

4.0 CONSTRUCTION SITE RUNOFF CONTROL

4.1 Overview

4.1.1 Purpose

The objective of the Construction Site Runoff Control Program (Construction Program) is to minimize the potential for polluted storm water runoff from construction sites to enter into the MS4 and ultimately discharge into State receiving waters.

4.1.2 Permit Requirement

Part 6.(4) of Appendix K of the State's General Permit (HAR 11-55) requires an operator of a regulated small MS4 to:

Develop, implement, and enforce a program to reduce pollutants in storm water runoff entering the permittee's small municipal separate storm sewer system from construction activities disturbing one acre or more, including construction activities less than one acre that are part of a larger common plan of development or sale that would disturb one acre or more, that, at a minimum, includes the following:

- (A) *Establishment of rules, ordinances, or other regulatory mechanism, including enforcement procedures and actions, that require erosion and sediment controls,*
- (B) *Requirements for construction site operators to implement appropriate erosion and sediment control best management practices,*
- (C) *Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality,*
- (D) *Procedures for site plan review which incorporate consideration of potential water quality impacts,*
- (E) *Procedures for receipt and consideration of information submitted by the public, and*
- (F) *Procedures for site inspection and enforcement of control measures.*

4.2 Construction Site Runoff Control Program Activities

4.2.1 Types of Construction Projects

The Construction Program covers three primary types of construction projects: contract, in-house, and permit projects.

Contract projects are construction projects that use outside contractors who are contracted by HDOT through a competitive bid process. The plans, specifications and estimates (PS&E) of contract projects are prepared by either HDOT personnel or engineering consultants. The construction of contract projects is managed by Maui District or its delegated representatives. Contract projects can vary in complexity and size from simple resurfacing to construction of new freeways.

In-house construction projects are those projects that are designed by Maui District or its delegated representatives and constructed by the Maui District Maintenance personnel. These projects are typically small and maintenance-related. Some in-house projects are constructed by outside contractors and are overseen by Maui District.

Permit construction projects are non-HDOT construction activities (activities conducted by others such as tenants or owners/developers of adjacent properties) that include work within the HDOT property and/or require permits or approvals from HDOT. Examples of HDOT permits include the *Permit to Perform Work Upon State Highways* (see Appendix D.1), as well as connection, discharge revocable permits and leases described in Section 3.

4.2.2 Enforcement Authority

In accordance with applicable permits and any project specific requirements (*Hawaii Standard Specifications for Road and Bridge Construction* [see Appendix D.2.A], Construction Contract Project Special Provisions, *General Provisions for Construction* [see Appendix D.2.B] and Hawaii Revised Statutes). HDOT has the authority to enforce compliance with NPDES permit requirements on construction projects. Mechanisms and appropriate actions include:

- *Hawaii Standard Specifications for Road and Bridge Construction*, Section 108.10 (see Appendix D.2.A) or *General Provisions for Construction* (HDOT Air and Water Transportation Facilities Division), Article 8 Section 10 (see Appendix D.2.B), which provides for the suspension of work due to the failure on the part of the contractor to comply with provisions of the contract;
- *Hawaii Standard Specifications for Road and Bridge Construction*, Section 108.11 (see Appendix D.2.A) or *General Provisions for Construction* (HDOT Air and Water Transportation Facilities Division), Article 8 Section 11 (see Appendix D.2.B), which provides for termination of contract for cause;
- *Hawaii Standard Specifications for Road and Bridge Construction*, Section 109.10 (see Appendix D.2.A) or *General Provisions for Construction* (HDOT Air and Water Transportation Facilities Division), Article 9 Section 10 (see Appendix D.2.B), which provides for withholding of payment for unsatisfactory progress;
- Project Special Provision sections as appropriate, which define construction requirements relating to Temporary Water Pollution, Dust and Erosion Control (see Appendix D.2.A), which may include but are not limited to:
 - Adherence to standards set forth in the HDOT *Construction Best Management Field Manual* (see Appendix D.3.A) or City and County of Honolulu *Storm Water BMP Manual for Construction* (see Appendix D.3.B), as appropriate;
 - The assessment of deductions in monthly progress payments;
 - The assessment of liquidated damages;
 - Temporary suspension of work; and
 - Reimbursement to the State for full amount of the cost for all citations or fines.
 - Terms and provisions for the *Permit to Perform Work Upon State Highways* (see Appendix D.1), as well as connection, discharge revocable permits and leases;

which provide for the revocation of authorization to perform work within HDOT property for failure to comply with applicable regulations and requirements.

Hawaii Revised Statutes, Chapter 342D provides HDOH the authority to implement and enforce the conditions of the NPDES Permits for construction projects holding NGPC or NPDES Individual Permits.

4.2.3 NPDES Policies and Site-Specific BMP Requirements

As required by the Clean Water Act, any individual, agency, business or organization, including HDOT, is required to obtain NPDES coverage for construction activities that disturb one (1) acre or more of land area, or result in the discharge of dewatering or hydrotesting effluent into State waters. HDOH administers the NPDES Program for the State, and requires submittal to HDOH of a Notice of Intent (NOI) to obtain a Notice of General Permit Coverage (NGPC), or an individual permit application which includes a site-specific BMP plan that complies with State and federal standards.

Under the Construction Program, no applicable contract, in-house, or permit project will be allowed to proceed to construction unless the project sponsor or representative (e.g., a Maui District project manager or contractor hired by Maui District) provides proof that the project has received from HDOH an NGPC, or other applicable NPDES Permit (e.g., Individual NPDES Permit, NGPC authorizing discharges associated with dewatering or hydrotesting, etc.). For contract and in-house projects Notice-To-Proceed will not be issued until all necessary permits are obtained and a Site-Specific BMP Plan is accepted by Maui District. For permit projects, an administrative approval to perform work on HDOT property or a *Permit to Perform Work Upon State Highways* (see Appendix D.1), *as applicable*, will not be issued until all necessary permits are obtained and a Site-Specific BMP Plan is accepted by Maui District.

The following procedures will be used to verify that applicable projects have NPDES coverage:

- For contract and in-house projects, HDOT project managers or delegated representatives will be instructed to use a checklist such as the *Site-Specific Best Management Practices (BMP) Plan Review Checklist* (see Appendix D.4.A) or the *Construction Site Design Review Checklist* (see Appendix D.4.B)) as appropriate during PS&E development (or the environmental review process) to verify whether or not their projects require NPDES coverage, regardless of whether the design is done by HDOT personnel or by engineering consultants.
- For permit projects, the applicant must provide proof that a NOI or NPDES permit application was submitted and approved by HDOH before the application can be processed. For example, the *Permit to Perform Work Upon State Highways* (see Appendix D.1) requires that the applicant disclose NPDES applicability. The lease process, connection, discharge, and revocable permit application processes also have similar provisions.

4.2.4 Site-Specific BMP Plan Review and Approval Process

Under the Construction Program the review and approval process of Site-Specific BMP Plans for projects that require NPDES coverage will be conducted in the following manner:

- For contract and in-house projects, HDOT project managers direct staff, engineering consultants, or contractors will prepare the site-specific BMP plan. A checklist such as the *Site-Specific Best Management Practices (BMP) Plan Review Checklist* (see Appendix D.4.A) or the *Construction Site Design Review Checklist* (see Appendix D.4.B) will be used as a guideline in the development of the Site-Specific BMP plan. The Site-Specific BMP Plan will be reviewed and accepted by Maui District.
- For permit projects, as required by the lease process, revocable permit process or the *Permit to Perform Work Upon State Highways* (see Appendix D.1) the applicant is required provide a Site-Specific BMP Plan if the project requires NPDES coverage. Applicants are encouraged to refer to a checklist such as the *Site-Specific Best Management Practices (BMP) Plan Review Checklist* (see Appendix D.4.A) or the *Construction Site Design Review Checklist* (see Appendix D.4.B), as appropriate during the development of the Site-Specific BMP Plan to ensure that the plan will meet all NPDES permit requirements. The Site-Specific BMP plan will be reviewed and accepted by Maui District prior to the issuance of a *Permit to Perform Work Upon State Highways* (see Appendix D.1) or the issuance of other approvals for work on HDOT property.

The *Site-Specific Best Management Practices (BMP) Plan Review Checklist* (see Appendix D.4.A) or the *Construction Site Design Review Checklist* (see Appendix D.4.B) will be used as a guide in developing and reviewing Site-Specific BMP Plans. Common elements of a Site-Specific BMP Plan include:

- Identifying potential pollutants that could affect the quality of storm water, dewatering effluent, or hydrotesting discharges from the construction site;
- BMPs that will need to be implemented during construction, including their precise locations, to control the quality of storm water runoff from construction activities, or discharges from hydrotesting or dewatering activities;
- Construction notes addressing erosion control and storm water pollution prevention requirements, which become part of the construction contract documents; and
- Copy of *Water Pollution and Erosion Control Notes* (see Appendix D.5).

The review of Site-Specific BMP Plans involves determining whether the construction BMPs identified in the plan are appropriate and reasonable for the specific project. The review will verify that the Site-Specific BMP Plan fully meets the requirements of:

- The appropriate Checklist as described above;
- The following HDOT publications when appropriate:
 - *Water Pollution and Erosion Control Notes* (see Appendix D.5);
 - *Hawaii Standard Specifications for Road and Bridge Construction (2005)* including Subsection 107.13 and Section 209 (see Appendix D.2.A);
 - Air and Water Transportation Facilities Division's *General Provisions for Construction Projects (2016)* (see Appendix D.2.B);
 - *National Pollutant Discharge Elimination System (NPDES) Requirements for Permit Projects Within State Highway Right-of-Way Notes* (see Appendix D.6);

- *Construction Best Management Practices Field Manual* (see Appendix D.3.A); and
- *City and County of Honolulu Storm Water BMP Manual for Construction* (see Appendix D.3.B).
- Stipulations contained in General Construction Activities Storm Water NPDES Permit, or any other applicable requirements of the Hawaii NPDES permit program where applicable.

4.2.5 Methods of Discovery

Non-compliance with requirements may be identified through the following sources:

- Observations made by Maui District personnel conducting routine activities within a project site;
- Project and permit required inspection/monitoring activities;
- Contractor compliance activities such as conducting, preparing and submitting inspection reports or preparing, implementing and updating site-specific BMP Plans;
- Regulatory agency inspections or audits; or
- Public complaints received by Maui District.

Reports of potential non-compliances associated with construction activities from external sources such as the general public or regulatory agencies will be received by Maui District and referred to staff responsible for the monitoring of construction activity for appropriate action.

Non-compliances will be documented by Maui District representatives along with any corrective actions necessary to achieve compliance in a timely manner in accordance with applicable permit requirements. When necessary, enforcement actions will be initiated by Maui District representatives (see Section 4.2.7). Follow-up notification to reporting parties will be initiated by Maui District when deemed necessary.

4.2.6 Inspection

This section describes the procedures for inspections of contract and in-house project sites to verify and document whether the construction BMPs have been installed properly. Two types of inspections will be conducted under the Construction Program:

- Initial inspections will be conducted on projects that require NPDES coverage, to verify that the construction BMPs identified in the Site-Specific BMP Plan are properly installed and in the correct locations prior to the commencement of ground-disturbing activity; and
- Periodic inspections to monitor the construction BMPs of all construction projects, regardless of whether they require NPDES coverage, to ensure that their construction BMPs are working properly throughout the life of the construction period.

A list of active construction projects and database of inspection data will be developed and maintained by the Maui District Construction Section.

4.2.6.1 *Initial Inspections*

For contract and in-house projects that require NPDES coverage, a qualified engineer or inspector (the Inspector) will inspect the construction BMPs to verify that they were installed in accordance with the approved Site-Specific BMP plan prior to approving the initiation of ground-disturbing activities that the BMPs are designed to address. The initial inspections will be conducted by Maui District staff or delegated representatives. The following general procedures for conducting the initial inspections at construction sites are provided below:

- The individual responsible for the construction activity shall provide Maui District advance notice as to when the installation of the construction BMPs is anticipated to be completed.
- Prior to the inspection, the Inspector shall review and become familiar with the project's Site-Specific BMP Plan. Depending on the size of the project, more than one inspector may be used.
- Prior to the initiation of any ground disturbing activities, the Inspector shall inspect the site(s) to determine whether the construction BMPs identified in the Site-Specific BMP Plan have been properly installed in the correct locations.
- The Inspector shall then document or record whether or not the construction BMPs as specified in the Site-Specific BMP Plan were properly installed using a standardized inspection form (see Appendix D.7).
- If the Inspector finds that the BMPs are properly installed in accordance with the Site-Specific BMP Plan, ground-disturbing activities can proceed.
- If the Inspector finds that the BMPs are not properly installed in accordance with the Site-Specific BMP Plan, ground-disturbing activities will not be allowed to start, and the Inspector will re-schedule another inspection to allow the individual responsible for the construction activity to fix the problem.

If the Site-Specific BMP Plan specifies that construction BMPs are to be installed in phases, the start of each phase will be treated as an initial inspection.

4.2.6.2 *Periodic Inspections*

NPDES permitted projects with NGPC's (coverage under the HAR 11-55, Appendix C) and certain non-NPDES permitted projects (projects disturbing less than 1 acre that do not involve minor land disturbing activities such as landscaping, signage installation, fencing, utility repair work, pavement surface repair and maintenance activities) will be subject to periodic weekly inspections of BMPs and rainfall event inspections when rainfall in excess of 0.25 inches is observed on-site within a 24-hour period. Individual NPDES permitted projects will be subject to weekly inspections, rainfall inspections and other inspections as specified in the project-specific Individual NPDES permit. HDOT requires that construction projects, regardless of whether they require NPDES coverage, include construction BMPs.

For HDOT construction projects within the Maui District MS4, weekly inspections (bi-weekly from October thru March, bi-monthly from April thru September for work within harbor property) will be performed by the Contractor and reviewed by Maui District inspectors or its designated

representative. The contractor/inspectors will use an inspection checklist, an example of which is provided in Appendix D.8. Inspections will be recorded into a central database to allow for periodic reporting of findings. The Contractor and/or inspectors will immediately inform the project contact person if any illicit discharge, deficiency, or violations of the NGPC or other NPDES permit is found so that the problem can be corrected or addressed in accordance with time frames stipulated in the permit conditions.

In the event evidence of discharge is discovered during periodic inspections an investigation of the nature of the discharge and its impacts will be performed. A discharge report will be produced to document the findings of the investigation including any corrective actions that have been taken to address any issues with site-specific BMPs or project activities. Discharge reports will be filed in a central database to allow for periodic reporting.

4.2.7 Enforcement

For construction projects, Maui District will implement an enforcement response plan pursuant to the applicable legal mechanisms (see Section 4.2.2) to address and correct non-compliances and deter future non-compliance. Enforcement methodology includes the use of verbal notification or written notice, and for Harbors Maui District tenant construction contracts only, may involve revocation of tenant permits/leases. In the case of HDOT construction contract projects, enforcement methodology also includes assessment of liquidated damages, withholding of payment, partial or total suspension of work or referrals to HDOH.

4.3 Measurable Goals

Table 4-1 describes the goals and activities to meet each goal, including annual targets, for the Construction Site Runoff Control Program.

Table 4-1: Construction Site Runoff Control Program Measurable Goals

Goal	Activities and Targets			
	Year 1	Year 2	Year 3	Year 4
Establish mechanisms to require erosion and sediment controls on all projects.	Evaluate and identify current ordinances, policies and procedures related to erosion and sediment control requirements.	Propose changes in ordinance, policy and/or procedure language to stakeholders.	Draft changes in ordinances, policies and/or procedures for stakeholder coordination.	This item is closed. See 2016 ACR.
Develop requirements for implementation of erosion and sediment controls on all projects.	Evaluate current requirements for implementation of erosion and sediment controls.	Develop and propose changes in requirements.	Initiate implementation of changes in requirements.	Continue implementation of developed requirements.

<p>Develop enforcement procedures and actions relating to non-compliance with established erosion and sediment control requirements.</p>	<p>Evaluate current methods of authority and enforcement.</p>	<p>Develop enforcement response strategy based upon identification of forms of non-compliance, enforcement actions, applicable timeframes for corrective actions and allowable penalties.</p>	<p>Draft and initiate implementation of enforcement response plan.</p>	<p>Continue implementation of developed ERP. Refine as necessary.</p>
<p>Develop a database to track BMP inspections, corrective actions and compliance with implemented policies related to erosion and sediment controls.</p>	<p>Evaluate current practices and identify data requirements for the development of a database system for construction BMP activities.</p>	<p>Initiate development of a centralized BMP inspection and tracking database.</p>	<p>By the end of Year 3 all active Maui District construction projects will utilize a central BMP inspection and reporting database.</p>	<p>Continue to utilize BMP inspection database.</p>