DOH-CWB, but shall be kept on-site and available upon request.

Please refer to the updated DOH-CWB Best Management Practice (BMP) procedures regarding Storm Water Discharges Associated with Construction Activities:

- *DOH-CWB Procedures for the Use of New Technologies as BMPs*
- *DOH-CWB Procedures for Changing Construction Site-Specific BMPs*
- *Link to EPA Construction Storm Water Menu of BMPs*

a. *Are you submitting the Site-Specific BMPs Plan (Sections C.12.b through C.12.f) with your NPDES application?*

☒ *Yes. My Site-Specific BMPs Plan complies with Sections C.1 and C.11.*

☐ *No. My Site-Specific BMPs Plan will comply with Sections C.1 and C.11.* ***If you do not submit the Site-Specific BMPs Plan with your NPDES application, you acknowledge that:***

- *The CWB may not provide comments on information in Section C.12.*
- *You are required to submit Section C.12 to the DOH-CWB for comment at least 30 calendar days prior to starting construction activities. All questions/concerns that the DOH may have must be answered to the satisfaction of the CWB.*
- *The CWB will review Section C.12 in the order received and will not expedite the review to accommodate your schedule.*
- *The CWB has no required time limits to review any Site-Specific BMPs Plan after issuance of an NPDES Permit.*
- *You are potentially exposing yourself to significant delays.*

b. Show the location of all proposed BMPs. Attach, title, and identify all maps (pdf - minimum 300 dpi) listed below, in Attachment A. Please reference which maps account for the features listed below.

- *i. Construction sequence diagrams showing the location of specific BMPs (including stabilization BMPs) that will be implemented at different sequences of construction See Attachment A.8 BMP Maps.*
- *ii. Additional Maps for **each major construction activity** that show all BMPs employed for activity specific pollution prevention. Please have at least one (1) map per major construction activity (e.g., Demolition, Mass Grading, Trenching, Vertical Construction, Landscaping, etc.) See Attachment A.8 BMP Maps.*
- *iii. Construction Baseyard and/or staging areas including remote/off-site areas. Areas used for the storage of soils, construction materials, or wastes and areas for the disposal of wash water from washing down of construction equipment and vehicles, concrete truck drum wash water, treated dewatering effluent, hydrotesting effluent discharge, etc. The Construction Baseyard and/or Staging Areas will be determined at least 30 days before start of construction activities. Supporting BMP Location Map will be submitted accordingly.*
- *iv. Location(s) where stabilization practices are expected to occur See attachment A.8 Landscaping Plans and Construction Drawings, Sheets 20-27 Roadway Plans*
- *v. Location(s) of all structural controls including those that will be used to divert the offsite storm water from flowing into the construction site and design details See Attachment A.8 Erosion Control Plans.*
- *vi. Areas where vegetative practices are to be implemented See Attachment A.8 Landscaping Plans.*
- *vii. Post Construction Final Stabilization BMP Plan See Attachment A.8 Landscaping Plans and Construction Drawings Sheets 20-27 Roadway Plans, and 76-82 Retaining Wall and Profile.*

c. Provide an installation detail with dimensions of all proposed BMPs, including the proposed BMPs that will be used to mitigate the potential pollutants identified in Section C.11.b. Attach the details and/or product data sheets in Attachment A. See Attachment A.8 Erosion Control Details and A.9 Best Management Practice Product Data Sheet

d. Describe your post construction BMP Plan, including all permanent BMPs, maintenance practices, etc. Upon completion of construction, permanent landscaping will be installed and impervious structures will be installed along the roadway to retain drainage flows.

Retaining walls will be used to mitigate runoff onto roadway. See Attachment A.8 Landscaping Plans and Construction Drawings Sheets 20-27 Roadway Plans, and 76-82 Retaining Wall and Profile.

e. You are required to check all boxes below to acknowledge that:

☒ *A Storm Water Pollution Prevention Training Log will be maintained on-site and available upon request. Note: Training your onsite staff, general contractor, and subcontractors is a required BMP. Storm water pollution prevention training is required. By submitting this NPDES application, you are certifying that the storm water pollution prevention training will be conducted. You may utilize the Storm Water Pollution Prevention Training Log provided in Attachment B or a self-developed storm water pollution prevention training log. Do not submit your training log with your NPDES application.*

☒ *The Subcontractor Certification/Agreement in Attachment C will be completed prior to the start of construction activities, will be maintained on-site and will be available upon request. Do not submit the Subcontractor Certification/Agreement with your NPDES application.*

☒ *An Inspection Report Form will be maintained on-site and available upon request. Note: Site inspections ensure NPDES compliance and adequate implementation of the Site-Specific BMPs Plan. Site inspections are required. Site inspection schedules and procedures shall be developed for your site including BMP maintenance requirements, names and contact numbers for responsible staff, and timeframe for making corrections. You may utilize the Inspection Report Form provided in Attachment D or a self-developed Inspection Report Form. Do not submit your inspection report form with your NPDES application.*

f. Provide a contingency plan in Attachment E to ensure that even under the worst case scenario, the construction activity will have a minimal adverse impact to State water(s). You may utilize the Contingency Plan provided in Attachment E or a self-developed Contingency Plan.

☒ *The Contingency Plan is attached as Attachment E.*