

Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections



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MĀLAMA I KA WAI

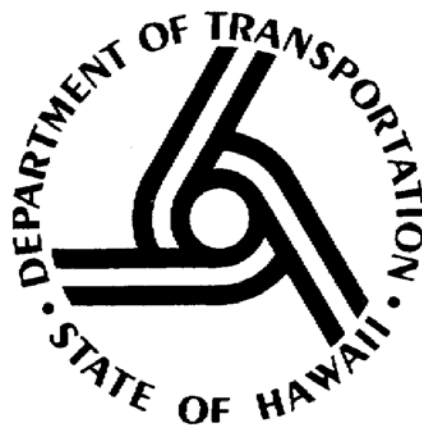
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

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Hawaii State Department of Transportation
Highways Division, Oahu District
Storm Water Management Program
NPDES Permit No. HI S000001
July 2020

Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections

State of Hawaii Department of Transportation
Highways Division, Oahu District



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Version: Final

Record of Revision

Revision No.	Revision Date	Description	Sections Affected
1	February 2015	Formatting	All
2	September 2015	Updated Watersheds	Tables 1 – 4
3	September 2016	Updated Watersheds	Tables 1 – 4
4	September 2017	Updated Watersheds	Tables 1 – 4
5	August 2018	Updated Watersheds	Tables 1 – 4
6	July 2019	Updated Watersheds	Tables 1 – 4
7	July 2020	Updated Watersheds	Tables 1 – 4

PRIORITIZED AREA PLAN FOR INDUSTRIAL AND COMMERCIAL FACILITY AND ACTIVITY INSPECTIONS

Purpose

This *Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections* was developed to fulfill the requirement found in Part D.1.g.(4) of the National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit No. HI S000001, which was issued to the State of Hawaii Department of Transportation, Highways Division, Oahu District (DOT-HWYS) on September 27, 2013, and effective on October 28, 2013, and modified April 1, 2016.

The requirement reads as follows:

“On an annual basis, the Permittee shall modify the Plan based on updated information from its industrial and commercial inventory, finding from previous inspections, the number of industrial and commercial facilities in the area, the density of these facilities, previous storm water violations in the area, and water quality impairments in the area. The modified Plan shall set a schedule that ensures inspections will be completed in accordance with the schedule in Part.D.1.g.(5). This Plan shall be submitted with the Permittee’s annual report.”

Background

The original *Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections* was completed and submitted as a part of the *Storm Water Management Program Plan* in March 2007. To develop this plan, information from the industrial and commercial inventory was analyzed using the Asset Management System (AMS), and priority areas for inspection were identified. These priority areas were delineated by watershed and were listed in Table 1 of the *Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections (2007)*.

The original plan was structured so that watersheds with Waste Load Allocations (WLAs) were given the highest priority, watersheds with 303(d) stream intersections were given second highest priority, and non-WLA or non-high priority watersheds were given the lowest priority. Watersheds within each priority level were then ranked based on their site or facility densities. Those watersheds that had the highest density of sites or facilities were ranked or prioritized as first.

Updated Plan

Using the updated information from the industrial and commercial facilities inventory, priority areas for inspection were re-evaluated and ranked according to the relative risk that any discharge may be contaminated with pollutants. Similar to the original plan, watersheds with WLAs were given highest priority, watersheds with 303(d) stream intersections were given second highest priority, and all other watersheds were given lowest priority.

Watersheds within each priority level were first ranked based on the number of facilities within the priority area (see Appendix A, Table 1). Watersheds within each priority level were then ranked based on facility densities (Number of Facilities/Watershed Acres) (see Appendix A, Table 2). Watersheds within each priority level were then ranked based on the number of violations or deficiencies within the priority area (see Appendix A, Table 3). Finally, the watershed rankings noted in Tables 1, 2, and 3 were totaled. Priority areas were then delineated by the sum of these rankings (see Appendix A, Table 4). The priority area with the lowest sum was ranked highest priority.

Inspection Schedule

Industrial facilities with NPDES coverage will be inspected once every five years. Industrial facilities without NPDES coverage will be inspected twice every five years. Highly ranked commercial facilities will be inspected once every five years. Since the majority of the facilities identified in the industrial and commercial inventory have previously been inspected, the inspection schedule is determined by the aforementioned inspection frequency. Facilities within the industrial and commercial inventory that have not been previously inspected will be scheduled for inspection in accordance to the priority areas identified in Table 4 of Appendix A. Once all industrial and highly ranked commercial facilities within a priority area have been inspected, the Industrial and Commercial team will move on to the next priority area.

**Prioritized Area Plan for Industrial and Commercial Facility and Activity
Inspections**

APPENDIX A: TABLES 1 – 4

Table 1. Number of Facilities Per Area

Rank	Watershed	No. of Facilities	Legend
1	Ala Wai	70	WLA
2	Waikele	44	303(d)
3	Kaneohe	25	Other
4	Waimanalo	10	
5	Kawa	7	
6	Kapaa	0	
7	Nuuanu	128	
8	Kaukonahua	73	
9	Kapalama	69	
10	Kalihi	57	
11	Waimalu	52	
12	Kaupuni	47	
13	Moanalua	40	
14	Kapakahi	30	
15	Halawa	24	
16	Manoa-Palolo	22	
17	Waiawa	21	
17	Kalauao	21	
19	Kahawai	12	
20	Kawainui	11	
21	Helemano	9	
22	Honouliuli	6	
22	Makiki	6	
24	Kaipapau	5	
24	Aiea	5	
26	Poamoho	4	
26	Ahuimanu	4	
26	Kahaluu segment	4	
29	Kaelepulu	3	
29	Kaalaea	3	
29	Wailele	3	
32	Kawela	2	
32	Waikane	2	
32	Punaluu	2	
35	Kiikii	1	
35	Kahawainui	1	
35	Kahaluu	1	
35	Waianu	1	
39	Kaaawa	0	
40	Mailiili	36	
41	Kaloi	35	
42	Keehi	20	
43	Waialaenui	17	
44	Ulehawa	16	
45	Kalunawaikaala	9	
46	Wailupe	8	
47	Makaiwa	5	
47	Kamiloiki	5	
49	Manuwai	4	
49	Paumalu	4	
49	Koko Crater	4	
49	Makaua	4	
49	Waipuhi	4	
49	Makaha	4	
55	Haiamoa	3	
55	Kamilonui	3	
55	Kamaileunu	3	
55	Nanakuli	3	
55	Halehaa	3	
60	Oio	2	
60	Malaekahana	2	
60	Hakipuu	2	
60	Waialua	2	
64	Waimea	1	
64	Kulioouou	1	
64	Niu	1	
64	Maakua	1	
64	Pahole	1	
64	Keaahala	1	
70	Waipio	0	

Table 2. Density Per Area

Rank	Watershed	Density	Legend
1	Waikele	0.0320	WLA
2	Ala Wai	0.0171	303(d)
3	Kaneohe	0.0069	Other
4	Kawa	0.0042	
5	Waimanalo	0.0033	
6	Kapaa	0.0000	
7	Nuuanu	0.2421	
8	Kaukonahua	0.0354	
9	Kapalama	0.0204	
10	Kalihi	0.0123	
11	Waiawa	0.0115	
12	Moanalua	0.0104	
13	Waimalu	0.0102	
14	Manoa-Palolo	0.0088	
15	Kaupuni	0.0079	
16	Halawa	0.0073	
17	Kapakahi	0.0063	
18	Kawainui	0.0042	
19	Kahawai	0.0037	
20	Makiki	0.0028	
21	Kalauao	0.0027	
22	Honouliuli	0.0024	
23	Helemano	0.0019	
24	Kaipapau	0.0016	
24	Ahuimanu	0.0016	
26	Poamoho	0.0014	
26	Kaelepulu	0.0014	
28	Kaalaea	0.0013	
29	Waikane	0.0012	
29	Aiea	0.0012	
31	Kahaluu segment	0.0009	
32	Kawela	0.0008	
33	Kahaluu	0.0006	
33	Waialele	0.0006	
35	Punaluu	0.0005	
35	Waianu	0.0005	
37	Kahawainui	0.0003	
37	Kiikii	0.0003	
39	Kaaawa	0.0000	
40	Mailiili	0.0186	
41	Kaloi	0.0182	
42	Waialaenui	0.0089	
43	Keehi	0.0078	
44	Ulehawa	0.0059	
45	Kalunawaikaala	0.0047	
46	Wailupe	0.0039	
47	Kamiloiki	0.0028	
48	Makaiwa	0.0026	
49	Koko Crater	0.0023	
50	Manuwai	0.0021	
51	Makaua	0.0019	
51	Waipuhi	0.0019	
53	Haiamoa	0.0017	
53	Nanakuli	0.0017	
55	Kamaileunu	0.0014	
56	Paumalu	0.0013	
56	Keaahala	0.0013	
58	Kamilonui	0.0011	
58	Halehaa	0.0011	
60	Hakipuu	0.0010	
61	Oio	0.0009	
61	Makaha	0.0009	
63	Malaekahana	0.0007	
63	Waialua	0.0007	
65	Kulioouou	0.0006	
66	Maakua	0.0003	
66	Pahole	0.0003	
66	Niu	0.0003	
66	Waimea	0.0003	
70	Waipio	0.0000	

Table 3. Violations Per Area

Rank	Watershed	Violations	Legend
1	Ala Wai	15	WLA
2	Waialele	9	303(d)
3	Kaneohe	7	Other
4	Kawa	2	
5	Kapaa	0	
5	Waimanalo	0	
7	Nuuanu	19	
8	Kalihi	12	
9	Moanalua	11	
10	Waimalu	9	
11	Kalauao	5	
12	Kapalama	4	
12	Kapakahi	4	
12	Kaukonahua	4	
12	Kawainui	4	
12	Waiawa	4	
17	Halawa	3	
17	Kahaluu	3	
17	Makiki	3	
17	Kahawai	3	
21	Aiea	2	
21	Kaalaea	2	
23	Kaupuni	1	
23	Waialele	1	
23	Kaipapau	1	
23	Honouliuli	1	
23	Kahaluu segment	1	
23	Poamoho	1	
29	Ahuimanu	0	
29	Kaelepulu	0	
29	Kawela	0	
29	Punaluu	0	
29	Waianu	0	
29	Kiikii	0	
29	Manoa-Palolo	0	
29	Waikane	0	
29	Kaaawa	0	
29	Kahawainui	0	
29	Helemano	0	
40	Keehi	5	
41	Mailili	4	
42	Kaloi	2	
42	Wailupe	2	
42	Waialaenui	2	
42	Makaiwa	2	
46	Kalunawaikaala	1	
46	Paumalu	1	
46	Ulehawa	1	
46	Kamilonui	1	
50	Manuwai	0	
50	Oio	0	
50	Kamiloiki	0	
50	Koko Crater	0	
50	Makaua	0	
50	Haiamoa	0	
50	Kamaileunu	0	
50	Malaekahana	0	
50	Waimea	0	
50	Waipuhi	0	
50	Hakipuu	0	
50	Halehaa	0	
50	Kulioouu	0	
50	Niu	0	
50	Maakua	0	
50	Pahole	0	
50	Waipio	0	
50	Makaha	0	
50	Nanakuli	0	
50	Keaahala	0	
50	Waialua	0	

Table 4. Updated Priority Area

Rank	Watershed	Table Totals
1	Ala Wai	4
2	Waikele	5
3	Kaneohe	9
4	Kawa	13
5	Waimanalo	14
6	Kapaa	17
7	Nuuanu	21
8	Kaukonahua	28
8	Kalihi	28
10	Kapalama	30
11	Waimalu	34
11	Moanalua	34
13	Waiawa	40
14	Kapakahi	43
15	Halawa	48
16	Kalauao	49
17	Kawainui	50
17	Kaupuni	50
19	Kahawai	55
20	Makiki	59
20	Manoa-Palolo	59
22	Honouliuli	67
23	Kaipapau	71
24	Helemano	73
25	Aiea	74
26	Poamoho	75
27	Kaalaea	78
28	Ahuimanu	79
29	Kahaluu segment	80
30	Kaelepulu	84
31	Kahaluu	85
31	Wailele	85
33	Waikane	90
34	Kawela	93
35	Punaluu	96
36	Waianu	99
37	Kahawainui	101
37	Kiikii	101
39	Kaaawa	107
40	Mailiili	121
41	Kaloi	124
42	Keehi	125
43	Waialaenui	127
44	Ulchawa	134
44	Wailupe	134
46	Kalunawaikaala	136
47	Makaiwa	137
48	Kamiloiki	144
49	Koko Crater	148
50	Manuwai	149
51	Makaua	150
51	Waipuhi	150
53	Paumalu	151
54	Haiamoa	158
55	Nanakuli	158
56	Kamilonui	159
57	Kamaileunu	160
57	Makaha	160
59	Halehaa	163
60	Hakipuu	170
60	Keahala	170
62	Oio	171
63	Malaekahana	173
63	Waialua	173
65	Kulioouou	179
66	Maakua	180
66	Pahole	180
66	Niu	180
66	Waimea	180
70	Waipio	190

Legend
WLA
303(d)
Other