

Trash Reduction Plan

HAWAII ARMY NATIONAL GUARD

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ENVIRONMENTAL OFFICE
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LIST OF ACRONYMS

AASF	Army Aviation Support Facility
BMP	Best Management Practice
CFR	Code of Federal Regulations
CWA	Clean Water Act
DoD	Department of Defense
DOT	Department of Transportation
DOT-HWYS	Department of Transportation, Highways Division
ENV	HIARNG Environmental Office
FOD	Foreign Object Debris/Foreign Object Damage
HIARNG	Hawaii Army National Guard
LEPC	Local Emergency Planning Committee
MEP	Maximum Extent Practicable
MCM	Minimum Control Measure
MS4	Municipal Separate Storm Sewer System
PBMPS	Permanent Best Management Practices
ROH	Revised Ordinance of Honolulu
SWMP	Stormwater Management Plan
TMDL	Total Maximum Daily Load
TRP	Trash Reduction Plan
USEPA	United States Environmental Protection Agency
USCG	United States Coast Guard
WAAF	Wheeler Army Airfield

TERMINOLOGY

Baseline Implementation: Level of implementation for specific trash control measures that establishes the starting point for tracking progress towards trash reduction load.

Baseline Load: Sum of trash volume from Hawaii Army National Guard (HIARNG) jurisdictional areas and adjusted for baseline implementation of existing control measures.

Best Management Practices or Control Measures: Best Management Practices (BMPs) include any schedules of activity, prohibitions of practices, maintenance procedures [Title 40 Code of Federal Regulations (CFR) Part 122], which when implemented: prevents, controls, removes, or reduces pollution or trash from entering waters of the United States.

Clean Water Act 303(d) List: Under Section 303(d) of the Clean Water Act (CWA), the States are required to compile a list of impaired waters that fail to meet any of their applicable water quality standards or cannot support their designated or existing uses. This “303(d) list” is submitted to Congress every two years, and States are required to develop a total maximum daily load (TMDL) for each pollutant that causes impairment for waterbodies on that list.

Compliance Manager: The Compliance Manager ensures that all applicable Environmental Compliance management and pollution prevention programs are properly developed, implemented, and maintained.

Drainage Area: An area of land where all stormwater converges to a single point at a lower elevation.

Litter: As defined in the Revised Ordinance of Honolulu (ROH), Section 29-4.1, “litter” means rubbish, waste material, garbage, or trash; and includes improperly discarded paper, metal, plastic, glass or solid waste thrown or deposited on the land and water. Litter does not include non-manmade materials (i.e., branches, leaves, and other vegetation) naturally deposited in waterbodies.

Outfall: The discharge point (the point of HIARNG’s Municipal Separate Storm Serwer System (MS4) that connects to an outside MS4 (i.e., City and County of Honolulu, Department of Transportation, Highways Division, and United States Army Garrison-Hawaii)) of an MS4 to a receiving State waterbody; and does not include open conveyances connecting to two pipes, tunnels, or other conveyances which connect segments of the same stream or state waterbodies and are used to convey State waterbodies [40 CFR 122.26(b)(9)].

Trash: Manmade litter that cannot pass through a 5 mm mesh screen; excluding sediment, sand, vegetation, oil and grease, and exotic species.

Water Quality Compliance Specialist: Works within the Environmental Office of the Hawaii Army National Guard, Engineering Section of the Facilities Management Office, Department of Defense. The Water Quality Compliance Specialist ensures and maintains the comprehensive development, implementation, management, and maintenance of the HIARNG stormwater program at training areas and facilities.

1.0 INTRODUCTION

This Trash Reduction Plan (TRP) was prepared as required under Part D.1.f.(1)(v) of the Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit No. HIS000052 (Permit). The Permit states:

“Within one (1) year from the effective date of this permit, the Permittee shall develop and submit to DOH for review and acceptance, a trash reduction plan which assesses the issues, identifies and implements control measures, and monitors the control measures to reduce trash loads from the MS4. The plan shall include, at a minimum and be formatted consistent with the following:

- *Quantitative estimate of the debris currently being discharged (baseline load) from the MS4, including methodology used to determine the load.*
- *Description of control measures currently being implemented as well as those needed to reduce debris discharges from the MS4 consistent with short-term and long-term reduction targets.*
- *A short-term plan and proposed compliance deadline for reducing debris discharges from the MS4 by 50% from the baseline load.*
- *A long-term plan and proposed compliance deadline for reducing debris discharges from the MS4 to zero.*
- *Geographical targets for trash reduction activities with priority on waterbodies listed as impaired for trash on the State’s CWA section 303(d) list.*
- *Trash reduction-related education activities as a component of Part D.1.a.*
- *Integration of control measures, education, and monitoring to measure progress toward reducing trash discharges.*
- *An implementation schedule.*
- *Monitoring plan to aid with source identification and loading patterns as well as measuring progress in reducing the debris discharges from the MS4.*
- *The Annual Report shall include a summary of its trash load reduction actions (control measures and BMPs) including the types of actions and levels of implementation, the total trash loads, and dominant types of trash removed by its actions, and the total trash loads and dominant types of trash for each type of action.*

The plan shall provide for compliance with the above short-term and long-term discharge limits in the shortest practicable timeframe.”

Trash is defined, for the purpose of this plan, as being unable to pass through a 5mm screen and analogous to litter as defined in the ROH. It will exclude non-man-made materials such as branches, leaves, and other vegetation deposited in waterbodies naturally. Section 29-4.1 of the ROH defines litter as: *“Litter” means rubbish, refuse, waste material, garbage, trash, offal, or any debris of whatever kind or description, whether or not it’s of value, and includes improperly discarded paper,*

metal, plastic, glass, or solid waste. Litter also includes “refuse” as defined in Section 29-1.1 which means *all putrescible and non-putrescible solid wastes, including animal body wastes, garbage, rubbish, ashes, street cleanings, dead animals, abandoned automobiles, and solid market and industrial wastes.*

The four sites listed in Table 1 are covered under the Permit and are included in this TRP. HIARNG’s Stormwater Management Plan (SWMP) includes maps of each of the four sites covered under the Permit.

TABLE 1: SITE SELECTION

Facility	Address	Discharge System	Receiving Water Body
Fort Ruger	3949 Diamond Head Rd. Honolulu, HI 96816	City and County of Honolulu MS4	Pacific Ocean (Kahala Beach)
Wahiawa Readiness Center and Field Maintenance Shop No. 2	77-230 Kamehameha Hwy. Wahiawa, HI 96854	DOT-HWYs MS4	Waikele Stream
Waiawa Unit Training and Equipment Site	96-1176 Waihona Street Pearl City, HI 96782	City and County of Honolulu MS4	Waiawa Stream
Army Aviation Support Facility-HHI (AASF1)	1935 Santos Dumont Rd. Buildings 825, 829, and 832 Wahiawa, HI 96854	US. Army Garrison - Hawaii MS4	Waikele Gulch

2.0 EXISTING CONTROL MEASURES AND BMPS

HIARNG implements control measures at the facilities covered under the Permit to manage stormwater runoff and MS4-related debris, including trash. BMPs are implemented to reduce discharges from HIARNG's MS4 to other MS4s and/or receiving water bodies. The BMPs that HIARNG implements to prevent trash from discharging from its MS4 are described in the following subsections.

2.1 RESTRICTED ACCESS

Each HIARNG facility is fenced, gated, and public access is restricted. The public may only gain access with proper military credentials or must be escorted by HIARNG personnel. Due to these access restrictions, there is no potential of public means for the contribution of trash or debris to the HIARNG MS4 other than de minimis windblown carry-on to each facility.

2.2 MILITARY STANDARDS AND GUIDELINES

Department of Defense (DoD) 5500.7, Standards of Conduct, provides guidance to military personnel on standards of conduct and ethics. Violation may result in prosecution or disciplinary action. Cleanliness, attention to detail, and discipline at the facilities is of vital importance to the nature of the operations being carried out. These values are intertwined with the Standards of Conduct and lead to higher standards to ensure the premises is kept clean, especially designated work areas, and are maintained in good military order.

In addition to higher standards, frequent inspections of the premises and work areas are conducted to further drive accountability and enforcement. Therefore, all four facilities are maintained in an orderly fashion, continuously observed for military order, and have limited ability for trash to be generated.

2.3 PUBLIC EDUCATION AND OUTREACH

Part D.1.a of the Permit requires HIARNG to implement a comprehensive Public Education and Outreach Program to reduce pollutants from entering its MS4. As part of this requirement, HIARNG prepared Section 2.0 of the SWMP which presents education on trash reduction and recycling initiatives that are implemented at all four facilities. The goal of the program is to promote positive changes in attitude, knowledge, awareness, BMP implementation, pollutant load reduction (including trash and debris), and ultimately improve the water quality of stormwater discharges.

Section 2.1 of the SWMP discusses the annual training requirement for all HIARNG personnel involved with activities that have the potential to impact stormwater. In addition, all HIARNG staff involved in construction, repair, or maintenance activities are trained annually, or before the start of a project to ensure pollutants generated during construction activities, such as trash are minimized.

HIARNG developed an Environmental Quick Reference Guide brochure that provides information on waste management BMPs to protect stormwater that is discharged from their facilities and minimize trash from entering the MS4. This brochure is available and is distributed to personnel during environmental trainings.

HIARNG utilizes two logos and additional branding messages to represent both the HIARNG Environmental program and promote stormwater awareness to HIARNG personnel and contractors. The HIARNG Environmental logo includes the phrase “*Mālama I Ka ‘Āina Koa*”, which translates to *preserving the soldier’s land* and depicts a soldier. This logo serves as a reminder to ensure environmental protection is an integral part of the HIARNG’s decision making process while minimizing the impacts of training on the environment. HIARNG’s stormwater logo includes the phrase “*Only Rain Down the Drain*” and a honu (green sea turtle) which serves as a reminder that all stormwater in Hawaii ultimately flows to the ocean. Placards are installed on all drainage inlets and post-construction BMPs.

2.4 TRASH PICKUP

Regular trash pickup is provided to ensure proper disposal of solid wastes. Trash pickup at each facility is performed by a contracted waste hauler at a minimum of once per week. In addition, dumpsters are not to be overfilled and are required to be closed when not in use. This requirement is instilled through annual training under the Public Education and Outreach Program.

HIARNG personnel ensure the cleanliness of all work areas and facility grounds and have been trained to sweep work areas daily and pick up any trash and debris observed in and around their immediate working area, as needed. Due to their high standards of cleanliness, all four facilities covered under the permit are maintained in a clean and organized manner.

2.5 FOREIGN OBJECT DEBRIS/FOREIGN OBJECT DAMAGE WALKDOWNS

AASF1 conducts daily Foreign Object Debris/Foreign Object Damage (FOD) walk-downs with HIARNG personnel. FOD walk-downs remove debris that threatens the safety of aircraft, vehicles, and personnel on the airfield tarmac. In addition to protecting aircraft, personnel, and vehicles, the FOD walkdowns prevent debris from potentially entering the MS4.

2.6 INSPECTIONS

The Water Quality Compliance Specialist is responsible for the implementation and enforcement of permit conditions and conducts inspections of each facility covered under the Permit as part of the Pollution Prevention/Good Housekeeping Program to determine if cleaning or maintenance is required. Storm drainage structures are required to be cleaned when one-third accumulation is reached or exceeded.

2.7 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT PROGRAM

Permanent BMPs (PBMPs) are required per the Permit and discussed in Section 6.0 of the SWMP. PBMPs may be incorporated into construction projects that disturb one acre or more of land, or small projects that have the potential to discharge pollutants to HIARNG’s MS4, if applicable. Section 6.0 in the SWMP further details how PBMPs assist in preventing the discharge of pollutants, including trash after project completion.

3.0 MONITORING AND REPORTING

3.1 PREVIOUS MONITORING

A baseline load study was completed through previous MS4 inspections. As a result, each of the four facilities listed in Table 2, have never required MS4 cleaning and maintenance since no trash or debris have been observed on the grounds of the facilities or within the outfalls.

TABLE 2: MS4 INSPECTIONS

Facility	Inspection Dates	Trash Observed?	Maintenance Required?
		Y/N	Y/N
Fort Ruger	7 July 2019	N	N
	13 September 2019	N	N
	9 December 2020	N	N
Waiawa	16 September 2019	N	N
	23 September 2020	N	N
	17 December 2020	N	N
Wahiawa	19 September 2019	N	N
	17 September 2020	N	N
	16 December 2020	N	N
AASF1	20 September 2019	N	N
	17 September 2020	N	N
	16 December 2020	N	N

3.2 FUTURE MONITORING

Storm drainage system infrastructure assessments will be conducted under the Pollution Prevention/Good Housekeeping Program to determine the amount of debris observed within the MS4. Storm drainage structures will be cleaned as appropriate. Maintenance and debris removal is tracked on HIARNG’s Asset Management Database and debris removal is reported with the Annual Report.

3.3 FUTURE REPORTING

Hauled waste volumes are estimated based off the contracted services for the four facilities, listed in Table 1. A contracted waste hauler performs trash pickup at each facility at minimum of once per week. Estimated hauled waste volumes will be calculated from the services contract.

The estimated percentage-based volume, in pounds, of wastes removed will be included in the Annual Report for each facility; this volume is the amount of trash and debris removed from dumpsters and waste bins/receptacles. The percentage-based volume will be calculated from the annual billing reports received from Honolulu Disposal Services for each reporting year.

4.0 GEOGRAPHICAL TARGETS

Waikele Stream is the only water body that receives discharges from the HIARNG MS4 and is listed as an impaired water for turbidity, total nitrogen, and nitrite+nitrate nitrogen on the State Clean Water Act Section 303(d) list; however, HIARNG has not been identified as a point source for any approved TMDL. HIARNG will remain vigilant and continue to implement the control measures discussed in Section 2.0 to prevent trash from reaching Waikele Stream. Through continuous monitoring and reporting, HIARNG will remain accountable for all discharges.

5.0 IMPLEMENTATION SCHEDULE

On February 16, 2021, HIARNG ENV representatives met with the Department of Health, Clean Water Branch Permitting to discuss HIARNG's TRP status and requirements. HIARNG presented the BMPs described in Section 2.0 and the monitoring results that are presented in Section 3.0 of this TRP. It was concluded that because no trash or debris were observed on the grounds of the facilities or within the outfalls, HIARNG has met the Permits short-term goal of 50% and the long-term goal of 100% reduction of debris discharging from their MS4.

The BMPs presented in Section 2.0 will continue to be implemented. The monitoring activities presented in Section 3.0 will continue to be implemented.