

State of Hawaii, Department of Transportation
Highways Division, Oahu District

Storm Water Management Program Plan



State of Hawaii, Department of Transportation
Highways Division, Oahu District
SWMPP, February 2022

STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION, OAHU DISTRICT

STORM WATER MANAGEMENT PROGRAM PLAN

MS4 NPDES Permit No. HI S000001



State of Hawaii, Department of Transportation
Highways Division, Oahu District
727 Kakoi Street, Honolulu, Hawaii 96819

February 2022
Version: Final

RECORD OF REVISION

OAHU STORM WATER MANAGEMENT PROGRAM PLAN			
Revision No.	Revision Date	Description	Sections Affected
Original Document	February 2022	Original	N/A

TABLE OF CONTENTS

LIST OF APPENDICES	vi
LIST OF FIGURES	viii
LIST OF TABLES	xiii
LIST OF ACRONYMS AND ABBREVIATIONS	xiv
LIST OF DEFINITIONS	xvii
EXECUTIVE SUMMARY	xxvii
CHAPTER 1 OVERVIEW OF STORM WATER MANAGEMENT PROGRAM PLAN.....	1
1.0 Program Organization	3
1.1 Purpose and Structure of SWMPP	4
1.2 Storm Water Regulations and Legal Authority	5
1.3 Asset Management System	6
CHAPTER 2 PUBLIC EDUCATION AND OUTREACH PROGRAM	8
2.0 Program Organization	12
2.1 Public Education and Outreach Plan	13
2.2 Public Involvement and Participation	14
2.2.1 Public Service Program	14
2.2.2 Public Review and Comment	15
2.3 Monitoring Program Effectiveness	16
CHAPTER 3 ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	17
3.0 Program Organization	21
3.1 Connection Permits	22
3.1.1 Permitting New Connections	22
3.1.2 Permitting Existing Connections	23
3.2 Outfall Field Screening	25
3.3 Tracking Illegal Connections, Illicit Discharges, and Spills	27

3.4	Investigation of Illegal Connections and Illicit Discharges	28
3.5	Enforcement Policy	32
3.6	Spill Prevention and Response	33
3.7	Household Hazardous Waste Disposal	38
3.8	Training	40
3.9	Monitoring Program Effectiveness	41
CHAPTER 4	CONSTRUCTION SITE RUNOFF CONTROL PROGRAM	42
4.0	Program Organization	48
4.1	Construction BMP Implementation	49
4.2	Inventory of Construction Sites	51
4.3	Plan Review and Permitting.....	53
4.3.1	Project Plan Review and Approval	53
4.3.2	Permitting	54
4.3.3	Plan Review Checklists	54
4.4	Inspections	57
4.4.1	Initial Inspections	57
4.4.2	Independent Inspections	58
4.4.3	Corrective Actions and Reporting Procedures	59
4.4.4	Tracking Inspection Results	60
4.5	Enforcement	62
4.6	Training	64
4.7	Monitoring Program Effectiveness	65
CHAPTER 5	POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT PROGRAM	66
5.0	Program Organization	70
5.1	Post-Construction BMP Design Standards	71
5.2	Review of Plans for Post-Construction BMPs	72
5.3	Post-Construction BMPs Inspection and Maintenance Database	74
5.4	Training	75
5.5	Monitoring Program Effectiveness	76

CHAPTER 6	POLLUTION PREVENTION/GOOD HOUSEKEEPING DEBRIS CONTROL BMPS PROGRAM	77
6.0	Program Organization	81
6.1	Asset Management System	82
6.2	Street Sweeping Inspection and Maintenance	84
6.3	Storm Drainage System Inspection and Maintenance	87
6.4	Storm Drain Placards	89
6.5	Action Plan for Retrofitting Structural BMPs	91
6.6	Trash Reduction Plan	93
6.7	Monitoring Program Effectiveness	94
CHAPTER 7	POLLUTION PREVENTION/GOOD HOUSEKEEPING CHEMICAL APPLICATIONS BMPS PROGRAM	95
7.0	Program Organization	98
7.1	Chemical Applications BMPs	99
7.2	Training	102
7.3	Monitoring Program Effectiveness	103
CHAPTER 8	POLLUTION PREVENTION/GOOD HOUSEKEEPING EROSION CONTROL BMPS PROGRAM	104
8.0	Program Organization	107
8.1	Permanent Erosion Control Improvements	108
8.2	Temporary Erosion Control Measures	111
8.3	Maintenance Plan for Vegetated Portions of the MS4	113
8.4	Action Plan to Address Erosional Outfalls	115
8.5	Identification of Significant Erosional Areas	116
8.6	Monitoring Program Effectiveness	117
CHAPTER 9	POLLUTION PREVENTION/GOOD HOUSEKEEPING MAINTENANCE ACTIVITIES BMPS PROGRAM	118
9.0	Program Organization	121
9.1	Maintenance Activities BMPs	121
9.2	Flood Control Project	124
9.3	Training	128

9.4	Monitoring Program Effectiveness	129
CHAPTER 10	INDUSTRIAL AND COMMERCIAL ACTIVITIES DISCHARGE MANAGEMENT PROGRAM	130
10.0	Program Organization	136
10.1	Connection and Discharge Permits	137
10.1.1	Permitting New Connections	137
10.1.2	Permitting Existing Connections	138
10.1.3	Permitting Discharge of Surface Runoff	139
10.2	Facility Inventory	140
10.2.1	Industrial and Commercial Database	141
10.2.2	Inventory and Map Deliverables	141
10.3	Prioritized Area Plan	144
10.4	Inspections	146
10.4.1	Inspection Procedures	146
10.4.2	Inspection Schedules	147
10.5	Commercial Facility Ranking	149
10.5.1	Facility Ranking Criteria	149
10.5.2	Facility Ranking Results	151
10.6	SWPPP Review	152
10.7	Enforcement	153
10.7.1	Addressing Deficiencies	154
10.7.2	Addressing Illicit Discharge Violations	155
10.8	Training	158
10.9	Monitoring Program Effectiveness	159
CHAPTER 11	BASEYARD FACILITIES PROGRAM	160
11.0	Program Organization	163
11.1	SWPCPs Implementation	164
11.2	Training	166
11.3	Baseyard Inspections	168
11.4	Monitoring Program Effectiveness	169

CHAPTER 12	MONITORING PROGRAM	170
12.0	Program Organization	174
12.1	Annual Monitoring Plan	175
12.2	Annual Monitoring Report	177
12.3	Monitoring Program Effectiveness	178
CHAPTER 13	TOTAL MAXIMUM DAILY LOAD PROGRAM	179
13.0	Program Organization	183
13.1	Implementation and Monitoring Plans	183
13.2	Schedules of Compliance	186
13.3	I&M Plans for Future TMDLs	187
13.4	Monitoring Program Effectiveness	188
CHAPTER 14	REPORTING PROGRAM	189
14.0	Program Organization	192
14.1	Addressing Requirements	192
14.2	Annual Report Content	194

LIST OF APPENDICES

<u>APPENDIX</u>	<u>TITLE</u>
A.1	DOT-HWYS National Pollutant Discharge Elimination System Permit No. HI S000001
A.2	Storm Water Management Program Organizational Chart
A.3	Program Effectiveness Strategy
A.4	Memorandum of Understanding with State of Hawaii, Department of Health
A.5	Memorandum of Understanding with City and County of Honolulu, Department of Environmental Services and Department of Facility Maintenance
B.1	Public Education and Outreach Plan
B.2	Storm Water Management Program Plan Informational Meeting Participant List
C.1	Application for a Private Storm Drain Connection and/or Discharge Permit to the State of Hawaii Highways Division Storm Drain System
C.2	Permit for Connection to the State Highways Drainage System
C.3	Outfall Field Screening Plan
C.4	IDDE Complaint MS4 Site Investigation Sheet
C.5	Spill Response Documentation Form
D.1	Construction Best Management Practices Field Manual
D.2	Storm Water Pollution Prevention Plan (SWPPP) Review Checklist
D.3	Site-Specific Best Management Practices (SSBMP) Plan/Storm Water Pollution Prevention Plan (SWPPP) Review Checklist
D.4	Permit to Perform Work Upon State Highways
D.5	Contractor's Certification of NPDES Compliance
D.6	Written Best Management Practices (BMP) Plan
D.7	Permit to Discharge into the State Highways Drainage System
D.8	Independent (Third Party) Inspection Checklist

D.9	Independent (Third Party) Inspection Checklist - Short Form
D.10	Site-Specific Best Management Practice/Storm Water Pollution Prevention Inspection and Maintenance Report
D.11	Enforcement Response Plan
E.1	Storm Water Post-Construction Best Management Practices Manual
F.1	Group A, B, C Street Sweeping Segments
F.2	Priority Schedules for Storm Drain Structure Inspections
F.3	Action Plan for Retrofitting Structural BMPs
F.4	Trash Reduction Plan
G.1	Chemical Applications Authorized Use List
G.2	Maintenance Baseyard Storm Water Training Topics
H.1	Implementation Schedule for Significant Erosional Areas
H.2	Action Plan to Address Erosional Outfalls
I.1	Maintenance Activities BMPs Field Manual
J.1	Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections
J.2	Industrial and Commercial MS4 Site Investigation Sheet
K.1	SWPCP Inspection Corrective Action Timeframes
L.1	Total Maximum Daily Load Implementation and Monitoring Plan Ala Wai Canal Watershed Waste Load Allocations
L.2	Total Maximum Daily Load Implementation and Monitoring Plan Kawa Stream Watershed Waste Load Allocations
L.3	Total Maximum Daily Load Implementation and Monitoring Plan Waimanalo Stream Watershed Waste Load Allocations
L.4	Total Maximum Daily Load Implementation and Monitoring Plan Kapaa Stream Watershed Waste Load Allocations
L.5	Total Maximum Daily Load Implementation and Monitoring Plan Kaneohe Stream Watershed Waste Load Allocations
L.6	Total Maximum Daily Load Implementation and Monitoring Plan Waikele Watershed Waste Load Allocations

LIST OF FIGURES

<u>FIGURE</u>	<u>TITLE</u>	<u>PAGE</u>
Figure 1-1	AMS Maximo Inputs and Outputs per Module	7
Figure 2-1	Public Education Program Organizational Chart.	12
Figure 2-2	Public Education Program Organizational Chart for Roles and Responsibilities Related to the <i>Public Education and Outreach Plan</i>	13
Figure 2-3	The Adopt-A-Highway Program Encompasses All Eligible State Highways Routes	14
Figure 2-4	Public Education Program Organizational Chart for Roles and Responsibilities Related to Public Involvement and Participation	16
Figure 3-1	IDDE Program Organizational Chart	21
Figure 3-2	IDDE Program Organizational Chart for Roles and Responsibilities Related to Connection Permits	24
Figure 3-3	AMS Maximo Outfall Module	25
Figure 3-4	IDDE Program Organizational Chart for Roles and Responsibilities Related to Outfall Field Screening	26
Figure 3-5	IDDE Program Organizational Chart for Roles and Responsibilities Related to Tracking Illegal Connections, Illicit Discharges, and Spills	27
Figure 3-6	IDDE Complaint Response Workflow	30
Figure 3-7	IDDE Program Organizational Chart for Roles and Responsibilities Related to the Investigation of Illegal Connections and Illicit Discharges	31
Figure 3-8	IDDE Program Organizational Chart for Roles and Responsibilities Related to Enforcement Policy	32
Figure 3-9	Spill Prevention and Response Workflow	33
Figure 3-10	IDDE Program Organizational Chart for Roles and Responsibilities Related to Spill Prevention and Response	37
Figure 3-11	IDDE Program Organizational Chart for Roles and Responsibilities Related to Household Hazardous Waste Disposal	39

Figure 3-12	IDDE Program Organizational Chart for Roles and Responsibilities Related to Training	41
Figure 4-1	Construction Program Organizational Chart	48
Figure 4-2	Construction Program Organizational Chart for Roles and Responsibilities Related to Construction BMP Implementation	50
Figure 4-3	Construction Program Organizational Chart for Roles and Responsibilities Related to Inventory of Construction Sites	52
Figure 4-4	Construction Program Organizational Chart for Roles and Responsibilities Related to Plan Review and Permitting	56
Figure 4-5	Construction Program Organizational Chart for Roles and Responsibilities Related to Inspections	61
Figure 4-6	Construction Program Organizational Chart for Roles and Responsibilities Related to Enforcement	63
Figure 4-7	Construction Program Organizational Chart for Roles and Responsibilities Related to Training	65
Figure 5-1	Post-Construction Program Organizational Chart	70
Figure 5-2	Post-Construction Program Organizational Chart for Roles and Responsibilities Related to Post-Construction BMP Design Standards	72
Figure 5-3	Post-Construction Program Organizational Chart for Roles and Responsibilities Related to Review of Plans for Post-Construction BMPs	73
Figure 5-4	Post-Construction Program Organizational Chart for Roles and Responsibilities Related to Post-Construction BMPs Inspection and Maintenance Database	75
Figure 5-5	Post-Construction Program Organizational Chart for Roles and Responsibilities Related to Training	76
Figure 6-1	Debris Control Program Organizational Chart	81
Figure 6-2	Debris Control Program Organizational Chart for Roles and Responsibilities Related to the AMS	83
Figure 6-3	Street Sweeping Module KPI	84
Figure 6-4	Street Sweeping by Status (Blue – Completed, Yellow – Scheduled)	85

Figure 6-5	Debris Control Program Organizational Chart for Roles and Responsibilities Related to Street Sweeping Inspection and Maintenance	86
Figure 6-6	Manhole and Inlet Inspection KPI	87
Figure 6-7	Debris Control Program Organizational Chart for Roles and Responsibilities Related to Storm Drain System Inspection and Maintenance	88
Figure 6-8	Storm Drain Placard Attribute Data	89
Figure 6-9	Debris Control Program Organizational Chart for Roles and Responsibilities Related to Storm Drain Placards	90
Figure 6-10	Debris Control Program Organizational Chart for Roles and Responsibilities Related to the <i>Action Plan for Retrofitting Structural BMPs</i>	92
Figure 6-11	Debris Control Program Organizational Chart for Roles and Responsibilities Related to the <i>Trash Reduction Plan</i>	94
Figure 7-1	Chemical Applications Program Organizational Chart	98
Figure 7-2	Chemical Applications Program Organizational Chart for Roles and Responsibilities Related to Chemical Applications BMPs	101
Figure 7-3	Chemical Applications Program Organizational Chart for Roles and Responsibilities Related to Chemical Applications Training	103
Figure 8-1	Erosion Control Program Organizational Chart	107
Figure 8-2	Criteria Used to Designate Sites with the Potential for Significant Water Quality Impact	109
Figure 8-3	Erosion Control Program Organizational Chart for Roles and Responsibilities Related to Permanent Erosion Control Improvements ...	110
Figure 8-4	Erosion Control Program Organizational Chart for Roles and Responsibilities Related to Temporary Erosion Control Measures	112
Figure 8-5	Erosion Control Program Organizational Chart for Roles and Responsibilities Related to the Maintenance Plan for Vegetated Portions of the MS4	114
Figure 8-6	Erosion Control Program Organizational Chart for Roles and Responsibilities Related to the <i>Action Plan to Address Erosional Outfalls</i>	115

Figure 8-7	Erosion Control Program Organizational Chart for Roles and Responsibilities Related to Identification of Significant Erosional Areas	117
Figure 9-1	Maintenance Activities Program Organizational Chart	121
Figure 9-2	Maintenance Activities Program Organizational Chart for Roles and Responsibilities Related to Maintenance Activities BMPs	124
Figure 9-3	Design Details of the Punahou Pump Station	125
Figure 9-4	Maintenance Activities Program Organizational Chart for Roles and Responsibilities Related to the Flood Control Project	127
Figure 9-5	Maintenance Activities Program Organizational Chart for Roles and Responsibilities Related to Training	129
Figure 10-1	Industrial and Commercial Program Organizational Chart	136
Figure 10-2	Industrial and Commercial Program Organizational Chart for Roles and Responsibilities Related to Connection and Discharge Permits	140
Figure 10-3	Industrial and Commercial Program Organizational Chart for Roles and Responsibilities Related to Facility Inventory	143
Figure 10-4	Industrial and Commercial Program Organizational Chart for Roles and Responsibilities Related to the Prioritized Area Plan	145
Figure 10-5	Industrial and Commercial Program Inspection Workflow	147
Figure 10-6	Industrial and Commercial Program Organizational Chart for Roles and Responsibilities Related to Inspections	148
Figure 10-7	Six Variables to Consider in Determining a Facility's Score	150
Figure 10-8	Industrial and Commercial Program Organizational Chart for Roles and Responsibilities Related to Commercial Facility Ranking	151
Figure 10-9	Industrial and Commercial Program Organizational Chart for Roles and Responsibilities Related to SWPPP Review	153
Figure 10-10	Industrial and Commercial Program Organizational Chart for Roles and Responsibilities Related to Enforcement	157
Figure 10-11	Industrial and Commercial Program Organizational Chart for Roles and Responsibilities Related to Training	159
Figure 11-1	Locations of DOT-HWYS Baseyard Facilities Subject to the MS4 NPDES Permit Requirements	162

Figure 11-2	Baseyard Facilities Program Organizational Chart	163
Figure 11-3	Baseyard Facilities Program Organizational Chart for Roles and Responsibilities Related to SWPCPs Implementation	165
Figure 11-4	Baseyard Facilities Program Organizational Chart for Roles and Responsibilities Related to Training	167
Figure 11-5	Baseyard Facilities Program Organizational Chart for Roles and Responsibilities Related to Baseyard Inspections	169
Figure 12-1	Monitoring Program Organizational Chart	174
Figure 12-2	Monitoring Program Organizational Chart for Roles and Responsibilities Related to the Annual Monitoring Plan	176
Figure 12-3	Monitoring Program Organizational Chart for Roles and Responsibilities Related to the Annual Monitoring Report	178
Figure 13-1	TMDL Program Organizational Chart	183
Figure 13-2	TMDL Watersheds (in blue) with Waste Load Reductions Assigned to DOT-HWYS (in yellow)	185
Figure 13-3	TMDL Program Organizational Chart for Roles and Responsibilities Related to the Implementation and Monitoring Plans	186
Figure 13-4	TMDL Program Organizational Chart for Roles and Responsibilities Related to the Schedules of Compliance	187
Figure 13-5	TMDL Program Organizational Chart for Roles and Responsibilities Related to I&M Plans for Future TMDLs	188
Figure 14-1	Reporting Program Organizational Chart	192

LIST OF TABLES

<u>TABLE</u>	<u>TITLE</u>	<u>PAGE</u>
Table 2-1	MS4 NPDES Permit Requirements for the Public Education Program	12
Table 3-1	MS4 NPDES Permit Requirements for the IDDE Program	19
Table 3-2	Illicit Discharge and Spill Response Notification Procedures	35
Table 4-1	MS4 NPDES Permit Requirements for the Construction Program	44
Table 4-2	Appropriate BMP Plan and Review Process for Public and Private Construction Projects	53
Table 5-1	MS4 NPDES Permit Requirements for the Post-Construction Program	68
Table 6-1	MS4 NPDES Permit Requirements for the Debris Control Program	79
Table 7-1	MS4 NPDES Permit Requirements for the Chemical Applications Program	97
Table 8-1	MS4 NPDES Permit Requirements for the Erosion Control Program	106
Table 9-1	MS4 NPDES Permit Requirements for the Maintenance Activities Program	120
Table 10-1	MS4 NPDES Permit Requirements for the Industrial and Commercial Program	132
Table 11-1	MS4 NPDES Permit Requirements for the Baseyard Facilities Program ..	162
Table 12-1	MS4 NPDES Permit Requirements for the Monitoring Program	172
Table 13-1	MS4 NPDES Permit Requirements for the TMDL Program	181
Table 13-2	Comparison of 2013 and 2020 MS4 NPDES Permit Waste Load Reductions for Kaneohe and Kapaa Stream Watersheds	184
Table 14-1	MS4 NPDES Permit Requirements for the Reporting Program	191
Table 14-2	Additional MS4 NPDES Permit Reporting Requirements	193

LIST OF ACRONYMS AND ABBREVIATIONS

AMS	Asset Management System
BMP	Best Management Practice
CCH	City and County of Honolulu
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWB	State of Hawaii, Department of Health, Clean Water Branch
DMS	Document Management System
DOH	State of Hawaii, Department of Health
DOT-HWYS	State of Hawaii, Department of Transportation, Highways Division, Oahu District
ENV	City and County of Honolulu Department of Environmental Services
EPA	Environmental Protection Agency
FACS	Field Automated Communication Systems
GIS	Geographic Information System
GPS	Global Positioning System
HAR	Hawaii Administrative Rules
HEER	Hazard Evaluation and Emergency Response
HFD	City and County of Honolulu Fire Department
HRS	Hawaii Revised Statutes
HWY-O	State of Hawaii, Department of Transportation, Highways Division, Oahu District (For the purpose of this document, DOT-HWYS is used in lieu of HWY-O.)
HWY-OC	State of Hawaii, Department of Transportation, Highways Division, Oahu District, Construction Section

HWY-OM	State of Hawaii, Department of Transportation, Highways Division, Oahu District, Maintenance Section
HWY-OT	State of Hawaii, Department of Transportation, Highways Division, Oahu District, Tunnel Operations Section
HWY-OW	State of Hawaii, Department of Transportation, Highways Division, Oahu District, Environmental Management Section
IDDE	Illicit Discharge Detection and Elimination
I&M Plan	Implementation and Monitoring Plan
KPI	Key Performance Indicators
LID	Low Impact Development
MEP	Maximum Extent Practicable
MOU	Memorandum of Understanding
MS4	Municipal Separate Storm Sewer System
NGPC	Notice of General Permit Coverage
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
PID	Point Identification Number
ROW	Right-of-Way
SIC	Standard Industrial Classification
SIS	Site Investigation Sheet
SSBMP	Site-Specific Best Management Practice
SWMP	Storm Water Management Program
SWMPP	Storm Water Management Program Plan
SWPCP	Storm Water Pollution Control Plan
SWPPP	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load

TMK	Tax Map Key
TN	Total Nitrogen
TOB	Top of Bank
TOC	Tunnel Operations Center
TP	Total Phosphorous
TSS	Total Suspended Solids
USC	United States Code
WLA	Waste Load Allocation

LIST OF DEFINITIONS

Best Management Practice (BMP) – Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. [40 CFR § 122.2]

Clean Water Act (CWA) – Formerly referred to as the Federal Water Pollution Control Act of 1972 or Federal Water Pollution Control Act Amendments of 1972 Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law Public 96-483 and Public Law 97-117, 33 U.S.C. 1251 *et seq.* [40 CFR § 122.2]

Code of Federal Regulations (CFR) – The codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government. It is divided into 50 titles that represent broad areas subject to Federal Regulation. Title 40 of the CFR (referenced as 40 CFR) lists all environmental regulations.

Connection Permit – A permit issued by DOT-HWYS for a physical connection into the MS4.

Construction Activity – Any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that results in a land disturbance. Construction does not include emergency construction activities required to immediately protect public health and safety or routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.

Critical Deficiencies (Baseyard Facility) – Deficiencies that pose an immediate threat for the discharge of pollutants from the drainage area(s) to the storm drain systems, surface waters, or state waters as described in the baseyard SWPCP. Critical deficiencies include, but are not limited to, the following examples:

1. Any observed discharge, or evidence of discharge, of potentially polluted storm water from the drainage area(s).
2. Presence of any spilled hazardous materials near to unprotected storm water discharge point(s) identified in the baseyard SWPCP.

Critical Deficiencies (Construction) – Those deficiencies that pose an immediate threat for the discharge of pollutants to the storm drain system, surface water, or state waters. Critical deficiencies include, but are not limited to, the following examples:

1. Any observed discharge, or evidence of discharge, of untreated storm water or non-storm water to the storm drain system, surface waters, or state waters generated by construction activity.
2. Absence of linear barriers and/or perimeter controls required by the BMP Plan.
3. There are identified storm drain inlets, surface waters, or state waters within or adjacent to the project site in close proximity to disturbed soil areas without control measures in place that pose an immediate threat of untreated storm water discharges.
4. Work in an active stream channel or other surface water body without proper implementation of required BMPs.
5. Presence of any spilled oil or hazardous materials near to unprotected storm drain inlet, surface waters, or state waters.

CWA Section 303(d) List – A state’s list of impaired and threatened waters. States are required to submit their list for EPA approval every two years. For each water on the list, the state identifies the pollutant causing the impairment, when known. In addition, the state assigns a priority for development of TMDLs based on the severity of the pollution and the sensitivity of the uses to be made of the waters, among other factors.

Discharge – When used without qualification means the discharge of a pollutant.

Discharge of a Pollutant – Any addition of any pollutant or combination of pollutants to state waters from any point source. This definition includes additions of pollutants into state waters from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. [40 CFR § 122.2]

Discharge Permit – A permit issued by DOT-HWYS to discharge storm water runoff into the MS4.

Disturbance of Land – The penetration, turning, or moving of soil or resurfacing of pavement with exposure of the base course or the exposure of bare soil or ground surface; including the land surface exposed by construction roads, baseyards, staging areas, demolition, headquarters, and parking areas. It includes “grubbing” in its normal meaning of the use of equipment to knock down and push vegetation out of the way, typically uprooting vegetation and disturbing the ground surface.

Erosion Control – The stabilization of a disturbed or exposed surface area to prevent soil particles from being detached and causing sediment accumulation in nearby surface waters.

Fiscal Year – The 12-month period that begins on July 1st and ends on June 30th.

Good Housekeeping – A common practice related to the storage, use, or cleanup of materials performed in a manner that minimizes the discharge of pollutants.

Household Hazardous Waste – Excess products that are flammable, corrosive, and toxic.

Illegal Connection – Any connection to the MS4 that is not permitted by a connection permit from DOT-HWYS.

Illicit Discharge – Any discharge that is not composed entirely of storm water, with the exception of the following types of discharges (provided that they do not contain pollutants in amounts that will cause or contribute to a violation of an applicable water quality standard):

- Water line flushing;
- Diverted stream flows;
- Rising ground waters;
- Uncontaminated ground water infiltration (as defined in 40 CFR § 35.2005[20]);
- Uncontaminated pumped ground water;
- Discharges from potable water sources and foundation drains;
- Air conditioning condensate;
- Sea water;
- Springs;
- Water from crawl space pumps (including discharge from buildings with basements, and crawl space pumps used by utility companies to dewater utility manholes and other maintenance and operations of substructure facilities) and footing drains;
- Lawn watering runoff; landscape irrigation, planter box runoff, and irrigation water, excluding runoff from commercial agriculture
- Water from individual residential car washing;
- Water from charity car washes;

- Flows from riparian habitats and wetlands;
- Dechlorinated swimming pool discharges;
- Exterior building wash water (water only);
- Residual street wash water (water only), including wash water from sidewalks, plazas, and driveways, but excluding parking lots; and
- Discharges or flows from firefighting activities.

Independent Inspections – Site inspections conducted on private and public construction projects by an Independent Inspector.

Independent Inspector – A qualified construction inspector that is not involved in a construction projects’ day-to-day planning, design, or implementation.

Low Impact Development (LID) – A comprehensive land planning and engineering design approach with a goal of mimicking or replicating the pre-development hydrologic regime of urban and developing watersheds.

Major Deficiencies (Baseyard Facility) – Deficiencies that are significant problems which could result in the discharge of pollutants from the drainage area(s) to the storm drain systems, surface waters, or state waters as described in the baseyard SWPCP. Major deficiencies include, but are not limited to, the following examples:

1. BMPs are implemented as required by the baseyard SWPCP pollutant control strategies, in areas tributary to storm water discharge point(s) identified in the baseyard SWPCP but are not functional.
2. Hazardous materials or waste is stored in areas tributary to storm water discharge point(s) identified in the baseyard SWPCP, and without containment or implementation of BMPs.
3. Hazardous material spills and/or stains covering more than one square yard and/or adjacent to protected discharge point(s) identified in the baseyard SWPCP.
4. BMPs are installed in accordance with the SWPCP but there is an area with insufficient BMPs down gradient to prevent the discharge of potentially polluted storm water to discharge point(s) identified in the baseyard SWPCP, in the event a rain event generates runoff.

Major Deficiencies (Construction) – Those deficiencies that are significant problems which could result in the discharge of pollutants to the storm drain system, surface waters, or state waters. Major deficiencies include, but are not limited to, the following examples:

1. No BMP Plan or NPDES permit (if required).

2. Linear barriers and/or perimeter controls in areas tributary to a water body or drain inlet are installed as required by the BMP Plan, but are not functional. This includes silt fences that are not anchored properly, have collapsed, been driven over or overwhelmed by accumulated sediment.
3. Hazardous materials or waste is stored within the project without containment or implementation of BMPs.
4. Oil, fuel, or brake or transmission fluid spills covering more than one square yard and/or adjacent to protected storm drain inlets, surface waters, or state waters.
5. Any discharge of sediment or other deleterious material resulting from dewatering operations conducted without implementation of required BMPs for dewatering.
6. Sediment tracking more than 50 feet from project ingress/egress location(s).
7. Expansion of the active disturbed soil area limit without written approval.
8. Soil stabilization and sediment controls are not installed in accordance with the applicable BMP Plan.
9. Sediment controls are installed in accordance with the BMP Plan, but there is a large unstabilized disturbed soil area with insufficient controls down gradient to prevent the discharge of untreated storm water to the MS4, surface waters, or state waters if a rain event generates runoff.
10. Dust from project site visibly blowing off the site and into storm drain conveyances or adjacent surface water bodies.

Major Alteration – As it relates to Permit Part D.3.b, major alterations made to the MS4 include MS4 alterations that result in the discharge into a new receiving state water.

Major Modification – As it relates to Permit Part D.3.a, major modifications to the SWMPP are those that imply a major reduction in the overall scope and/or level of effort of the SWMP.

Maximum Extent Practicable (MEP) – The minimum required performance standard for implementation of municipal storm water management programs to reduce pollutants in storm water. Maximum Extent Practicable is the cumulative effect of implementing, evaluating, and making corresponding changes to a variety of technically appropriate and economically feasible best management practices, ensuring that the most appropriate controls are implemented in the most effective manner.

Minor Deficiencies (Baseyard Facility) – Deficiencies that do not pose a threat for discharge but are not in conformance with the baseyard SWPCP pollutant control strategies. Minor deficiencies include, but are not limited to, the following examples:

1. The baseyard SWPCP does not reflect current operations and update(s) are recommended.
2. BMPs are not deficient but are not consistent with the baseyard SWPCP pollutant control strategies.
3. BMPs are implemented as required by the baseyard SWPCP but require minor maintenance.
4. Hazardous material spills and/or stains covering less than one square yard and not adjacent to discharge point(s) identified in the baseyard SWPCP.

Minor Deficiencies (Construction) – Those deficiencies that do not pose a threat for discharge of untreated storm water or pollutants to the storm drain system, surface waters, or state waters, but are not in strict conformance with the SWPPP or BMP Plan. Minor deficiencies include, but are not limited to, the following examples:

1. BMP Plan does not reflect current operations and an amendment is recommended.
2. BMPs are not deficient, but are not consistent with the BMP Plan.
3. Linear barriers and/or perimeter controls are installed as required by the BMP Plan but require minor maintenance. For example, a silt fence which is not anchored properly throughout the entire length of an inlet protection device with some accumulated silt.
4. Soil stabilization or sediment controls are installed as required by the BMP Plan, but not properly maintained.
5. Site inspections by project staff are not being conducted at the required frequencies.
6. Non-storm water or waste management BMPs improperly maintained.
7. Oil, fuel, or brake or transmission fluid spills covering less than one square yard and not adjacent to storm drain inlets, surface waters, or state waters.
8. Evidence of active wind erosion on unstabilized slopes/stock piles.
9. Minor tracking less than 50 feet from project ingress/egress locations.
10. Major deficiencies which are corrected prior to the inspector leaving the site.

MS4 NPDES Permit – Municipal Separate Storm Sewer System National Pollutant Discharge Elimination System Permit No. HI S000001.

Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) owned by a state, city, town, or other public body, that is designed or used for collecting or conveying storm water, that is not a combined sewer, and that is not part of a publicly owned treatment works [40 CFR122.26(b)(8)].

National Pollutant Discharge Elimination System (NPDES) – The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA. [40 CFR § 122.2]

New Development – Any construction of new impervious surface over existing pervious area.

Notice of Intent (NOI) – Form completed and signed by a construction site operator or an industrial facility operator notifying the DOH that the operator intends to be authorized to discharge pollutants to state waters under an applicable NPDES general permit.

Ongoing Deficiencies (Baseyard Facility) – Deficiencies that require more than just a single corrective action event to maintain conformance with the baseyard SWPCP pollutant control strategies. Ongoing deficiencies include, but are not limited to, the following examples:

1. Daily removal of rubbish and covering of rubbish disposal containers.
2. Weekly sweeping of baseyard areas and additionally as needed to remove accumulated sediment and debris.
3. Cleaning any parking area oil stains that produce a sheen when wet.
4. Replenishing spill kits when used, or as needed.
5. Utilizing spill containment materials whenever there is the potential for fluid leaks or spills.

Outcome Level – Reflects the relationship between an activity and its effect on water quality. Outcome levels are grouped into six levels and represent a gradation from activity-based to water-quality based outcomes.

Outfall – A point source where the MS4 discharges to state waters and does not include open conveyances connecting two MS4s, pipes, tunnels, or other conveyances which

connect segments of the same stream or state waters and are used to convey state waters [40 CFR § 122.26(b)(9)].

Pollutants – Refer to the waste material that contaminates air, soil, or water. In the context of storm water quality, pollutants often refer to the following:

- Nutrients - phosphorous and nitrogen;
- Suspended solids - sediment suspended in the water;
- Organic carbon and hydrocarbons;
- Bacteria;
- Trace metals;
- Pesticides; and
- Trash and debris.

Post-Construction BMP – A specific practice intended to reduce storm water volume and/or the pollution typically associated with storm water runoff. Such practices may include LID design features, source control methods, or manufactured devices designed to capture pollutants and is synonymous with the terms Permanent BMP and Permanent Post-construction BMP.

Private Construction Projects – Construction activity not under the authority (funding) of or administered by DOT-HWYS that is located within or adjacent to DOT-HWYS ROW and drains to the DOT-HWYS ROW. Private construction projects are required to obtain a *Permit to Perform Work Upon State Highways* prior to commencing construction activities.

Program Element – Individual programs that comprise the overall Storm Water Management Program (i.e., Public Education and Outreach Program, Construction Runoff Control Program, etc.) of DOT-HWYS.

Public Construction Project – A construction activity, which is funded by DOT-HWYS, designed either by personnel of DOT-HWYS or engineering consultant firms, and constructed by DOT-HWYS or a private contractor. Includes contract construction projects and maintenance construction projects.

Redevelopment Project – Any construction, reconstruction, alteration, or improvement performed on existing impervious area in which the underlying soil or pervious subgrade is exposed, penetrated, or replaced during construction. Cold planing (also known as “mill and fill” and some variations of pavement resurfacing) which removes a thin layer of

pavement without exposing the underlying pervious subgrade is not considered redevelopment. Redevelopment results in no net increase in impervious surface.

Routine Maintenance Projects – Scheduled or cyclical projects performed to preserve the life of a system; to restore the original function or delay the deterioration of an existing asset without substantially increasing its structural capacity; or to maintain the original line and grade, hydraulic capacity or original purpose of a facility, system or asset, in which maintenance activities does not go beyond the original footprint of the previous structure.

Sediment – Organic or inorganic material that is carried by or is suspended in water and that settles out to form deposits in the storm drain system or receiving waters.

Service Contractor – The contractor or contractors procured by DOT-HWYS to provide various services.

Significant Erosional Areas – Erosional areas with the potential for significant water quality impact where there is evidence of rilling, gullying, and/or other evidence of significant sediment transport, as well as erosional areas in close proximity to receiving waters listed as impaired by sediment, siltation, and/or turbidity.

Source Control BMP – Operational or structural measures that prevent or reduce pollutants from entering storm water. Examples of operational source control BMPs include good housekeeping practices, spill prevention, and employee training. Structural source control BMPs consist of enclosures or roofs for working areas where pollutants are present or installing devices that direct contaminated storm water to appropriate treatment control BMPs.

State Waters – As defined by section 342D-1, HRS, means all waters, fresh, brackish, or salt around and within the State, including, but not limited to, coastal waters, streams, rivers, drainage ditches, ponds, reservoirs, canals, ground waters, and lakes; provided that drainage ditches, ponds, and reservoirs required as part of a water pollution control system are excluded. In accordance with HAR 11-54-1, this definition applies to all state waters, including wetlands, subject to the following exceptions: (1) This chapter [HAR 11-54-1] does not apply to groundwater, except the director may in the director's discretion take appropriate actions when the director believes that the discharge of pollutants to the ground or groundwater has adversely affected, is adversely affecting, or will adversely affect the quality of any state water other than groundwater. (2) This chapter does not apply to drainage ditches, flumes, ponds and reservoirs that are required as part of a water pollution control system. (3) This chapter does not apply to drainage ditches, flumes, ponds, and reservoirs that are used solely for irrigation and do not overflow into or

otherwise adversely affect the quality of any other state waters, unless such ditches, flumes, ponds, and reservoirs are waters of the United States as defined in 40 CFR § 122.2. The State of Hawaii has those boundaries stated in the Hawaii Constitution, Art. XV § 1.

Storm Water – Storm water runoff, snow melt runoff, and surface runoff and drainage. [40 CFR § 122.26(b)(13)].

Storm Water Runoff – The portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, channels, or pipes.

Top of Bank (TOB) – The break in slope between the bank and surrounding terrain. TOB is the point closest to the boundary of the active floodplain of a stream where a break in the slope of the land occurs.

Total Maximum Daily Load (TMDL) – A water quality assessment that determines the source or sources of pollutants of concern for a particular waterbody, considers the maximum amount of pollutants the waterbody can assimilate, and then allocates to each source a set level of pollutants that it is allowed to discharge (i.e., a waste load allocation).

Waste Load Allocation (WLA) – The portion of a receiving water's total maximum daily load that is allocated to one of its existing or future point sources of pollution.

Water Quality Standards – Provisions of state, territorial, authorized tribal or federal law approved by EPA that describe the desired condition of a waterbody and the means by which that condition will be protected or achieved. Water quality standards consist of three core components: designated uses, criteria, and antidegradation requirements.

Watershed – A drainage area or basin in which all water drains or flows toward a central collector such as a stream, river, or lake at a lower elevation.

Wet Weather Event – Any amount of rainfall that could result in an illicit discharge from the site.