

Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections



State of Hawaii, Department of Transportation
Highways Division, Oahu District
SWMPP, July 2021

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

STORM WATER MANAGEMENT PROGRAM
PRIORITIZED AREA PLAN
FOR INDUSTRIAL AND COMMERCIAL
FACILITY AND ACTIVITY INSPECTIONS

MS4 NPDES Permit No. HI S000001



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

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Version: Final

RECORD OF REVISION

Revision No.	Revision Date	Description	Sections Affected
Original Document	October 2014	Original	N/A
1	February 2015	Formatted Plan	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
8	July 2021	Reformatted Plan. Updated to reflect 2020 MS4 NPDES Permit.	All

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Inspections Tables 1 – 4

1. 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 State of Hawaii Department of Transportation, Highways Division, Oahu District (DOT-HWYS) Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) Permit No. HI S000001, effective date September 1, 2020.

The MS4 NPDES Permit Part D.1.g.(4) requirements are as follows.

“On an annual basis, the Permittee shall modify the Plan based on updated information from its industrial and commercial inventory, findings 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.”

2. 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.

3. 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.

The targeted groups that DOT-HWYS will address during the permit term and their respective desired behaviors are shown in Appendix A Table 1.

Watersheds within each priority level were first ranked based on the number of facilities within the priority area (Appendix A Table 1). Watersheds within each priority level were then ranked based on facility densities, e.g., Number of Facilities/Watershed Acres (Appendix A Table 2). Watersheds within each priority level were further ranked based on the number of violations or deficiencies within the priority area (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 (Appendix A Table 4).

The priority area with the lowest sum was ranked highest priority.

4. 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 Appendix A Table 4.

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.

Appendix A

Prioritized Area Plan for Industrial and Commercial Facility and Activity Inspections

Tables 1 – 4

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Table 1. Number of Facilities Per Area

Rank	Watershed	No. of Facilities	Legend
1	Ala Wai	55	WLA
2	Waikele	39	303(d)
3	Kaneohe	24	Other
4	Waimanalo	9	
5	Kawa	7	
6	Kapaa	0	
7	Nuuanu	125	
8	Kaukonahua	68	
9	Kapalama	63	
10	Kalihi	53	
11	Waimalu	49	
12	Kaupuni	47	
13	Moanalua	38	
14	Kapakahi	29	
15	Manoa-Palolo	22	
16	Kalauao	19	
17	Waiawa	18	
18	Halawa	17	
19	Kawainui	10	
20	Helemano	8	
21	Makiki	5	
21	Aiea	5	
21	Makaiwa	5	
24	Poamoho	4	
24	Kahaluu segment	4	
26	Waialele	3	
26	Kaelepulu	3	
28	Kaalaea	2	
28	Waikane	2	
28	Ahuimanu	2	
31	Kahawainui	1	
31	Kahaluu	1	
31	Waianu	1	
31	Keaahala	1	
35	Kaaawa	0	
36	Mailiili	31	
37	Kaloi	27	
38	Keehi	17	
38	Waialaenui	17	
40	Ulehawa	15	
41	Kahawai	12	
42	Kalunawaikaala	9	
43	Wailupe	8	
44	Kamiloiki	5	
44	Kaipapau	5	
46	Manuwai	4	
46	Paumalu	4	
46	Makaua	4	
46	Waipuhi	4	
46	Makaha	4	
51	Haiamoa	3	
51	Kamilonui	3	
51	Kamaileunu	3	
51	Nanakuli	3	
51	Halehaa	3	
51	Honouliuli	3	
57	Oio	2	
57	Malaekahana	2	
57	Hakipuu	2	
57	Waialua	2	
57	Kawela	2	
62	Koko Crater	1	
62	Waimea	1	
62	Kuliouou	1	
62	Niu	1	
62	Maakua	1	
62	Pahole	1	
62	Punaluu	1	
69	Kiikii	0	
69	Waipio	0	

Table 2. Density Per Area

Rank	Watershed	Density	Legend
1	Waikele	0.0283	WLA
2	Ala Wai	0.0134	303(d)
3	Kaneohe	0.0066	Other
4	Kawa	0.0042	
5	Waimanalo	0.0030	
6	Kapaa	0.0000	
7	Nuuanu	0.2364	
8	Kaukonahua	0.0330	
9	Kapalama	0.0186	
10	Kalihi	0.0114	
11	Moanalua	0.0099	
12	Waiawa	0.0098	
13	Waimalu	0.0097	
14	Manoa-Palolo	0.0088	
15	Kaupuni	0.0079	
16	Kapakahi	0.0061	
17	Halawa	0.0052	
18	Kawainui	0.0038	
19	Makaiwa	0.0026	
20	Makiki	0.0024	
20	Kalauao	0.0024	
22	Helemano	0.0017	
23	Poamoho	0.0014	
23	Kaelepulu	0.0014	
25	Keaahala	0.0013	
26	Waikane	0.0012	
26	Aiea	0.0012	
28	Kaalaea	0.0009	
28	Kahaluu segment	0.0009	
30	Ahuimanu	0.0008	
31	Kahaluu	0.0006	
31	Waialele	0.0006	
33	Waianu	0.0005	
34	Kahawainui	0.0003	
35	Kaaawa	0.0000	
36	Mailiili	0.0160	
37	Kaloi	0.0140	
38	Waialaenui	0.0089	
39	Keehi	0.0066	
40	Ulehawa	0.0056	
41	Kalunawaikaala	0.0047	
42	Wailupe	0.0039	
43	Kahawai	0.0037	
44	Kamiloiki	0.0028	
45	Manuwai	0.0021	
46	Makaua	0.0019	
46	Waipuhi	0.0019	
48	Haiamoa	0.0017	
48	Nanakuli	0.0017	
50	Kaipapau	0.0016	
51	Kamaileunu	0.0014	
52	Paumalu	0.0013	
53	Honouliuli	0.0012	
54	Kamilonui	0.0011	
54	Halehaa	0.0011	
56	Hakipuu	0.0010	
57	Oio	0.0009	
57	Makaha	0.0009	
59	Kawela	0.0008	
60	Malaekahana	0.0007	
60	Waialua	0.0007	
62	Kuliouou	0.0006	
62	Koko Crater	0.0006	
64	Maakua	0.0003	
64	Pahole	0.0003	
64	Niu	0.0003	
64	Waimea	0.0003	
68	Punaluu	0.0002	
69	Kiikii	0.0000	
69	Waipio	0.0000	

Table 3. Violations Per Area

Rank	Watershed	Violations	Legend
1	Ala Wai	15	WLA
2	Waialele	10	303(d)
3	Kaneohe	8	Other
4	Kawa	2	
5	Kapaa	0	
5	Waimanalo	0	
7	Nuuanu	23	
8	Kalihi	15	
9	Moanalua	12	
10	Waimalu	11	
11	Kalauao	7	
11	Kapalama	7	
13	Waiawa	5	
14	Kapakahi	4	
14	Kaukonahua	4	
14	Kawainui	4	
17	Halawa	3	
17	Kahaluu	3	
17	Makiki	3	
20	Aiea	2	
20	Kaalaea	2	
20	Makaiwa	2	
20	Poamoho	2	
24	Kaupuni	1	
24	Waialele	1	
24	Kahaluu segment	1	
24	Manoa-Palolo	1	
28	Ahuimanu	0	
28	Kaelepulu	0	
28	Waiānu	0	
28	Waikane	0	
28	Kaaawa	0	
28	Kahawainui	0	
28	Helemano	0	
28	Keaahala	0	
36	Keehi	5	
36	Mailiili	5	
38	Kahawai	3	
39	Kaloi	2	
39	Wailupe	2	
39	Waialaenui	2	
42	Kalunawaikaala	1	
42	Paumalu	1	
42	Ulehawa	1	
42	Kamilonui	1	
42	Kaipapau	1	
42	Honouliuli	1	
48	Manuwai	0	
48	Oio	0	
48	Kamiloiki	0	
48	Koko Crater	0	
48	Makaua	0	
48	Haiahoa	0	
48	Kamailunu	0	
48	Malaekahana	0	
48	Waimea	0	
48	Waipuhi	0	
48	Hakipuu	0	
48	Halchaa	0	
48	Kuliouou	0	
48	Niu	0	
48	Maakua	0	
48	Pahole	0	
48	Waipio	0	
48	Makaha	0	
48	Nanakuli	0	
48	Kawela	0	
48	Punaluu	0	
48	Kiikii	0	
48	Waialua	0	

Table 4. Updated Priority Area

Rank	Watershed	Table Totals
1	Ala Wai	4
2	Waikole	5
3	Kaneohe	9
4	Kawa	13
5	Waimanalo	14
6	Kapaa	17
7	Nuuanu	21
8	Kalihi	28
9	Kapalama	29
10	Kaukonahua	30
11	Moanalua	33
12	Waimalu	34
13	Waiawa	42
14	Kapakahi	44
15	Kalauao	47
16	Kawainui	51
16	Kaupuni	51
18	Halawa	52
19	Manoa-Palolo	53
20	Makiki	58
21	Makaiwa	60
22	Aiea	67
22	Poamoho	67
24	Helemano	70
25	Kaalaea	76
25	Kahaluu segment	76
27	Kaelepulu	77
28	Kahaluu	79
29	Wailele	81
30	Waikane	82
31	Keaahala	84
32	Ahuimanu	86
33	Waianu	92
34	Kahawainui	93
35	Kaaawa	98
36	Mailiili	108
37	Kaloi	113
37	Keehi	113
39	Waialaenui	115
40	Ulehawa	122
40	Kahawai	122
42	Wailupe	124
43	Kalunawaikaala	125
44	Kamiloiki	136
44	Kaipapau	136
46	Manuwai	139
47	Makaua	140
47	Waipuhi	140
47	Paumalu	140
50	Honouliuli	146
51	Haiamoa	147
51	Nanakuli	147
51	Kamilonui	147
54	Kamaileunu	150
55	Makaha	151
56	Halehaa	153
57	Hakipuu	161
58	Oio	162
59	Kawela	164
60	Malaekahana	165
60	Waialua	165
62	Kuliouou	172
62	Koko Crater	172
64	Maakua	174
64	Pahole	174
64	Niu	174
64	Waimea	174
68	Punaluu	178
69	Waipio	186

Legend

WLA
303(d)
Other