



STORM WATER MANAGEMENT PLAN

SUBMITTAL TO DOH

MARCH 30, 2007

Prepared by:
**DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU**



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Protect our waters...
FOR LIFE

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CERTIFICATION

City and County of Honolulu
Department of Environmental Services
Storm Water Management Plan
NPDES MS4 Permit No. HI S000002

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”



Dr. Eric S. Takamura, P.E., Director
Department of Environmental Services

3/30/07

Date

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ACRONYMS AND GLOSSARY



Inlet protection and silt fence



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ACRONYMS AND GLOSSARY

BMP	Best Management Practice
BWS	Board of Water Supply
Caltrans	State of California Department of Transportation
CIP	Capital Improvement Program
City	City and County of Honolulu
DDC	Department of Design and Construction
DES	Department of Enterprise Services
DFM	Department of Facility Maintenance
DOH	Department of Health
DOT	Department of Transportation
DOT-HWYS	Department of Transportation, Highways Division
DPP	Department of Planning and Permitting
DPW	Department of Public Works
DRM	Division of Road Maintenance
DTS	Department of Transportation Services
ECP	Erosion Control Plan
ENV	Department of Environmental Services
EPA	Environmental Protection Agency
ESCP	Erosion and Sediment Control Plan
FWPCA	Federal Water Pollution Control Act
FY	Fiscal Year
GIS	Geographic Information System

GPS	Global Positioning System
HAR	Hawaii Administrative Rules
HAZMAT	Hazardous Material
HDOA	State of Hawaii, Department of Agriculture
HFD	Honolulu Fire Department
HOA	Homeowners Association
HPD	Honolulu Police Department
HoLIS	Honolulu Land Information System
IPM	Integrated Pest Management
KBAC	Kaneohe Bay Advisory Committee
LOW	Letter of Warning
MEP	Maximum Extent Practicable
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheet
MS4	Municipal Separate Storm Sewer System
NED	National Economic Development
NFOV	Notice and Findings of Violation
NGPC	Notice of General Permit Coverage
NOI	Notice of Intent
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service
PED	Preconstruction Engineering and Design

PSA	Public Service Announcement
ROH	Revised Ordinances of Honolulu
SIC	Standard Industrial Classification
State	State of Hawaii
SWMP	Storm Water Management Plan
SWPCP	Storm Water Pollution Control Plan
SWQ	Storm Water Quality
TMDL	Total Maximum Daily Load
TMK	Tax Map Key
TSS	Total Suspended Solids
WLA	Waste Load Allocation
WWTP	Wastewater Treatment Plant

EXECUTIVE SUMMARY



Slope protection BMP



EXECUTIVE SUMMARY

This Storm Water Management Plan (SWMP) is a product of the major requirement in the City and County of Honolulu's (City's) National Pollutant Discharge and Elimination System (NPDES) permit, HI S000002 that has an effective date of March 31, 2006. The permit required that the City develop and ultimately implement a SWMP to reduce storm water pollutants into State of Hawaii (State) receiving waters.

The SWMP provides a framework of activities and actions that will be required to address the following areas:

- Public Education and Outreach
- Illicit Discharge
- Construction Site Runoff
- Post-Construction Storm Water Management
- Pollution Prevention and Good Housekeeping
- Commercial/Industrial Discharge Sites'
- Monitoring Requirements
- Reporting Requirements

Public education and outreach addresses both targeted groups and the general public. This plan describes what actions the City will undertake to educate these groups through workshops, hands-on activities, distribution of brochures, appearances at trade shows and expos, and advertising through various media, such as radio, television, newspapers and magazines. A calendar of events can be found on the City's website. The calendar will be updated periodically to reflect additions to the outreach program as they are identified.

The Illicit Discharge chapter describes the actions and program the City currently has in place and improvements to the program to address illegal connections, discharges into the Municipal Separate Storm Sewer System (MS4s) without a permit and illegal discharges. Databases have been developed to track investigations of illicit discharge. Licenses for private drain connections and field screening efforts will be maintained. Public reporting via a phone call to the City or through the City's website will be continued. Investigations, mainly through complaints, will be conducted and enforcement actions taken. Response plans will be updated and training will be performed for City employees.

For construction site runoff, the Best Management Practices (BMP) manual will be updated for both private and public sector construction projects. This BMP manual will identify various alternative methods to reduce pollutants that may enter the City's MS4s. The City will continue to use a database to track both public and private construction projects. The drainage and soil erosion standards will also be revised to reflect the installation and implementation of construction and post construction BMPs at construction sites.

Similar to the construction site runoff, the Post Construction BMPs will be included in the manual that provides alternative methods of constructing permanent structural BMPs. The permanent BMPs will contribute toward the reduction of pollutants to receiving State waters. Procedures for the review and implementation of post-construction BMPs will be developed. Again the standards and guidelines will be revised to include post-construction BMPs. Training for design and review of post-construction BMPs will be conducted for engineers, plan reviewers and inspectors.

Pollution prevention and good housekeeping play a critical role in the reduction of total maximum daily loads (TMDL) to receiving waters. These housekeeping tasks include street sweeping, litter pickup, maintenance of storm drains and structural controls, proper chemical applications, erosion control measures, and maintaining a clean and safe working environment to prevent potential spills to the MS4s. The City plans to continue their existing efforts and include other BMP measures by the development of a field manual that will identify various methods of conducting good housekeeping activities. The City is developing an inventory of all drainage facilities that will tie into the City's Geographic Information System (GIS) system.

An inventory of Commercial and Industrial sites has been developed because these types of facilities have the potential of significantly contributing pollutants to the storm water system. The commercial facilities include restaurants, gas stations and auto repair shops. Industrial facilities include landfills, and hazardous waste recovery, treatment, storage and disposal facilities. This inventory and mapping of commercial and industrial sites will facilitate the inspection and monitoring programs. Training will also be conducted on inspection and enforcement procedures, and BMP measures and techniques that can be used to prevent pollution.

The monitoring requirements of the permit will focus on three watersheds: Kawa, Waimanalo and Ala Wai. The Waimanalo watershed monitoring program will be developed jointly by the City and the State Department of Transportation (DOT). For Waimanalo and Kawa, the U.S. Geological survey will be preparing a monitoring plan and develop a baseline of the conditions. Thereafter, specific BMP measures, such as soil erosion control will be implemented and the water quality will be compared to the baseline conditions to measure the successfulness of the various types of BMP methods used.

The City will continue to provide reports to the State Department of Health (DOH). These reports include the Annual Report that documents all the efforts the City has taken to meet the requirements of the NPDES permit, the Annual Monitoring Report that contains the objectives and activities conducted in various watersheds working in collaboration with other agencies, and continue to adhere to the requirements of the Memorandum of Understandings (MOU) between the State DOT Highways Division, City Department of Environmental Services (ENV) and the City Department of Facilities Maintenance (DFM) and between the State DOH Environmental Management Division and the City Department of Public Works (DPW).