

## **6.0 POLLUTION PREVENTION/GOOD HOUSEKEEPING**

### **6.1 Overview**

#### 6.1.1 Purpose

The objective of the Pollution Prevention/Good Housekeeping Program is to minimize the potential for operation and maintenance related activities to generate polluted storm water runoff which may enter into the MS4 and ultimately discharge into State receiving waters. This can be accomplished by establishing good housekeeping control measures including development of standardized maintenance activity and maintenance activity best management practices. The Pollution Prevention/Good Housekeeping Program will include training of stakeholders on good housekeeping practices to ensure proper implementation of best management practices.

#### 6.1.2 Permit Requirement

Part 6.(a)(6) 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 an operation and maintenance program to prevent and reduce storm water pollution from activities, including but not limited to, park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance that, at a minimum, includes the following:*

- (A) *Good Housekeeping and other control measures, and*
- (B) *Employee and contractor training on good housekeeping practices to ensure that good housekeeping measures and best management practices are properly implemented.*

### **6.2 Pollution Prevention/Good Housekeeping Program Activities**

#### 6.2.1 Street Sweeping

Polluting material typically found on roadways includes litter from motorists and pedestrians, material from illegal dumping, runoff from construction activities within and adjacent to the roadway, debris from vehicles, degraded pavement materials, vegetative debris and accumulated sediment. Polluting material found at harbors facilities also typically includes sediment and particulate matter from tire degradation. Left unchecked, accumulated quantities of these potential pollutants can enter the Maui District MS4 during storm events. One strategy to minimize the potential accumulation of material in the MS4 is timely removal of debris via street sweeping using industry-standard sweeping vehicles.

Periodic sweeping within the Maui District MS4 is conducted by Maui District Maintenance Section personnel. Current street sweeping practices within the MS4 are being evaluated. Information collected about each sweeping event includes the limits of swept area, the amount of debris collected, and the categorization of the type of debris collected. Analysis of baseline data including the amount of accumulated material and potential impacts to the quality of State waters will assist Maui District in the prioritization of roadway sweeping activities and serve as a basis for

establishment of street sweeping frequency. Currently, the plan developed for Highways Maui District sweeping is six times per year, and for Harbors Maui District, at least monthly.

### 6.2.2 Chemical Application

The objective of the Pollution Prevention/Good Housekeeping Program is to minimize pollutant loading in storm water from all maintenance related activities including the application of fertilizers and herbicides on HDOT property. Maui District Maintenance personnel and landscape contractors must follow the procedures described in this section and all requirements on product labels. Construction and maintenance of landscaped areas on HDOT property may require the application of chemicals in addition to physical care to control weedy plants.

Maui District Maintenance personnel and licensed contractors use only brand-name herbicides such as Roundup®, a systemic contact weed killer. These herbicides may be applied to large areas by Maui District Maintenance personnel, contractors and landscape crews using a spray truck and/or hand sprayers. Personnel applying herbicides are required to wear protective clothing and accessories and follow all manufacturers' application guidelines.

Maui District will evaluate current chemical application practices for opportunities to improve the chemical application program through the development of training for personnel. The training will consist of instructing landscape maintenance personnel that handle or have responsibility for using fertilizers and herbicides about good housekeeping procedures, such as cleaning and maintaining equipment; properly storing and disposing of chemicals; and general procedures for applying herbicides and fertilizer.

Training for herbicide management will include the proper handling and application procedures to prevent contamination of storm water runoff. Also, the training for this BMP will include instruction on the adjustment irrigation systems to suit site conditions and the avoiding of conveyance of chemically contaminated runoff to down-slope areas where it can enter the MS4 or directly into receiving waters.

A training strategy will be developed to train personnel, including supervisors, and service contractors (e.g., landscaping construction and maintenance contractors) involved in the use, storage, management, and application of herbicides and fertilizer.

### 6.2.3 Drainage System Maintenance – Storm Drain Cleaning

Drainage infrastructure of the Maui District MS4 includes manholes, inlets, catch basins and outlets. Inlets within the MS4 are being inspected by Maui District to determine the amount of debris and sediment that is accumulated within the drainage systems of the MS4. Information collected during these inspections will include the degree of accumulation of debris, the type of debris, potential sources and an evaluation of potential impacts. Baseline data is being evaluated to develop a storm drain cleaning strategy which shall include consideration of accumulation rate and potential impacts to the quality of State waters. Areas where a high degree of accumulation is observed during baseline analysis will be flagged for evaluation for potential issues within the contributing drainage area with regards to erosion or other factors contributing to the high degree of accumulation of debris or materials/pollutants observed.

Similar to the street sweeping program, a database will be developed to track the progress of the storm drain cleaning operations. Continual analysis of storm drain cleaning data will assist Maui District in the development of a storm drain cleaning program including the prioritization of storm drain cleaning activities and serve as a basis for adjustment of drain cleaning frequency for each storm drain in the future.

#### 6.2.4 Facility Operations

##### *6.2.4.1 Highways Maui District Kahului Baseyard*

Maintenance and baseyard facilities have the potential to pollute storm water runoff passing through these properties because these are the locations where Highways Maui District parks many of its vehicles and equipment; conducts washing, fueling and maintenance of these vehicles and equipment; and stores materials and chemicals used to maintain its highway network. The goal of the Pollution Prevention/Good Housekeeping Program is to operate Highways Maui District's Kahului Baseyard in a manner that would prevent impacts to the quality of receiving water bodies to the MEP. Strategies that will be used to achieve this include:

- Implementation of the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP), revised in November 2016,
- Establishing contact persons and holding regular inspections; and
- Supporting a training program for Highways Maui District personnel who operate and maintain the baseyard on procedures for pollution prevention and good housekeeping.

A description of the activities associated with the Highways Maui District Kahului Baseyard, a listing of potential pollutants, and appropriate BMP measures including material storage procedures, spill prevention and response, and hazardous waste management procedures are outlined in the SWPCP.

##### *6.2.4.2 Harbors Maui District Kahului Baseyard*

The operation activities at Harbors Maui District Kahului Harbor Baseyard within the Maui District MS4 area include boat rinsing and small above ground oil storage.

- Harbors Maui District Kahului Baseyard has a Security and Recovery Vessel berthed in the MS4 area which is occasionally rinsed with fresh water to remove salt. No soap or detergent is allowed to be used.
- Two 55-gallon sealed and labeled drums, one of gasoline and one of oil, are stored in a specifically designed concrete containment building. The containment building has a sloped floor and an emergency holding area capable of holding the entire contents of a drum if it leaks.
- Baseyard is inspected for stormwater compliance at least annually and personnel are trained on procedures for pollution prevention and good housekeeping annually.

### 6.3 Measurable Goals

Table 6-1 describes the goals and activities to meet each goal, including annual targets, for the Pollution Prevention/Good Housekeeping Program.

**Table 6-1: Pollution Prevention/Good Housekeeping Program Measurable Goals**

Goal	Activities and Targets			
	Year 1	Year 2	Year 3	Year 4
Establish a program to prevent and reduce storm water pollution through maintenance activities.	Initiate evaluation of current storm drain system and roadway maintenance practices.	Inspect all storm drains within the MS4 and monitor street sweeping activities. Initiate development of storm drain cleaning and street sweeping programs.	Develop and initiate implementation of storm drain inspection and street sweeping programs.	Continue to sweep and inspect drains. Continually evaluate priority list and continue cleaning storm drains.
Establish a program to prevent and reduce storm water pollution from baseyard activities.	Initiate evaluation of current Kahului Baseyard activities against established SWPCP procedures.	Identify and develop changes in procedures to improve upon the Kahului Baseyard SWPCP.	Implement procedures for Kahului SWPCP improvements identified in year 2.	Continue to implement the SWPCP.
Develop a training program supporting pollution prevention and good housekeeping measures.	Initiate evaluation current practices to identify training requirements for maintenance activities.	Develop maintenance program training strategy consisting of training topics, target audiences and training frequency requirements.	Initiate implementation of maintenance training program.	Continue the maintenance training program.
Implement good housekeeping measures at Kahului Harbor.				Continue to sweep and inspect inlets at Kahului Harbor.