

6 | Pollution Prevention and Good Housekeeping Program





6 | POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS

The Pollution Prevention and Good Housekeeping Program (hereinafter PPGH Program) is designed to develop and maintain a maintenance program to reduce, to the MEP, the discharge of pollutants from roads, maintenance facilities, and the MS4.

The PPGH Program includes the following objectives:

- Conduct street and yard sweeping to remove sediment and debris.
- Conduct inspection and maintenance of MS4 drainage structures.
- Conduct inspections of Maintenance Baseyard facilities.
- Install storm drain placards at select storm drain inlets for the purpose of educating the public.
- Conduct training on PPGH BMPs.

6.1 PERMIT REQUIREMENTS

The PPGH Program is administered in accordance with the MS4 NPDES Permit requirements referenced in Table 6-1.

Table 6-1. MS4 NPDES Permit Requirements for the PPGH Program.

MS4 NPDES Permit Requirement	SWMP Section(s)
Part 6.(a)(6): <i>Pollution Prevention and Good Housekeeping Program – Develop, implement, and enforce an operation and maintenance program to prevent and reduce stormwater pollution from activities, including but not limited to, park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance that, at a minimum, includes the following.</i>	—
Part 6.(a)(6)(A): Good housekeeping and other control measures.	6.2, 6.3, 6.4, 6.5, 6.6
Part: 6.(a)(6)(B): Employee and contractor training on good housekeeping practices to ensure that good housekeeping measures and best management practices are properly implemented.	6.4, 6.5, 6.7

6.2 STREET SWEEPING

Maui District conducts street sweeping to remove sediment and debris from yards, roadways, shoulders, medians, and gutters prior to it reaching the MS4. Street sweeping is conducted bimonthly for HWY-M routes and their divided segments, and at least monthly at Kahului Harbor. Street sweeping results, including the location swept and dimensions of the debris collected, are documented in Maximo and/or on sweeping logs.





Maui District will revise the street sweeping frequency to maximize available resources.

6.3 STORM DRAIN INSPECTION AND MAINTENANCE

Maui District inspects MS4 drainage structures (e.g., storm drain manholes, inlets) to identify if maintenance is needed.

MS4 drainage structures are inspected annually and require cleaning when the accumulation of sediment and debris reaches at least one-third of the depth of the structure's invert, or one-third of the opening into or out of the structure. Linear structures are cleaned at the discretion of Maui District.

During inspections, Maui District installs and/or maintains storm drain placards in high priority areas with heavy pedestrian traffic. Storm drain placards are installed to increase public knowledge and awareness of the impacts of littering and discharging pollutants to drainage structures. A Maui-centric storm drain placard is shown in Figure 6-1.



Figure 6-1. Maui District's Maui-Centric storm drain placards increase public knowledge and awareness.

Utilizing Maximo, Maui District tracks information relating to storm drain inspection and maintenance.



6.4 MAINTENANCE ACTIVITIES

6.4.1 Maintenance Activity BMP Implementation

Maui District implements maintenance activity BMPs in accordance with the *Maintenance Activities Best Management Practices Field Manual* (Appendix 4.2). The *Maintenance Activities Best Management Practices Field Manual* includes written procedures to minimize pollutant discharge for maintenance activities that have the potential to discharge pollutants to the MS4. Booklets of the manual are provided to Maintenance section staff to keep in their offices or vehicles for quick and easy reference. Service contractors who perform maintenance activities (e.g., landscape maintenance, street sweeping, etc.) are also required to perform operations in accordance with the *Maintenance Activities Best Management Field Manual* and required BMPs.

Maui District evaluates this document periodically and will update it as necessary.

6.4.2 Maintenance Activity BMP Inspections

Maui District conducts BMP inspections of its Maintenance Baseyards to ensure that BMPs are consistently executed and facilities are maintained properly. Maui District conducts semiannual inspections at the HWY-M Kahului Baseyard, and annual inspections at the Kahului Harbor Baseyard. During inspections, Maui District identifies any site conditions that have the potential to result in the discharge of pollutants and requires corrective action from the facilities designate. Inspections and corrective actions are documented in Maximo and/or on inspection checklists.

6.5 CHEMICAL APPLICATION

HWY-M utilizes the *Highway Manual for Sustainable Landscape Maintenance* to establish chemical application BMPs and educate chemical applicers on BMP implementation. The *Highway Manual for Sustainable Landscape Maintenance* encourages a culture of sustainable landscape maintenance practices, such as reducing the impacts of herbicide application.

The Highway Manual for Sustainable Landscape Maintenance is available on the DOT website, www.hidot.hawaii.gov/highways/landscape-architecture-program/.

6.6 EROSION CONTROL

HWY-M evaluates the need to implement temporary and/or permanent erosion control measures for significant erosional areas. Significant erosional areas are classified as areas exhibiting evidence of rilling, gullyng, and/or other evidence of significant sediment transport that also have the potential to significantly impact water quality.





6.6.1 Temporary Erosion Control

As significant erosional areas are identified by HWY-M or through public complaints, HWY-M implements temporary erosion control measures (e.g., erosion control blankets, silt fencing, vegetation) if a permanent control is not immediately feasible. During the temporary BMP selection process, HWY-M assesses the conditions of each significant erosional area to determine the most appropriate BMP for each site. Erosion and sediment control BMPs are selected from the *Construction Best Management Practices Field Manual* (Appendix 4.1). Following implementation, temporary erosion control measures are inspected and maintained in accordance with Chapter 5 of this *SWMP*.

6.6.2 Permanent Erosion Control

HWY-M evaluates significant erosional areas for the feasibility of installing a permanent erosion control measure. These projects are designed and constructed by HWY-M and/or the Construction Section staff.

Utilizing Maximo, HWY-M effectively tracks information relating to significant erosional areas, including location and erosion control measures implemented.

6.7 TRAINING

Maui District conducts annual training for its program staff on BMPs, such as performing inspections of street sweeping operations and performing inspections of MS4 drainage structures. Maui District also conducts annual training for its Maintenance staff on various maintenance activities and associated BMPs.

6.8 MEASURING PROGRAM EFFECTIVENESS

Maui District assigns each PPGH Program BMP an Outcome Level, anticipated frequency over the permit term, data collection method, and assessment parameter, as shown in Table 6-2.

Table 6-2. Measuring Effectiveness of the PPGH Program.

PPGH Program BMP	Outcome Level ¹	Anticipated Frequency	Data Collection Method	Assessment Parameter
Street Sweeping	1	Bimonthly at HWY-M	Tabulation	No. of street sweeping cycles completed
		Monthly at HAR		





Table 6-2. Measuring Effectiveness of the PPGH Program.

PPGH Program BMP	Outcome Level ¹	Anticipated Frequency	Data Collection Method	Assessment Parameter
Storm Drain Inspection and Maintenance	2	Annually	Tabulation	No. of MS4 drainage structures inspected and maintained
Maintenance Activities	3	Annually	Tabulation	Average no. of deficiencies
Chemical Application	1	Continuous	Completion	Permit compliance
Erosion Control	1	Continuous	Confirmation	Permit compliance
Training	2	Annually	Tabulation	No. of events and event attendees

¹Outcome Levels:

- 1- **Permit Compliance.** Many program activities are conducted as a direct requirement of the MS4 NPDES Permit. Therefore, Level 1 outcomes may take the form of yes/no answers. Level 1 outcomes are assumed to be beneficial to water quality, but are not considered Direct Outcomes as it lacks the casual effect to support this assumption.
- 2- **Knowledge and Awareness.** Outcomes at this level gauge whether educational efforts are progressing toward changes in knowledge and awareness. Measuring these outcomes is achieved through observation of involvement from target audiences. Similar to Outcome Level 1, Level 2 outcomes are assumed to be beneficial to water quality but are considered Indirect Outcomes.
- 3- **Behavioral Changes.** Outcomes at this level measure the effectiveness of programs in motivating target audiences to change their behaviors and implement appropriate BMPs. These behavioral changes are tracked using site inspections and tabulating changes in program involvement. Outcomes at Level 3 are considered Indirect Outcomes.

