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 majority of the project sites are highway embankment slopes and grass interchanges. These areas were constructed as slopes and interchanges. There are no other historical uses for the project sites.

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):* N/A

Describe any existing pollution source(s) identified in the references you checked above: N/A

Describe any corrective measures that have been undertaken for any existing pollution source(s): N/A

C.3 - Construction Site Estimates

Please provide the following estimates for the construction site.

Total project area including areas to be left undisturbed: 4.57(See Attachment A-4) *acres*

Construction site area to be disturbed including storage and staging areas: 4.57 *acres*

Impervious area before construction: 0 *acres*

Impervious area after construction: 0 *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

11.11 (See Attachment A-5) *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:

H-3 & Likelike Interchange

The H-3 & Likelike Interchange site consists of LoC (Lolekaa silty clay). LoC soils are well drained and have moderately rapid permeability, slow to medium runoff, and a slight to moderate erosion hazard.

Site 207, 208, and 210

Sites 207, 208, and 210 consist of KHOF (Kaneohe silty clay). KHOF is a well-drained soil with moderate to rapid runoff. KHOF soils also have a moderately rapid permeability and a moderate to severe erosion hazard.

Site 209

Site 209 consists of KHOF (Kaneohe silty clay) and KgC (Kaneohe silty clay). KHOF is a well-drained soil with moderate to rapid runoff. KHOF soils also have a moderately rapid permeability with a moderate to severe erosion hazard. KgC soils are well drained with moderate permeability. KgC has a medium runoff and a moderate erosion hazard.

Site 1008

Site 1008 consists of KHOF (Kaneohe silty clay), KHMC (Kaneohe silty clay loam), and HnA (Hanalei silty clay) soils. KHOF is considered to be a well-drained soil with moderately rapid permeability. KHOF soils are well drained, have a moderate permeability, with slow to medium runoff, and a slight erosion hazard. HnA soils are poorly drained and also have moderate permeability with a slight erosion hazard. HnA soils have a very slow runoff rate.

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): Erosion Control/Slope Improvements*

What is being constructed? Permanent BMPs

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 scope of this project includes slope surface preparation, clearing of the vegetation, recontouring by grading and shaving existing slopes, installation of erosion control matting, planting, retrofit of existing drainage structures, installation of permanent BMP structures; and vegetated walls, and providing traffic control. These measures will be implemented at areas along state roadways exhibiting significant erosion. Installation of the proposed permanent BMP measures will mitigate the risk of erosion and hazards that may otherwise occur.

For bare slopes along state roadways, installation of vegetation walls is proposed at sites PID 207, 210, 208, and 1008. The vegetated walls are composed of compost fiber rolls laid along the slope face and sprayed with hydro-mulch mixture. The compost in the fiber rolls will provide the necessary nutrients needed for plant growth that are not readily available in the existing onsite soil. Vegetation of the slope is proposed to stabilize the soils at the site, thus reducing the amount of erosion during storm events. Work associated with installation of the vegetated walls include cleaning of debris, and vegetation, soil preparation, hydro-mulch seeding, and planting. Due to the steep slope, erosion control matting with earth anchors is proposed at PID 209. The slope will also be hydro-mulched to help vegetate the slope and stabilize the soils at the site.

Since significant sediment erosion is exhibited at Sites PID 1008, 207 and 210, inlet inserts are being proposed within the existing drainage structures along the roadway. These inserts will be used to remove pollutants and trash by means of screening, separation and media filtration. In addition to inlet inserts, a sub-surface baffle box will be placed in-line with an existing 60" pipe at Site PID 1008.

At the H-3 & Likelike Interchange site, a bioswale is being proposed to provide treatment for runoff from the H-3 deck drains and downspouts and surrounding areas. Bioswales are used to filter pollutants through the layering of different types of media. An underdrain within the bioswale section will be used to provide relief from ponding. In conjunction with the bioswale, outlet riprap protection and a settling basin is proposed for pretreatment. A flow dispersal trench at the end of the bioswale will allow treated runoff to sheet flow and percolate into the surrounding vegetation. In addition to treating the runoff from the deck drains, the runoff flowing into an inlet along Likelike Highway will be diverted into the bioswale via a conveyance swale. Work associated with the bioswale system include excavation, planting, placement of riprap, construction of a concrete settling basin, installation of geotextile fabric, filtering media, underdrains and cleanouts, and a drainage catch basin.

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.: N/A*

☐ *Department of the Army Permit (Section 404): N/A*

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:* N/A

☐ *RCRA Permit (Hazardous Wastes):* N/A

☐ *Section 401 Water Quality Certification:* N/A

☒ *Other (Specify):* N/A

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):* _____

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
b. *Vicinity of the project on the island.* District of Kaneohe
c. *Legal boundaries of the project.* See Attachment A-3

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-3*

e. *Location of ALL discharge points from Section 6 of e-Permitting form with identification numbers. See Attachment A-3*

f. *Boundaries of 100-Year flood plans. All sites are located in Zone D*

g. *Areas of soil disturbance. See Attachment A-8*

h. *Location(s) of impervious structures (including buildings, roads, parking lots, etc.) after construction is completed. Proposed landscape improvements allow for stormwater percolation and thus negligible runoff comes from those sites*

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*

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*

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). The proposed construction activities will not alter the drainage patterns of the site. See Attachment A-8*

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 *N/A*

C.10 - Construction Schedule

Provide the following estimated dates:

The date when construction activity will begin. *November 1, 2013*

The date when each major construction activity begins. *November 8,2013*

The date when the Notice of Cessation form will be submitted. *March 24, 2015*

A detailed construction schedule, including a timetable for major activities will be provided by the selected contractor at least 30 days prior to start of construction.

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 G. 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

*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*

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 Staging/Storage area(s) will be located within the project limits. The area will be determined once the contract is awarded. The Staging/Storage area(s) will be incorporated into the SSCBMP Plan after the contract is awarded. If the Staging/Storage area is not located within the project limits, the requirements of Section C.6 shall be followed.

iv. Location(s) where stabilization practices are expected to occur See Attachment A-8

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 Areas of sheet flow discharging from the site will be protected using perimeter sediment controls including fiber roll or silt fence. If off-site water causes a problem, BMPs will be incorporated into the SSCBMP Plan.

vi. Areas where vegetative practices are to be implemented See Attachment A-8

vii. Post Construction Final Stabilization BMP Plan See Attachment A-8

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.

d. Describe your post construction BMP Plan, including all permanent BMPs, maintenance practices, etc. All distributed areas will be overlain with concrete, rip rap, erosion control matting and/or hydromulch. These areas shall be repaired as necessary. Grass

and vegetation will be cut as necessary. All permanent BMP structures will be maintained on a regular basis.

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 D 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 E 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 F 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 F or a self-developed Contingency Plan.

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